E v o l D i r

November 1, 2021

M o n t h i n R e v i e w

Foreword

This listing is intended to aid researchers in population genetics and evolution. To add your name to the directory listing, to change anything regarding this listing or to complain please send me mail at Golding@McMaster.CA.

Listing in this directory is neither limited nor censored and is solely to help scientists reach other members in the same field and to serve as a means of communication. Please do not add to the junk e-mail unless necessary. The nature of the messages should be "bulletin board" in nature, if there is a "discussion" style topic that you would like to post please send it to the USENET discussion groups.

Instructions for the EvolDir are listed at the end of this message.

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Conferences

Auckland-hybrid SMBE2022 ProposalCall 2022

SMBE 2022 Call for Symposium Proposals - Application Deadline 30 November 2021 -

T¿'nâ koutou, hello!

The Society of Molecular Biology and Evolution (SMBE) annual conference will be held as a hybrid conference both onsite in Tâmaki Makaurau / Auckland in Aotearoa / New Zealand, and online, from 10-14 July 2022. This conference will be an opportunity for many of us to reconnect and to build new relationships (whanaungatanga, in our Indigenous language, Mâori).

We're delighted to announce that we are now accepting proposals for symposium topics for the 2022 conference. The deadline for symposia applications is 30 November 2021 (23:59 NZT).

Note that as a hybrid conference our symposia will be run live online as well as in-person; speakers, chairs and participants can attend remotely. We encourage symposia that capture the breadth of SMBE membership in terms of research areas, geographical area and diverse participants.

Please visit https://www.smbe2022.org/call-for-symposia/ ??" to access the submission portal.

Proposals will be reviewed by the committee with around 20-30 topics selected for inclusion within the scientific programme.

Key dates 30 November 2021 (23:59 NZT) ?¿' Deadline for symposia applications 15 December 2021 ??" Symposia selection process concludes 20 January 2022 ?¿' Abstract submission system opens and selected symposia announced to Society 20 February 2022 (23:59 NZT) ??" Abstract submission system closes 28 April 2022 ?¿' Talks and posters finalized by SMBE reviewers Proposals should span the range of interests of SMBE members, including exciting new scientific developments, and should represent the geographic and gender diversity of our membership.

Symposium Proposal Guidelines

Please review the following guidelines before submitting a Symposium Proposal: Individuals can only be listed as an organiser for one symposium proposal, although organisers can be listed as an invited speaker on another proposal Each symposium will include one invited speaker plus a number of contributed speaker The invited speaker included within a symposium should have verbally agreed to be involved before the proposal is submitted An individual can only give one talk at the SMBE meeting, so in the event that a speaker is invited to two successful symposium applications the organisers should consider a back up The Society provides some financial support, in the form of complimentary conference registration, to facilitate symposium organisers in attracting outstanding invited speakers Symposium organisers should provide a description of the symposium (250 words max) that will be made public if selected. The symposium organisers will also provide a description of how their proposal brings forward the SMBE's objective of equity and diversity, as well as any additional information for the committee to make an informed review (250 words max).

The symposia proposals selected for inclusion within the SMBE 2022 scientific programme will then be listed on

the abstract submission portal, which will open on 20 January 2022, for members to indicate that they would want their contributed talk to be featured in a specific symposia.

We are committed to an inclusive, diverse and child-friendly congress that showcases the best research in molecular biology and evolution from around the world, as well as featuring the best New Zealand and Auckland have to offer, from culture to science to our natural assets. We are ready to host an exceptional event in Auckland for SMBE 2022 and very much look forward to extending manaakitanga ??" the uniquely Aotearoa New Zealand way of giving and making people feel welcome.

Noho ora mai, be well, Prof Alexei Drummond (Chair) Amelia Lowe (Conference Manager) Prof Quentin Atkinson, Dr Austen Ganley, Dr Simone Linz, Prof Anthony Poole, Dr Anna Santure and Dr David Welch (Organising committee)

Please direct all questions regarding SMBE 2022 to the Conference Manager, Amelia Lowe, University of Auckland Event Services, at Amelia.Lowe@auckland.ac.nz

https://www.smbe2022.org/ asanture@gmail.com

CIGENE IcelandGenomes Oct6

Dear All,

We are extremely happy to announce the first CIGENE seminar of Autumn 2021. Next week, on Wednesday, October 6th we kick off with:

Doruk Beyter, Research Scientist at deCODE genetics

Title: Long-read sequencing of 3,622 Icelanders provides insight into the role of structural variants in human diseases and other traits

Abstract: Long-read sequencing (LRS) promises to improve the characterization of structural variants (SVs). Upon generating LRS data from 3,622 Icelanders, we identified a median of 22,636 SVs per individual, and investigated their impacts in human diseases and other traits. We discovered an association of a rare 14kb deletion in PCSK9 with lower low-density lipoprotein (LDL) cholesterol levels, and of a multiallelic SV in a tandem repeat region within ACAN and height, where a higher number of repeats carried indicated increase in height. These results show that SVs can be accurately characterized at the population scale using LRS data in a genome-wide non-targeted approach and demonstrate how SVs impact phenotypes.

This will be an online seminar: https://nmbu.zoom.us/-j/67064421833 For more information, please check out the seminar website: https://cigene.no/cigene-seminar-series/ Sincerely,

Marie SAITOU, Ph.D. Tenure-Track Principal Investigator, Centre of Integrative Genetics (CIGENE), Faculty of Biosciences, Norwegian University of Life Sciences https://sites.google.com/view/saitou-lab Marie Saitou <marie.saitou@nmbu.no>

Gothenburg PangenomeEvolution Nov17

Pangenomes are revolutionizing biology, and provide a new, more inclusive platform for comparative and population genomics. They also present exciting challenges for computational biology, genome assembly, visualization and calling of structural variants. Please join us on November 17, 2021 for a full, free day of amazing talks from leading experts about pangenomes and their computation: "Pangenomes: Evolution and Computation". See https:/-/pgec2021.schlieplab.org/ and https://twitter.com/-ScottVEdwards1/status/1452339576962490380 We welcome you in person in Gothenburg, Sweden, or online. Either way, please register - space for in-person attendees is quickly running out. Hope to see you on November 17! We hope to record the talks to make them available to the broader community after the conference.

Scott Edwards, Harvard University Alexander Schliep, Chalmers U./U. Gothenburg Contact the organizers: pgec2021@schlieplab.org

sedwards@fas.harvard.edu

Marseilles EvolBiol Sep20-23

The 24th evolutionary biology meeting" at" Marseilles will take place from September 20 to 23, 2022 Early registration opened if the pandemic is back, reimbursements will be organized contact pierre.pontarotti(at)univ-amufr aeeb.fr

Pierre Pontarotti DR CNRS Evolutionary Biology team. UMR MEPHI D-258, CNRS SNC5039 IHU Mï¿½diterranï¿½e Infection

19-21 Boulevard Jean Moulin 13005 Marseille

tel 0413732425 / 0695177328 https://sites.google.com/view/pontarotti/ we are organizing the 24th evolutionary biology meeting at Marseilles September : 20-23 2022 aeeb.fr < https://ebm24.sciencesconf.org/ >

< https://twitter.com/pontarotti >

PONTAROTTI Pierre <pierre.pontarotti@univ-amu.fr> PONTAROTTI Pierre <pierre.pontarotti@univ-amu.fr>

Montpellier Lagomorph Jul4-8

The World Lagomorph Conference brings together researchers and experts on rabbits, hares, and pikas. It is an excellent opportunity to share information on the natural history, ecology, evolution, behaviour, physiology, genetics, morphology, diseases, management, and conservation of wild lagomorphs.

The 6th World Lagomorph Conference in 2022 is mainly planned as an in-person event, respecting all local sanitary regulations to ensure maximum security of all participants. In addition, we will offer the possibility of online conference participation in the talks and workshops. However, the presentation of talks and posters will require in-person participation.

For further details: https://lagomorph2022.sciencesconf.org/ .

Dr Raquel Monclï¿½s

Maï¿½tre de Confï¿½rences (HDR)/Associate Professor

Laboratoire d'Ethologie Expï¿½rimentale et Comparï¿½e-UR 4443 (LEEC) Universitï¿½ Sorbonne Paris Nord 99 av. J.-B. Clï¿½ment, F-93430 Villetaneuse, France

raquel.monclusburgoa@univ-paris13.fr

Online CIGENE Nov3

Dear All,

The CIGENE seminars are being held on a weekly basis the next few weeks. We are pleased to announce the next week's presenter and welcome Dr. Pam Wiener from the Roslin Institute, University of Edinburgh.

She will present: Probing domesticated animal genomes to investigate history and phenotype Abstract: The work I will describe relates to the application of selection mapping, the use of genetic diversity patterns to infer historical processes and dissect genetic architecture, to domesticated animal species. I will describe examples of this approach to map genes associated with animal production, morphological features and environmental adaptation. I will also discuss how these studies provide insights into the selection pressures that have been imposed on the studied populations and, more generally, contribute to the understanding of convergent evolution.

Time: Wednesday, November 3rd, 12:00-13:00 CET Place: This will be an online seminar: Click here for access to the Zoom seminar. < https://nmbu.zoom.us/j/67064421833 >

For more information and recordings, check out the seminar website: https://cigene.no/cigene-seminar-series/ – *** We are hiring!!! Postdoc in gene-editing of fish *** https://www.jobbnorge.no/en/available-jobs/job/214147/researcher-within-functional-genomics-in-atlantic-salmon Best,

Marie SAITOU, Ph.D. Tenure-Track Principal Investigator, Centre of Integrative Genetics (CIGENE), Faculty of Biosciences, Norwegian University of Life Sciences https://sites.google.com/view/saitou-lab Marie Saitou <marie.saitou@nmbu.no>

Online CIGENE Oct20

Dear All,

We are happy to announce the next CIGENE seminar on October 20th.

Odd Arne Olsen, Department of plant sciences, NMBU
Daniel Lang, Plant Genome and Systems Biology, Helmholtz Zentrum Munchen

Title: Calpain DEK1 acts as a developmental switch gatekeeping cell fate transitions

Abstract: We initially studied the Dek1 (Defective kernel 1) gene due to its essential function in forming the aleurone layer of the cereal endosperm. The gene encodes a Ca2+activated cysteine protease termed calpain (Lid et al., PNAS 2002). Soon after, it became clear that the DEK1 protein serves a fundamental role in land plants, ranging from the earliest diverging land plants formed 500 million years ago to flowering plants. Although subsequent studies during the following twenty years have associated diverse cellular and developmental functions with the Dek1 gene, a mechanistic and integrative understanding of its molecular function and role in these diverse developmental and biological processes has been missing. In animals, including humans, calpains are viewed as modulatory proteases displaying severe, pleiotropic phenotypes. Calpain cleavage targets were recently shown to be directed to the N-end rule degradatory pathway. Several of these destabilized targets are transcription factors, hinting at a gene regulatory role of the cysteine protease. Here, we analyze the gene regulatory networks of the moss Physcomitrium patens and characterize the regulons that are deregulated in Dek1 calpain mutants. Predicted cleavage patterns of the regulatory hierarchies in the five DEK1-controlled subnetworks are consistent with the gene's pleiotropy and the regulatory role in cell fate transitions targeting a broad spectrum of functions. Network structure suggests DEK1-gated sequential transition between cell fates in 2D to 3D development. We anticipate that both our method combining phenotyping, transcriptomics and data science to dissect phenotypic traits and our model explaining the calpain's role as a switch gatekeeping cell fate transitions will inform biology beyond plant development.

This will be an online seminar: https://nmbu.zoom.us/-j/67064421833 For more information, please check out the seminar website: https://cigene.no/cigene-seminar-series/ Sincerely,

Marie SAITOU, Ph.D. - ** is soon hiring a gene-editing postdoc**

Tenure-Track Principal Investigator, Centre of Integrative Genetics (CIGENE), Faculty of Biosciences, Norwegian University of Life Sciences https://sites.google.com/view/saitou-lab Marie Saitou <marie.saitou@nmbu.no>

Online CIGENE SalmonidParallelEvolution Oct27

Hi all,

Welcome to the next CIGENE seminar, where Kathryn Elmer, Professor at Institute of Biodiversity Animal Health & Comparative Medicine, University of Glasgow will give a presentation entitled:

Parallel evolution of adaptive divergences in a freshwater salmonid

Abstract: The repeated diversification of postglacial fishes into ecotype specialists in northern freshwaters is a major source of temperate biodiversity and a long-standing model for studying evolution. I will present some of our recently published work on the evolutionary, genomic, and transcriptomic underpinnings of ecotype specialists in Arctic charr. This work is geographically broad, as it compares within regions and also across distinct lineages spanning Scotland and Siberia. We find extensive variation in historical and demographic background yet parallel evolution of ecologically relevant forms.

Time: Wednesday, October 27th, 12:00-13:00 CET Place: This will be an online seminar: Click here for access to the Zoom seminar. < https://nmbu.zoom.us/-j/67064421833 >

For more information, check out the seminar website: https://cigene.no/cigene-seminar-series/ Marie SAITOU, Ph.D. Tenure-Track Principal Investigator, Centre of Integrative Genetics (CIGENE), Faculty of Biosciences, Norwegian University of Life Sciences https://sites.google.com/view/saitou-lab Marie Saitou <marie.saitou@nmbu.no>

Online EvoDevo Dec8

Stowers Research Conferences offers a series of four biennial meetings as well as "Pop-Up" Early Career Symposia to inspire creativity, collaboration, and career development in the basic sciences.

Brought to you by the Stowers Institute for Medical Research - Kansas City, MO, USA

What: Stowers Research Conferences “Pop-Up” Early Career Symposia: Evolutionary Developmental Biology III Early Career Symposia are a series of FREE online webinars which celebrate the achievements and promote the development of early career researchers from around the world.

When: December 8, 2021 12-3:30PM CST

Where: Zoom

Registration is FREE: https://www.stowers.org/-conferences Agenda: Session 1: Developmental Evolution Brent Hawkins | Harvard Medical School, Harris Lab Mirna Marinic | The University of Chicago, Shubin Lab Jorge Torres Paz | Paris-Saclay Institute of Neuroscience, Retaux Lab

Session 2: Growth and Form Min Ya | Harvard University, Kramer Lab Alice Accorsi | Stowers Institute, Sánchez Alvarado Lab Patrick Rohner | Indiana University, Moczek Lab

Session 3: Genomic Diversity Andrew Thompson | Michigan State University, Braasch Lab Aurélie Hintermann | University of Geneva, Duboule Lab Anna Klompen | University of Kansas, Cartwright Lab

Organized By: Nicolas Rohner (nro@stowers.org) and Matt Gibson (mg2@stowers.org) Hosted By: Jaya Krishnan and Keith Sabin Institution: Stowers Institute for Medical Research - Kansas City, MO, USA

Please join us for our 3rd EvoDevo Webinar in support of the next generation of leaders in the field. Questions? Contact conferences@stowers.org

“Dreyer, Abby” <ADreyer@stowers.org>

Online Evoltree GenomicsInPractice Nov3-10-17-25

EVOLTREE is proud to announce the next EVOLTREE online seminar series taking place in November 2021. This fall, the series’ theme is “Genomics in Practice” and we again have a great lineup of speakers:

Wednesday 3 November 2021 16:30-18:00 CET Prof Mike Bruford, Cardiff University ?Conserving genomic diversity for climate resilience in a changing world?

Wednesday 10 November 2021 09:00-10:30 (!) CET Dr Rebecca Jordan, CSIRO Hobart ?Building resilience to change: using genomics to guide plant restoration and conservation in a changing world?

Wednesday 17 November 2021 16:30-18:00 CET Prof Emily Latch, University of Wisconsin-Milwaukee “Genomic data improves wildlife conservation”

Thursday (!) 25 November 2021 16:30-18:00 CET. Prof Louis Bernatchez, Laval University, Quï¿½bec ?Genomics applied to fisheries management and conservation?

More details can be found here: https://-www.evoltree.eu/webinars Registration can be found here: https://www.evoltree.eu/evoltree-online-seminar-series-2021-on-genomics-in-practice Seats in the live sessions are limited to 150. All seminars will be recorded and available on the EVOLTREE YouTube channel afterwards: https://www.youtube.com/channel/-UCla0sRglK9UUPYp5Ks8hwFA . The organizing team: Stephen Cavers (UKCEH, UK), Christian Rellstab (WSL, Switzerland), Lidwina Koop (European Forest Institute, Finland), Santiago C. Gonzï¿½lez-Martï¿½nez (INRAE, France)

christian.rellstab@wsl.ch christian.rellstab@wsl.ch

Online EvolutionarySystemsBiology Feb9-11

Evolutionary System Biology (Virtual Conference) Date: 9-11 February 2022 Location: Wellcome Genome Campus, UK (Virtual)

Overview: We are pleased to announce the fourth meeting on Evolutionary Systems Biology. This conference will provide a forum for scientists interested in applying systems and mechanistic approaches to understand evolution. Advances in genome sequencing and computational biology are providing unprecedented insights into biological mechanisms and evolutionary processes. In addition, gene-editing tools are revolutionising what is possible in model and non-model organisms.

This year’s conference will focus on the evolution of biological systems at different levels: genes, molecules and systems. We will also explore protein evolution, how microbes adapt to their environment, quantitative genetics and the impact that evolutionary change can have on human health. We will feature examples of practical and theoretical approaches to study how genetic and non-genetic changes fuel and constrain evolution.

The meeting will offer a valuable training ground and rich learning experience for scientists in disciplines relevant to systems biology. It will be of particular interest

to those working at the interface of evolution, quantitative genetics, and systems biology.

Abstract deadline: 7 December 2021 Bursary deadline: 7 December 2021 Registration deadline: 2 February 2022

Contact email: conferences@wellcomeconnectingscience.org

For further information: https://coursesandconferences.wellcomeconnectingscience.org/event/evolutionary-systems-biology-virtual-conference-20220209/ Nagehan Ramazanoglu Bahadir <nagehan.bahadir@wellcomeconnectingscience.org>

Online PortugueseAssocEvolBiol Dec16-17

Subject: XVII ENBE: The International Meeting of the Portuguese Association for Evolutionary Biology: New abstract submission deadline

Thursday and Friday 16-17th December 2021

Venue: Online Zoom and Spatial.Chat (hosted by Ciï¿½ncias, University of Lisbon)

This is a reminder for the International Meeting of the Portuguese Association for Evolutionary Biology (ENBE). ENBE aims to bring together Evolutionary Biologists working in Portugal and abroad in order to promote scientific cohesion and excellence. This is a small informal meeting with usually 60-120 participants that provides a supportive environment for discussion for scientists of all academic levels (from master students to principal investigators), fostering new ideas and collaborations.

We are happy to announce that we have received many submissions for the XVII ENBE. However, because we wish to increase the diversity of participants, across groups within Portugal and beyond, we will keep accepting abstract submissions for the ENBE 2021. The new deadline for abstract submission is 31st October 2021 (23:59 GMT+1).

We wish to make ENBE an opportunity to strength and establish new interactions and collaborations. We encourage participation from evolutionary biologists from different research groups, geographical areas and nationalities.

The conference will run online for two afternoons so that people working in different time zones are able to attend. Registration fee is symbolic and free for members of APBE (Portuguese Association for Evolutionary Biology). We hope in this way to make the conference as open and accessible as possible.

Please visit the website to register and submit: https://enbe2021.rd.ciencias.ulisboa.pt/abstract-submission/ The XVII ENBE organizing committee.

"bparreira@igc.gulbenkian.pt" <bparreira@igc.gulbenkian.pt>

Online YoungSystematistsForum Nov19

22ndYOUNG SYSTEMATISTS' FORUM

Friday 19thNovember 2021, 9:30 am GMT

Venue: ZOOM Online

[Natural History Museum, London, UK]

The annual Young Systematists' Forum represents an exciting setting for Masters, PhD andyoung postdoctoral researchers to present their data, often for the first time, to a scientific audience interested in taxonomy, systematics and phylogenetics. This well-established event provides an important opportunity for budding systematists to discuss their research in front of their peers within a supportive environment. Supervisors and other established systematists are also encouraged to attend.

Prizes will be awarded for the most promising talk and flash presentation as judgedby a small panel on the day.

Registration isFREE https://systass.org/meetings/future-events/ysf2021/ When you register you will be asked to supply your name, contact information and stating whether or not you wish to give a talk or flash presentation.Please also tell us your academic stage - e.g., Masters, PhD or postdoc and affiliation. Abstract submission and registration are separate portals, both on the YSF event page.

Space will be allocated subject to availability and for a balanced programme of animal, plant, algal, microbial, molecular and other research. Non-presenting attendees are also very welcome - please register as above.

Abstracts must be submitted by e-mail in English and in Word format no later than Friday 22 October 2021. The body text should not exceed 150 words in length. Title, authors, and their professional affilia-

tions/addresses should be included with the abstracts.If the presentation is co-authored,the actual speakermust be clearly indicated in BOLD text. The file should be in editable format (.doc or .odt, not pdf) and titled Surname_First-name_YSF2019.doc, for example Doe_Jane_YSF2019.doc.

Again the YSF will be held the day after the-Molluscan Forum(http://www.malacsoc.org.uk/-MolluscanForum.htm) also online (and at the Natural History Museum). If attending both you will have to register for both meetings separately.

If you have presented a talk at the YSF before, we ask that you submit only for a flash talk presentation, as speaker slots are limited and we want to give as many people a chance as possible. Similarly, if you are presenting at both the YSF and MF, we ask that you not apply for speaking slots in both (or let us know so we can assess).If you are a postdoc, please be awarethat it's unlikely we will be able to give you a chance to present here, as the aim is to give more junior researchers their first experience in a supportive international setting.

All registered attendants will receive further information about the meeting, including abstracts, by e-mail one week in advance. This information will also be displayed on the Systematics Association website (www.systass.org).

If you have questions, feel free to contact us at YSF.SystematicsAssociation@gmail.com Last year's meeting worked very well, with wide international attendance and great interactions. We're looking forward to meeting you online! YSF 2021 Organising Team:Ellinor Michel,Katie Collins,PabloMuñoz, Ana Serra Silva, Yvette Harvey, Karen Siu Ting, Yvette Harvey,Kalman Konyves, Peter Mulhair

With additional sponsorship from:

Dr Ellinor MICHEL Department of Life Sciences The Natural History Museum Cromwell Road SW7 5BD London UK tel: +44-207-942-5516

http://nhm.academia.edu/EllinorMichel www.researchgate.net/profile/Ellinor_Michel Ellinor Michel <e.michel@nhm.ac.uk>

Plon Germany MicrobialPopulations May

Announcing two in-person meetings on Microbial Population Biology for Summer of 2022. We look forward to bringing the Microbial Population Biology community back together in the Summer of 2022 at the Max Planck Institute for Evolutionary Biology in Plön.

During two independent, 4-day meetings, we will embrace thought-provoking discussions and community engagement on cutting edge topics in microbial evolution. Applicants may apply to either or both meetings. Both meetings will feature invited speakers, and we also welcome applications for short talks and poster presentations. We aim to have all participants present their work.

Applications will be reviewed based on overall quality and fit for the meeting. Abstracts must be unique and specific to the theme of the meeting. As a fully trainee-organized meeting, we especially welcome applications from graduate students and postdocs. But all levels are welcome! Both meetings will be small (˜60 people) and will feature meals and social activities at the venue to drive discussion and engagement. Registration and two meals per day will be provided at no cost, but participants need to cover travel and accommodation. We expect to provide need-based financial assistance for travel, and accommodation. Please reach out to us directly for financial assistance. Applications are open now, and close on October 31st 2021. All applications will be reviewed after this deadline.

Meeting I is focused on Microbial Communities and Coevolution (May 16 - 20, 2022).

â€Meeting II is focused on Microbial Evolutionary Dynamics (May 30 - June 3, 2022).

Visit the following website for details of each workshop and for the abstract submission process.

https://workshops.evolbio.mpg.de/event/43/ Note: We aim to provide safe conditions for this in-person meeting. Based on future regulations and recommendations, we may require proof of vaccination status and/or proof of testing prior to entry.

Organizers: Alita Burmeister (Yale University), Andrew Farr (MPI for Evolutionary Biology), Fatima Aysha Hussain (MIT), Tanush Jagdish (Harvard), Clara Moreno-

Fenoll (ESPCI-PSL), Loukas Theodosiou (MPI for Evolutionary Biology)

Andrew Farr <afarr@evolbio.mpg.de> Andrew Farr <afarr@evolbio.mpg.de>

SanDiego PAG AnimalDomestication Jan8-12

Dear colleagues,

We are excited to announce the call for abstracts for the 'Cat and Dog', 'Paleogenomics', and 'Domestication' sessions at PAG XXIX from January 8-12, 2022.

This year, in addition to a joint dinner on Sunday night, our sessions are joining forces for abstract submissions so that we can ensure a diverse representation of topics and people at our three sessions.

If you are interested in submitting an abstract, please fill out this google form: https://forms.gle/-Z8s7xtsR5q1r1CDUA before October 25th, 2021. We will notify you of your acceptance by the end of that week. As a reminder, the early bird registration ends on October 31st, but if you are selected as a speaker, you will be eligible for early bird registration after the deadline. We encourage you to register as early as possible if that is an option.

Feel free to contact any of the organizers (contact details below) should you have any questions. We are aware that a previous call for abstracts was sent out as a result of a miscommunication for the 'Cat and Dog' session and we apologize for this error. Please use only the form linked above to submit abstracts. Abstracts sent by email will not be reviewed.

Please feel free to share the call for abstracts with anyone who might be interested.

We cannot wait to see everyone after last year's hiatus!

All the best, Cat & Dog: Ellie Armstrong & Laurent Frantz (ellieearmstrong@gmail.com, laurent.frantz@lmu.de) Paleogenomics: Greger Larson (greger.larson@arch.ox.ac.uk) Domestication: Emily Warschefsky & Sarah Turner (sarah.turner-hissong@bayer.com)

Laurent Frantz <laurent.frantz@lmu.de>

GradStudentPositions

AuburnU EvolutionMollusks

Graduate Research Assistant(s) - MSc and PhD Southeast Conservation Genetics Lab Auburn University Dr. Nathan Whelan, nathan_whelan@fws.gov, nwhelan@auburn.edu www.nathanwhelan.com www.fws.gov/southeast/warm-springs-fish-technology-center/conservation-genetics-lab/ The Whelan Lab at Auburn University and the U.S. Fish and Wildlife Service Southeast Conservation Genetics Lab (SECGL) are seeking graduate student applications for the MSc or PhD degree to study freshwater invertebrate evolution and conservation. At least one MsC and one PhD position will be available to start in January or August 2022. Potential masters and PhD projects include conservation genetics and molecular ecology of freshwater mollusks, phylogenetics and systematics of freshwater gastropods, and phylogenomics of Myxobolidae fish parasites. Students will work in museum, lab, and field environments.

SECGL is a joint U.S. Fish and Wildlife Service and Auburn University research lab. We are located in Swingle Hall on Auburn University's main campus. Our research includes both basic and applied science, and students work in an academic research environment while collaborating with government researchers and on-the-ground conservation scientists. Students will have the opportunity to work directly with conservation practitioners and perform cutting-edge research. Current research projects in the lab include (1) phylogenomics of freshwater gastropods, with an emphasis on Pleuroceridae, (2) conservation genomics and molecular ecology of freshwater mollusks, including threatened and endangered mussels and snails, (3) taxonomy of terrestrial snails, freshwater mussels, and freshwater snails, (4) freshwater gastropod life history evolution, and (5) taxonomy of metazoan fish and mollusk parasites. We also work with the National Fish Hatchery program and use genetic data to evaluate and improve hatchery efforts.

SECGL has outstanding facilities, equipment, and capacity for lab- and field-based research. We have all the equipment needed for next-generation library prep and other molecular data generation, including an Agilent Fragment Analyzer, Blue Pippen, Quibit, and Opentrons OT-2 liquid handling robot. We also have multiple computers for bioinformatics (e.g., an 80-core, 512GB RAM machine) and access to additional computing resources through Auburn University and the Alabama Supercomputer Authority. The lab has a 4WD SUV and other equipment for fieldwork.

Auburn University is a public land-, sea-, and space-grant institution with internationally recognized research and academics. Auburn and nearby Opelika, Alabama are vibrant towns with excellent quality of life and a relatively low cost of living.

GRA Stipends and Start Dates: Students will receive a stipend of $1,900/month and a tuition waiver. Available start dates are January 2022 or August 2022.

To apply: Send a letter of interest, current CV, contact information for 2-3 references, and unofficial transcripts to: Dr. Nathan Whelan, nathan_whelan@fws.gov. Members of historically underrepresented groups are particu-

larly encouraged to apply.

Nathan Whelan, Ph.D.

My pronouns are: he/him/his Director, Southeast Conservation Genetics Lab U.S. Fish and Wildlife Service || Auburn University nathan_whelan@fws.gov

"Whelan, Nathan V" <nathan_whelan@fws.gov>

Belgian 3 QuaternaryEvolAntarcticLakes

Three research positions (2 fully funded PhD fellowships, 1 PhD or Post-doc) in 'Late Quaternary evolutionary dynamics of Cyanobacteria and eukaryote biota in Antarctic lakes'

Ghent University and the University of Liï¿½ge are recruiting two PhD students who will be engaged in the recently started project HabitAnt: 'Past and future habitability in Antarctic lakes: succession, colonization, extinction, and survival in glacial refugia', funded by BelSPO BRAIN-BE. The project also includes the Royal Institute of Natural Sciences (Brussels) where the invertebrates will be studied by a research assistant (PhD or postdoc level).

Context

Coupled climate and Earth-system models predict increased temperatures and altered precipitation patterns in vast regions of Maritime and coastal Continental Antarctica. These changes will likely result in more extensive glacial melt and the expansion of ice-free areas, increasing connectivity between regions, and changes in their hydrology. These projected environmental changes are expected to cause biotic homogenization between regions. Recent studies demonstrated that terrestrial and lacustrine biota in the Antarctic are more globally distinct and biogeographically structured than previously believed, due to the long-term survival and diversification of taxa in isolated glacial refugia. Hence, it is to be expected that biotic homogenisation will significantly increase the risk of extinction of endemic species and the spread of invasive species.

The students' work will be organized to design two (or three) complementary PhD theses. They will use fossil DNA in lake sediment cores, and develop molecular phylogenies of focal taxa to study the processes that contributed to the present-day diversity of organisms in Antarctic lakes. The processes studied include the long-term persistence of biota in glacial refugia, and extinction, colonization, diversification and biological succession in response to past climate and environmental changes.

Job description

The job tasks will include:

- Extraction of fossil DNA and the development of DNA libraries for high- throughput sequencing.

- Development of multi-gene molecular phylogenies.

- Bioinformatics and statistical analysis of metagenomic and DNA amplicon datasets.

We offer an intellectually challenging environment, high-quality training to develop hard and soft skills, and opportunities to participate in sampling campaigns to Antarctica and international scientific conferences. The research fellows will be hosted at the three different Belgian partner institutions, but joint PhD degrees are envisaged and several tasks will be done in a close collaboration between the respective research groups.

Please follow the links below for more information on the two individual PhD fellowships:

PhD on the diversity, ecology and evolution of micro-eukaryotes (Ghent University) - https://-www.ugent.be/en/work/scientific/phd-student-8
PhD on the diversity, ecology and evolution of Cyanobacteria (University of Liï¿½ge) https://-www.uliege.be/upload/docs/application/pdf/2021-10/-phd_on_the_diversitycyanobacteria.pdf Note that the position at the RBINS will be advertised in 2022.

For more information, contact Prof. Elie Verleyen (elie.verleyen@ugent.be).

Isabelle Schon <ischoen@naturalsciences.be> Isabelle Schon <ischoen@naturalsciences.be>

BoiseStateU PlantMicrobes

Ph.D. or M.S. Assistantship in Plant-Associated Microbial Communities, Boise State University, Idaho, USA

The Bittleston Lab (https://www.bittlestonlab.com/) is recruiting motivated students for Fall 2022 to study ecological and evolutionary dynamics of plant- and insect-associated microbial communities. Potential projects can be based in either the small ecosystems formed within pitchers of carnivorous pitcher plants, or the local sagebrush steppe ecosystem. The student will work

as part of a collaborative team of researchers across different universities. The student will participate in fieldwork and lab work including culturing of bacteria or fungi and molecular assays as well as data analysis, writing, and presenting results.

Qualifications

Seeking a self-motivated, independent, and creative thinker who is passionate about ecology and plant-associated microbes. The minimum qualification is a Bachelor's degree in Biology, Ecology, Evolution, Microbiology or a related field.

Preferred qualifications include: evidence of strong writing (e.g., grant proposals, publications) and quantitative skills (e.g., bioinformatics, coding, modeling); experience with microbial culturing and/or molecular assays; excellent communication skills; and an interest in understanding mechanisms of community assembly or plant-microbial interactions. Applicants who would add to the diversity and excellence of our academic community are especially encouraged to apply. Please address these points in your introductory email.

Stipend and Benefits

The position starts Fall (August) 2022 and includes support in the form of a graduate teaching assistantship (renewable, 12-month), tuition and fee waiver, and health insurance.

About the Programs and Boise

Our Ph.D. in Ecology, Evolution, & Behavior and M.S. in Biology are innovative graduate programs at Boise State University. They bring together faculty from across multiple academic departments including biological sciences, geosciences, anthropology, and the human-environment systems group to offer relevant courses and provide unique mentorship and training opportunities. We have a strong quantitative course component and the position provides access to a network of valuable connections in academia, local relationships with federal and state agencies, nonprofits and NGOs, as well as international organizations, all dedicated to providing students with educational experiences for diverse career opportunities. To learn more about our Biology Graduate Programs, please visit:

https://www.boisestate.edu/biology/graduate-programs/ . Nestled in the foothills of the Rocky Mountains, Boise is the capital of the State of Idaho and is frequently featured as a top-ranked metropolis. The city has lots of opportunities for world-class outdoor activities year-round and a thriving arts and entertainment culture.

To Apply

Applicants should email Dr. Leonora Bittleston (leonorabittleston@boisestate.edu) before December 1st to indicate your interest in this position before officially applying. The email should include your CV and why you are interested in this research area in particular. Please specify if you are interested in a Ph.D. or a M.S. degree. Top candidates will be asked to formally apply. All admission decisions must be approved by the Graduate Dean.

Ph.D. in Ecology, Evolution, and Behavior Graduate Program Boise State University https://www.boisestate.edu/eeb/ "Ecology, Evolution, and Behavior Graduate Program" <eebprogram@boisestate.edu>

BolzanoItaly InsectPhytoplasmaGenomics

A fully funded PhD position is available at the Free University of Bozen-Bolzano (Italy) in the lab of Hannes Schuler. The project is in collaboration with Katrin Janik (Research Centre Laimburg) and Mirko Moser and Alessandro Cestaro (Fondazione Edmund Mach) and aims to study the interaction of 'Candidatus Phytoplasma vitis' and its main insect vector Scaphoideus titanus through whole-genome sequencing.

Grapevine yellows are important viticultural diseases caused by phytoplasmas. Phytoplasma-infected grapes show different symptoms on leaves, shoots and grapes, causing high yield losses and considerable economic impact worldwide. The project aims to investigate factors influencing the acquisition and transmission efficiency by its vector S. titanus via ecological transmission experiments combined with population genomic approaches. By performing whole-genome sequencing, the successful candidate will investigate the tri-trophic interaction of the phytoplasma, the insect vector and its microbial community. Specifically, we will investigate if the presence/absence of different symbionts in the microbiome of the insect vector influences the acquisition and transmission of Ca. P. vitis.

We are looking for an enthusiastic student with a background in molecular biology and experience with bioinformatic analyses of bacterial communities. The student will gain experience in field biology, entomology, DNA extraction and sequencing, bioinformatics and population genomics. Prior undergraduate or master's research experience in entomology, molecular evolution, bioinfor-

matics, and/or population genetics is desirable but not required.

The Free University of Bozen-Bolzano is located in one of the most fascinating European regions, at the crossroads between the German-speaking and Italian cultures. Its trilingualism in teaching and research, its high level of internationalization as well as an ideal research environment guaranteed by its excellent facilities are some of the reasons why unibz regularly reaches top positions in national and international rankings. Our lab is part of the newly funded Competence Centre for Plant Health within the Department of Science and Technology https://www.unibz.it/en/-home/research/competence-centre-plant-health. We are a young and dynamic research group studying various aspects of insect-microbe interactions in a collaborative atmosphere http://hschuler.people.unibz.it General requirements for the position: A masters degree in agriculture, biology, evolutionary biology or related fields. The candidate should have excellent communication skills and should be fluent in English.

The Application deadline is 05.11.2021.

For informal inquiries, and for questions about the hiring process, please contact Hannes Schuler hannes.schuler@unibz.it.

Schuler Hannes <Hannes.Schuler@unibz.it>

BristolU HoneyBeeMaternalEffects

We invite applications for a PhD opportunity to study the links between foraging ecology & behaviour, nutrition, and maternal effects in honeybees at the School of Biological Sciences, University of Bristol, UK.

The project is jointly supervised by Dr Christoph Grueter, Dr Sinead English and Prof Adria LeBoeuf (University of Fribourg, Switzerland). Funding is subject to a competitive selection process.

- UK and non-UK students are eligible for this 4-year studentship. - Application deadline: 6 December 2021 - For more details about the project: https://tinyurl.com/-2f6fw6jv - For more information about the SWBio DTP & eligibility requirements: https://www.swbio.ac.uk/ For informal enquiries, contact Christoph Grueter: c.grueter@bristol.ac.uk

Dr. Christoph Grueter

School of Biological Sciences

University of Bristol

24 Tyndall Avenue

Bristol,BS8 1TQ, UK

Tel: 0117 394 1176

Office: 2A03

Christoph Grueter <c.grueter@bristol.ac.uk>

BristolU HumanImpactOnBees

We invite applications for a PhD opportunity to study the links between human impacts and thebehaviour & ecology of bees in the UK and the Brazilian Amazon region. The project is jointly supervised by Dr Christoph Grueter and Dr Emily Bell, University of Bristol, in collaboration with not-for-profit organisation Meli Bees (https://www.meli-bees.org/).

For informal enquiries, contact Christoph Grueter: c.grueter@bristol.ac.uk

Project Background

Bees are important pollinators of agricultural and wild plants, yet they also face many challenges, including habitat loss, pesticides, diseases, and poor nutrition. Among the most important pollinators in temperate regions are honeybees (Apis mellifera) and, in the tropics, the stingless bees (Meliponini). People keep bees in apiaries to facilitate beekeeping and pollination. For traditional communities in the Amazon, beekeeping of native Brazilian stingless bees is of both economic and cultural importance as bees provide food, income, and medicinal products. However, keeping bees in apiaries in highly disturbed environments is challenging as bees might struggle to find enough food, leading to poor health of colonies. Furthermore, the proximity of hives in an apiary promotes “drifting”, which means that bees enter the wrong hive and leads to disease spread and lowers the honey and pollen production of colonies.

Project Aims and Methods

This project brings together an exciting mix of methodological approaches to study how “drifting” in stingless bees in Brazil and in honeybees in the UK is related to their foraging landscape. The project will study drifting in environments varying in human disturbance, particularly different degrees of deforestation and urbanisation. The main aims are (1) to identify the key food sources for bees in modified and natural environments; (2) to

investigate if food source availability and diversity affects drifting behaviour; (3) to test whether entrance guarding by guard bees can prevent drifting and (4) whether artificial landmarks in apiaries can reduce drifting behaviour. Results will help us identify the most important food sources for these important pollinators and help improve the health and productivity of bees.

The project will study stingless bee hives kept by traditional communities in the Maranhão state in the Brazilian Amazon region, which has been heavily affected by deforestation and in honeybee hives inhabiting different landscapes in the South West of England. Pollen quantity and diversity will be assessed using DNA metabarcoding, while drifting is studied using Radio-frequency identification (RFID) tracking of bees and behavioural observations. In addition to these aims, the project provides opportunities for the candidate to build on or modify the project and develop their own research ideas within the general research topic.

Candidate requirements

We seek a highly motivated, dedicated, and collaborative student with an interest in behaviour, ecology, and entomology. You should be eager to learn about the natural history of bees, molecular methods, and bioinformatic tools. We welcome and encourage student applications from under-represented groups. We value a diverse research environment.

Project partners

This project provides an exciting opportunity to collaborate with Meli, a not-for-profit organisation that uses native beekeeping, educational activities, and regenerative agricultural initiatives to support traditional communities in Brazil. The candidate will work with beekeepers to study a fascinating group of social bees, the Meliponini, and their interactions with the environment. With the help of Meli, the student will gain experience in the day-to-day business of an environmental organisation that is passionate about protecting the Amazon region and its human inhabitants, learn about fundraising and generating content for educational projects run by Meli in Brazil. Contingency plans are in place should the pandemic prevent or limit the opportunities to work in Brazil, which include generating content for projects while working in the UK.

Training

The project combines field and laboratory work in the UK and in the Brazilian Amazon:

State-of-the art molecular tools in biodiversity research (DNA metabarcoding and bioinformatics)Radio-frequency identification (RFID) to track the behaviour of bees in Brazil and the UK Plan and perform behavioural experiments to study the role of nest entrance guarding by bees and visual landmarks on the tendency of bees to "drift"Training in the activities of an environmental organisation that works closely with traditional communities in Brazil

Background reading and references

Grüter, C. 2020. Stingless Bees: Their Behaviour, Ecology and Evolution. Springer, Switzerland.Jones, L., Brennan, G.L., Lowe, A., Creer, S., Ford, C.R. & de Vere, N. 2021. Shifts in honeybee foraging

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CardiffU MauritiusLizards

PhD studentship (Cardiff University, UK) - —Competition amongst endemic lizard species on a tropical island (Round Island, Mauritius) —To apply visit:—https://www.findaphd.com/phds/project/nerc-gw4-dtp-studentship-competition-amongst-endemic-lizard-species-on-a-tropical-island-round-island-mauritius/?p135350 Supervisors:—- Dr Pablo Orozco ter Wengel, School of Biosciences, Cardiff University (informal enquiries welcome: sbipao@cf.ac.uk) - Dr Gavin Broad, Natural History Museum (London)- Dr Ian Vaughn, School of Biosciences, Cardiff University- Dr Nik Cole, Durrell Wildlife Conservation Trust (Jersey) and the Mauritian Wildlife Foundation (Mauritius)- Dr. Rosemary Moorhouse-Gann, Durrell Wildlife Conservation Trust (Jersey)- Prof. William Symondson, School of Biosciences, Cardiff University

Project DescriptionRound Island, Mauritius, hosts a community of rare endemic lizard species. Their environment was cleared of most vegetation by introduced goats and rabbits (now eliminated). A partnership between the Durrell Wildlife Conservation Trust, Mauritian Wildlife Foundation and the Government's National Parks and Conservation Service has permitted the restoration of habitat and with it the recovery of the reptile-dominated vertebrate community (Cole—et al. 2018). The reptile species occupy a landscape going through plant community recovery, but little is known about availability of the invertebrate prey. The skinks

and geckos have proved to be remarkably resilient to environmental change, although some species were extirpated from the island's reptile community. It is likely the reptiles originally adapted to different niches, including trophic niches that allowed them to avoid direct competition. One species, the Telfair's skink, is a generalist, consuming a wide range of different taxonomic groups. Other species may have narrower niche axes and be more specialised. Understanding the feeding niche of the reptiles may help explain differences in population recovery and guide restoration management to enhance the success of planned reptile reintroductions.

The main aims/methods are:

§————————Analyse the diets of the lizard species that have survived on Round Island.—Collect lizard faecal samples from across the island and use High Throughput Sequencing (HTS) of plant and invertebrate DNA.

§————————DNA barcode as many invertebrate species on Round Island as possible—(we have already barcoded all the plants). Invertebrates will be identified by the student at the Natural History Museum. Once we have the barcodes we can interpret the output from HTS and identify who is eating what.

§————————Analyse for prey choice and competition. Compare what lizards are eating with available food (Vaughan—et al. 2018) and use dietary overlap tests to assess dietary similarity.

§————————Analyse differences in the abundances of lizard and invertebrate species in different plant communities. Apply/develop a range of invertebrate and reptile survey techniques. Look for areas of more advanced regrowth of the vegetation to predict changes to the island food web structure in the future. §————————Analyse the diets of reptile species that are to be reintroduced to Round Island's reptile community.—Use prey overlap tests to evaluate whether any of these species are likely to compete with Round Island species.

Candidate requirements

The student would need to have a strong academic record with expertise relevant to this project. Molecular Ecology expertise would be ideal but is not a prerequisite. Must be able to work in the field on a rugged tropical island for extended periods and also be good in the lab. Possession of a clean driving licence would be an advantage for accessing mainland sites on Mauritius.

Project partners—

The—CASE partner, Durrell Wildlife Conservation Trust, has been restoring Round Island for the last—43—years, in partnership with the Mauritian Wildlife Foundation and the Government of Mauritius. They can provide all the field ecology training required by the student and data on population trends of lizards and other taxa. The—Collaborative/DTP partner, the Natural History Museum, will train the students to identify Round Island invertebrates potentially in the diets of the lizards. This is an exceptional opportunity to work with international leaders in their fields.

Training The student will take full advantage of courses provided by the GW4+—DTP2 (e.g. statistics, bioinformatics). Additional courses will be selected (depending upon student background) provided by the Cardiff University

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CzechAcademySci CommunityEcolEvolution

PhD studentship in Community Ecology & Evolution

We invite prospective candidates for a four-year fully funded PhD Studentship to explore exciting questions on the interface of community ecology and population genetics. How do species coexist in diverse communities? And how is genetic variation maintained within populations? These processes are typically studied separately, but likely interact to structure diversity in ecological communities. For example, rapid evolution is likely to have a key role in determining species coexistence.

To address these questions, our collaborative project utilizes a novel experimental community model system of wild Drosophila species and their parasitoids from tropical Australia. We are able to perform multigenerational laboratory microcosm experiments and track eco-evolutionary dynamics in fine detail. The candidate will conduct laboratory experiments on eco-evolutionary dynamics of communities, eco-evolutionary modelling, and will be involved in obtaining live Drosophila and parasitoid lines in Australia (likely to be possible in 2022 or 2023). There will also be opportunities to develop the project in a direction of the candidate's own choosing.

The successful applicant will join the Laboratory of Experimental Ecology [http://lab.hrcek.net] at the Biology Centre, Czech Academy of Sciences, Ceske Budejovice, Czech Republic, under the supervision of Dr

Jan Hrcek. The laboratory is a multinational team of postdocs, PhD students and technicians and the applicant will have the opportunity to work extensively with other team members. The laboratory obtained prestigious high-level funding for five years from 2020 to 2025 (ERC-CZ grant) and therefore can provide substantial resources and support for exceptional research. The laboratory is part of the Department of Ecology, a dynamic international centre for research on interaction networks.

Together with the PhD student we will choose a co-supervisor from current international collaborators (listed at the bottom of [http://lab.hrcek.net/-people.html] page) or start new collaborations. The position will include a research stay abroad.

The deadline for applications is 1st December 2021. The position can start from February 2022 onwards. Interested candidates who could only start in autumn 2022 are also encouraged to get in touch. The student will receive a salary which comfortably covers living expenses in the Czech Republic. The working language is English and applicants from all countries are eligible. A MSc degree is required to enter PhD in Czech Republic. We are looking for candidates with some of the following:

- Research experience with laboratory experiments, insect ecology or molecular ecology - Experience in eco-evolutionary dynamics or population genetic modelling - Experience with population genetics - Driving licence and fieldwork experience

To apply please send one document comprising a CV, contact details for two references, and a motivation letter to Jan Hrcek [janhrcek@gmail.com].

Jan Hrcek <janhrcek@gmail.com>

DrexelU AntAphidMicrobiomes

The Russell Lab at Drexel University seeks strongly motivated and intellectually engaged Ph.D candidates to join them in the Department of Biology for the Fall of 2022. Preferred, but not required, is background experience in molecular ecology, genomics, evolutionary biology, or entomology. Students with interests in social justice and environmental sustainability are highly preferred.

Successful recruits will be joining a lab that strives to support minoritized groups in the sciences, and one that regularly engages in readings, discussions, and improved advising practices steeped in the realms of Diversity, Equity, and Inclusion. We aim to train students who will apply these practices in their future mentoring. Emphasis is also placed on effective science communication, effective and fair collaboration, and the development of critical-thinking skills in addition to bench, field, and computational toolkits. Our current lab roster includes 8 undergraduates, 4 PhD students, and 1 postdoctoral fellow, providing a critical mass for our strong intellectual and socially conscious culture, along with numerous opportunities for collaboration and the development of mentoring skills.

For their research, students will work on one of two systems: 1. A 46-million year old nutritional symbiosis between Cephalotes turtle ants and their symbiotic gut bacteria. 2. Symbioses between pea aphids and protective bacteria.

Research in both system uses genomic tools to understand symbiont function, diversity, and evolution. Both systems are amenable to lab experimentation, and opportunities exist for local and semi-long-distance field research to collect host insects and ecological metadata from the surrounding habitat.

Dissertation research on the ant system may be focused on elucidating symbiont function and evolutionary history, while that on the pea aphid may focus on symbionts' protective roles - against parasitoids or high temperatures. Alternative projects, available in both systems, may include studies on within-host symbiont interactions and their capacities to structure symbiotic communities. Genomics, bioinformatics, PCR screening, phylogenetics, FISH microscopy, and live insect manipulations will be among the tools utilized for these lines of research. All are supported by strong lab/university infrastructure and opportunities for training at Drexel and beyond.

Collaborators on both projects come from Drexel and other renowned academic institutions, providing access to a wide network with diverse expertise. Through the PI's secondary appointment with Drexel's Biodiversity, Earth, and Environmental Sciences department, students will gain access to an even broader professional pool. Like our collaborators, and our peers in Biology, these BEES colleagues bring with them a variety of interests in the areas of social justice, sustainability, climate change, science, and leisure.

All inquiries should be directed to Professor Jacob Russell at jar337@drexel.edu and should include a brief statement of interest and a CV.

FOR MORE INFORMATION

-Russell lab website: http://www.pages.drexel.edu/-

˜jar337/index.html

-Google Scholar website: https://scholar.google.com/-citations?user=_0gMkHRngbEC&hl=en -Info on the PhD in Biology: https://drexel.edu/coas/academics/-graduate-programs/biological-sciences/doctorate/ -Biology department website: http://www.drexel.edu/-biology/ -BEES department website: http://-drexel.edu/bees/ -Biology's Cell Imaging Center: http://www.pages.drexel.edu/˜bio/cores/cic/ -Drexel's Picotte Computing Cluster: https://drexel.edu/core-facilities/facilities/research-computing/service/-picotte/ "Russell,Jacob" <jar337@drexel.edu>

EarlhamInst Norwich SplicingNetworkEvolution

Therapies for many potentially treatable genetic diseases remain out of touch because we still don't have a full picture of how genes are regulated differently between cells and tissues. Many genes, including some directly associated with traits and disorders, are widely expressed across cells and tissues, leading to potential unwanted secondary effects if blindly targeted with medications.

However, nearly all genes in humans undergo alternative splicing, the process through which different transcripts are generated from a single gene.

Recent work by us and others demonstrated that alternatively spliced transcripts arising from many of these genes tend to have a much more specific expression, opening the opportunity to identify specific isoforms as potential targets for drug development. To further the identification of isoforms of interest it is becoming increasingly important to fully characterise their regulation through the reconstruction of regulatory networks integrating splicing information in relevant tissues.

We offer a highly collaborative PhD project between the Haerty (bioinformatics) Macaulay (molecular biology, technology development), and Tunbridge (neurobiology, target identification) groups. The main aim of the project is to develop approaches to reconstruct regulatory networks at the transcript level in the human brain, assess the transcript regulation for candidate genes, and assess the impact of genetic variation on transcript regulation.

The student will work in a rapidly developing field and gain unique expertise in computational biology, large dataset analysis, genomics, transcriptomics, sequencing technologies, molecular biology, technology development, and therapeutic target identification.

The project will be conducted at the Earlham Institute, a UKRI-BBSRC research centre of excellence for bioinformatics and sequencing technology development, in close collaboration with scientists at the University of Oxford. The student will have access to training and career development opportunities at EI and on the Norwich Research Park as part of the Norwich Biosciences Doctoral Training Partnership.

Related Reading:

ClarkM., et al. 2020. Long-read sequencing reveals the complex splicing profileof the psychiatric risk gene CACNA1C in human brain. Mol Psychiatry 25:37-47.Mincarelli L., et al. 2020. Combined single-cell gene and isoform expression analysis in haematopoietic stem and progenitor cells. biorXivhttps://doi.org/10.1101/-2020.04.06.027474.Wright D. et al. 2021. Long read sequencing reveals novel isoforms and insights into splicing regulation during cell state changes. bioRxivhttps://-doi.org/10.1101/2021.04.27.441628 Entry Requirements

At least UK equivalence Bachelors (Honours) 2:1 or UK equivalence Master's degree. English Language requirement (Faculty of Science equivalent: IELTS 6.5 overall, 6 in each category).

Visit the NRPDTP website for further information on eligibility and how to apply:https://-biodtp.norwichresearchpark.ac.uk/You can also-visit:www.earlham.ac.uk/application-guidance Wilfried Haerty

Group Leader Norwich Research Park Norwich Norfolk NR4 7UZ +44 (0) 1603 450 974

wilfried.haerty@earlham.ac.uk

www.earlham.ac.uk "Wilfried Haerty (EI)" <Wilfried.Haerty@earlham.ac.uk>

ETHZurich MicrobialPredation

Applications are invited for a postdoc position and a PhD position in the lab of Greg Velicer at ETH Zurich as part of our team researching the ecology and evolution of predation in microbial communities, especially predation by and of myxobacteria.

Themes of our research relevant to these positions include: - abiotic, social, community and molecular factors impacting predator- prey interactions and their

evolution, - effects of predation by and of myxobacteria on (co)evolution in microbial communities manipulated for initial composition, species richness and trophic structure, - predatory adaptation and prey counter-adaptation (e.g. mechanisms, dynamics, genetic architecture, specialization) - evolutionary interactions between predation, aggregative multicellular development and motility.

Candidates with any relevant training background and a strong record of creative research who can thrive at both team and individual work in a scientifically and culturally diverse group are sought. Relevant areas of training/interest include (in alphabetical order) community ecology, community metagenomics, experimental evolution, microbial ecology and molecular genetics. Multiple projects relevant to these positions are ongoing and planned, but the interests and expertise of the selected candidates will inform specific project directions.

Support for least two years is available for the postdoc position, although it is expected that the selected candidate will apply for fellowships. PhD positions in Switzerland generally require a Masters degree. (Swiss Masters programs are roughly analogous to the precandidacy phase of US PhD programs. Potential applicants from countries in which a Masters degree is not normally required for entry into PhD programs can contact us to discuss possibilities for meeting the Masters requirement.)

To apply, please send one file to Rita Jenny at rita.jenny@env.ethz.ch that includes a motivation statement (one page max), your CV and contact information for two persons who have agreed to serve as references. All applications received by November 26 will be considered. Please specify the relevant position with a subject line of either "predation postdoc" or "predation PhD". Informal inquiries can be sent to gregory.velicer@env.ethz.ch.

Zurich, Switzerland has vibrant communities of ecologists, evolutionary biologists and microbiologists that offer many opportunities for interaction and collaboration. (https://ibz.ethz.ch/research/eco-evo-zurich.html)

Group research: https://evo.ethz.ch/ Relevant recent publications/preprints: Nair, Vasse et al. 2019 - doi.org/10.1038/s41467-019-12140-6 Wielgoss et al. 2019 - doi.org/10.1126/science.aar4416 La Fortezza et al. 2021 (preprint) - doi.org/10.1101/2021.06.17.448787 La Fortezza et al. 2021 (in press, book chapter preprint) - doi.org/10.20944/preprints202105.0451.v1 Freund et al. 2021 - doi.org/10.1098/rspb.2021.0456 Mayrhofer et al. 2021 - doi.org/10.3390/microorganisms9071362 Nair & Velicer 2021 - doi.org/10.3390/microorganisms9102079 Fiegna et al. 2021 (preprint) - doi.org/10.1101/2021.09.27.461844

See Google Scholar for additional relevant publications: https://scholar.google.ch/citations?user=-Vz_yy3MAAAAJ&hl=en&authuser=1 Velicer Gregory <gregory.velicer@env.ethz.ch>

FUBerlin EcolEvolutionInsectImmunity

Freie Universitaet Berlin, Germany Open PhD position: Resistance and tolerance in persistent infections Application deadline: 8th November 2021

The Evolution and Ecology of Insect Defences group at the Institute of Biology, Freie Universitaet (FU) Berlin, Germany, would like to invite applications for a German Research Foundation (DFG) funded doctoral candidate position (TV-L E13, 65%) for the research project: "Resistance and tolerance in persistent infections". The position is fixed-term and available for 3 years and it will start as soon as possible.

Project background Our research lies in the field of eco-evo-immunology, focusing on host resistance and tolerance to infection (https://armitagelab.com/). A host can counteract an infection by directly reducing its pathogen load, i.e., resistance, or by reducing the harm that the infection does to its fitness, i.e., tolerance (reviewed in Kutzer & Armitage, doi: 10.1016/j.zool.2016.05.011). Given that resistance can be costly and involve autoimmune damage, a more resistant host is not always the fittest. Tolerance on the other hand. describes how well hosts are able to deal with the fitness costs of a given pathogen load. Resistance and tolerance are predicted to give contrasting perspectives on host-pathogen evolution and infectious diseases, therefore it is important to understand infection in the light of these two concepts. In our group we focus on resistance and tolerance to bacterial infections in insects. Such infections are dynamic and, similarly to the case in humans, can persist for up to a lifetime (Acuña Hidalgo et al, doi: 10.1101/2021.03.29.437521). The project will build on our previous work and involve studying the interaction between the host (Drosophila melanogaster) and bacterial pathogens over the course of the infection process. The aims are to understand more about bacterial persistence, the host and pathogen responses during persistent infections, and resistance and tolerance along the trajectory of the infection process. Approaches will include, e.g., genetic modification

of bacteria, bacterial infection of flies, microscopy, proteomics of host responses to infection, and host fitness analyses.

Berlin has a dynamic research environment, and the Freie Universitaet Berlin has a number of other researchers with an interest in insect infection biology, and with whom we intensively interact. Furthermore, there is the possibility to join a graduate programme in biodiversity, evolution and ecology. Please contact Sophie Armitage (sophie.armitage@fu-berlin.de) with any questions or for further information about the project.

Requirements A completed University Master's degree in biology, microbiology or similar.

Desirable - We would very much appreciate applications from enthusiastic and highly motivated students with a background/strong interest in evolutionary ecology and infection biology - Practical experience in molecular biology, microbiology, and microscopy - Knowledge/practical experience of insect physiology (particularly Drosophila melanogaster) - Good knowledge of statistics and experimental design - Fluency in written and spoken English - Good teamwork and communication skills - Ability to work independently - Experience: Completed projects/internships on topics relevant to the research area would be advantageous

How to apply Applications should be written in English and include the following documents, ideally combined into one PDF file: (1) A one-page (maximum) letter of motivation with information on previous research experience and future goals. (2) Your CV, with publications listed if applicable. Please include the names of 2-3 potential contacts as references. (3) Abstract/brief summary of your MSc thesis. (4) Copies of your BSc and MSc certificates. Please indicate your expected end-date if you have not yet finished your MSc.

Please send the application as one single PDF document, to sophie.armitage@fu-berlin.de, with the following identifier in the subject field: "PhD_Res,Tol,Pers_SA".

The deadline for applications is the 8th November 2021. Interviews will take place as soon as possible after this date. We are an international group, and the working language is English. We look forward to receiving your application!

Sophie Armitage

Heisenberg Fellow Freie Universität Berlin Institute of Biology Königin-Luise-Str. 1-3 14195 Berlin https://armitagelab.com/ Sophie Armitage <saoarmitage@zedat.fu-berlin.de>

GeorgeMasonU SEAsiaAvianEvolution

PhD Student Positions in SE Asia Avian Evolution

The Lim Lab (sites.google.com/view/gmuevogen) at the George Mason University, Biology Department, is recruiting 1-2 graduate students for the 2022/23 academic year. Using tropical birds as the study system, student research will focus on one of the following areas: 1) understanding speciation and the role of secondary contacts using multifarious data; 2) metapopulation genetic structure and its drivers; 3) species diversification and trait evolution. Students are welcome to develop independent projects within these broad areas or work in-depth on components of larger projects. Students will be expected to conduct integrative research that combines field/museum work, genomic sequencing and bioinformatic analyses.

Required skills and expectations:

* B.S. or M.S. in Evolution or Biology or a related field (e.g. Ecology) * Background and interest in ornithology and molecular genetics/phylogenetics/population genetics * Demonstrated writing skill * Committed to a collaborative and inclusive lab environment * Interest in bioinformatics * Ability to conduct fieldwork independently

Preferred skills and experiences: * Experience with NGS * Experience with the command-line interface and coding in R, Python, etc * Experience with handling birds and museum specimens * Prior research experience

Students will be partly funded by TAship and RAship. Students will be part of GMU's Biosciences - Biocomplexity and Evolutionary Biology PhD program (https://catalog.gmu.edu/colleges-schools/-science/systems-biology/biosciences-phd/). This is a vibrant program with many opportunities to interact with professors and peers interested in fundamental evolution and ecology questions, as well as applied topics such as conservation.

GMU has three main campuses in the greater Washington, DC area (Fairfax, Prince William and Arlington counties). The Lim Lab is located in the Science and Technology campus (Manassas, Virginia) and collaborates with GMU and outside researchers from NMNH, NZP, SCBI, USGS and other institutions. Mason is a highly diverse university with 49% of students from

underrepresented groups and 37% considered first generation.

For more information, please read about research in the lab. Before applying to the graduate program, please send your CV and a brief cover letter stating your background and interests to HC Lim (hlim22@gmu.edu). Questions are welcome, especially about potential research topics and how your interests may intersect with mine.

HC Lim, Ph.D. Assistant Professor of Biostatistics and Bioinformatics Biology Department

Colgan Hall 409

George Mason University Manassas, VA 20110

HC Lim <big.river.forest@gmail.com>

GeorgetownU PhD PDF ButterflyAdaptation

Opportunities for graduate students and post-doctoral fellows to participate in a multi-institutional collaboration examining adaptive potential of butterflies to climate change

A new NSF-funded initiative to examine how climate impacts population dynamics of butterflies throughout North America has funding for an integrative collaboration based at 5 institutions in the US (listed below). This project will study growth, survivorship, and immune responses of multiple butterfly species to different temperature profiles and variable host plant sources. Field and laboratory approaches (including rearing, population genetics, and gene expression) will study select butterfly populations throughout their range to understand local adaptations and evolutionary potential. We will use these mechanistic data to build dynamic models to project species' responses to climate change. Predictions of emerging models of large-scale population and range dynamics will be tested with data emerging from a network of community (citizen) science monitoring platforms and programs (e.g., the North American Butterfly Counts, route-based butterfly monitoring networks, opportunistic observations through portals like eButterfly and iNaturalist). Validated models will be projected into future climates to explore the potential biodiversity consequences of global change.

There is a great deal of latitude for building individual projects and cross-lab collaborations within the scope of this project. Limited graduate student stipends are available in many participating labs (see below), but recent or current undergrads are also encouraged to learn more about the project and write individualized research proposals that could be separately funded by fellowship programs (e.g., NSF Graduate Research Fellowships, https://www.nsfgrfp.org/). While there is no specific funding in the project for post-docs, the goals of the project align exactly with one current focus of NSF Postdoctoral Fellowships in Biology (area 2), "Integrative Research Investigating the Rules of Life Governing Interactions Between Genomes, Environment and Phenotypes." (https://beta.nsf.gov/funding/opportunities/-postdoctoral-research-fellowships-biology-prfb)

Our project is looking to support a large and diverse collaboration and we are particularly interested in recruiting candidates who have been traditionally underrepresented in the ecological and evolutionary sciences or who are passionate about broadening participation. As such, we also highly encourage interested upcoming and recent graduates who can also apply for NSF Biology Fellowships under area 1: "Broadening Participation of Groups Underrepresented in Biology"

Collaborative PIs and institutions

Georgetown University Biology Department: The Ries and Armbruster labs are seeking a graduate student to begin in fall 2022. Our labs are collaborating on studies of butterfly development and survivorship (focus of Ries lab, https://butterflyinformatics.org/) using RNA-seq and other bioinformatic approaches to examine gene expression (focus of Armbruster lab, https://-armbruster.georgetown.domains/).

The Yang Lab (https://yanglab.ucdavis.edu/) at the University of California, Davis studies species interactions and community ecology from a temporally explicit (phenological) perspective. They use field, lab, and greenhouse experiments to examine how changes in seasonal timing and extreme climate events affect plant-herbivore interactions, and have also developed models to investigate the evolution of phenological cue strategies under changing environmental conditions.

The Kingsolver Lab (https://jgking.web.unc.edu/) at University of North Carolina, Chapel Hill integrates physiology, ecology and evolution to explore how organisms respond and adapt to variable, natural environments. We combine laboratory, field and modeling approaches, working primarily with herbivorous insects and their interactions with hostplants and parasitoids. Much of our recent work focuses on understanding and predicting the consequences of climate change and of invasive species for butterflies and other insects.

The Smilanich Lab (http://www.angelasmilanich.com/) at the University of Nevada, Reno studies the interaction between host plants, the immune response, and pathogens in herbivorous insects. We seek to understand the effect of host plant chemistry on the insect immune response and their ability to defend against entomopathogenic viruses. We use a combination of lab and field work to investigate these interactions and a suite of

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HeidelbergU VertebrateBrainEvolution

PhD student positions (dry and wet lab): Vertebrate brain origins and evolution

Center for Molecular Biology (ZMBH), Heidelberg University, Germany

Two PhD student positions (3 years with possible extensions) are available immediately in the evolutionary genomics group of Henrik Kaessmann. Applications will be reviewed until the positions are filled.

We are seeking highly qualified and enthusiastic applicants with a Master degree, a keen interest in evolutionary questions, and a talent and passion for experimental molecular/cellular work and/or bioinformatics analyses (i.e., both joint and distinct dry/wet lab projects are possible).

Our lab has been interested in a range of topics related to the origins and evolution of organs in mammals and other vertebrates and the various underlying genomic/molecular changes (see "Selected Publications" below). In the framework of our research, we have generated and analyzed comprehensive genomics (e.g., RNA-seq, ATAC-seq) datasets based on samples from our large organ collections. More recently, we have begun to bring the work of our lab to the level of single cells using state-of-the-art single-cell genomics technologies and bioinformatics procedures.

The PhD student positions will be funded by a recently awarded ERC Advanced Grant (VerteBrain - "The Ancestral Vertebrate Brain and its Cellular Diversification During Evolution"). In the framework of this grant, we seek to unravel the molecular origins and evolution of the vertebrate brain and its constituent substructures and cell types. Possible projects involve the generation and/or comparative/bioinformatics analyses of extensive single-cell transcriptomic, epigenomic, and spatial transcriptomics data for key species representing all major vertebrate lineages, ranging from jawless vertebrates, such as the sea lamprey, to mammals, such as platypus and human. The precise projects will be developed together with the candidates, based on their respective interests and dry/wet lab skills.

In our lab, we attach great importance to a highly collaborative and positive team spirit! Indeed, we have various "mini-teams" of dry and wet lab researchers within the lab, who enthusiastically drive projects forward in remarkable ways. We are also particularly fond of the diverse cultural backgrounds of our lab members, which contribute to a very enriching atmosphere.

The language of our institute is English and its members form a highly international group. The ZMBH is located in Heidelberg, a picturesque international city next to the large Odenwald forest and Neckar river. The city offers a very stimulating, diverse and collaborative research environment, with the European Molecular Biology Laboratory (EMBL), German Cancer Research Center (DKFZ), Heidelberg Institute of Theoretical Studies (HITS), and the Max Planck Institute for Medical Research located in close proximity to the University.

For more information on the group and our institute more generally, please refer to our website at the ZMBH (http://www.zmbh.uni-heidelberg.de/Kaessmann/).

Please submit a CV, statement of research interest, and names of three references to: Henrik Kaessmann (h.kaessmann@zmbh.uni-heidelberg.de).

– Selected publications:

Sarropoulos, I., Sepp, M., Fromel, R., Leiss, K., Trost, N., Leushkin, E., Okonechnikov, K., Joshi, P., Giere, P., Kutscher, L.M., Cardoso-Moreira, M., Pfister, S.M., and Kaessmann, H. (2021) Developmental and evolutionary dynamics of cis-regulatory elements in mouse cerebellar cells. Science 373: eabg4696.

Mazin, P.V., Khaitovich, P., Cardoso-Moreira, M., and Kaessmann, H. (2021) Alternative splicing during mammalian organ development. Nat. Genet. 53:924-935.

Wang, Z.Y., Leushkin, E., Liechti, A., Ovchinnikova, S., Mossinger, K., Bruning, T., Rummel, C., Grutzner, F., Cardoso-Moreira, M., Janich, P., Gatfield, D., Diagouraga, B., de Massy, B., Gill, M.E., Peters, A.H.F.M., Anders, S., and Kaessmann, H. (2020) Transcriptome

and translatome co-evolution in mammals. Nature 588: 642-647.

Cardoso-Moreira M., Halbert, J., Valloton, D., Velten, B., Chen, C., Shao, Y., Liechti, A., Ascencao, K., Rummel, C., Ovchinnikova, S., Mazin, P.V., Xenarios, I., Harshman, K., Mort, M., Cooper, D.N., Sandi, C., Soares, M.J., Ferreira, P.G., Afonso, S., Carneiro, M., Turner, J.M., VandeBerg, J.L., Fallahshahroudi, A., Jensen, P., Behr, R., Lisgo, S., Lindsay, S., Khaitovich, P., Huber, W., Baker, J., Anders, S., Zhang, Y.E., and Kaessmann H. (2019) Gene expression across mammalian organ development. Nature 571: 505-509.

Sarropoulos, I., Marin, R., Cardoso-Moreira, M., and Kaessmann, H. (2019) Developmental dynamics of lncRNAs across mammalian organs and species. Nature 571: 510-514.

Cortez, D., Marin, R., Toledo-Flores, D., Froidevaux, L., Liechti, A.,

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HongKongU EcologyEvolutionBiodiversity

GRADUATE OPPORTUNITIES AT THE UNIVERSITY OF HONG KONG (HKU)

The Research Division for Ecology and Biodiversity (DEB) is inviting candidates interested on enrolling to PhD studies to apply (before December 1, 2021) to two programs listed below.

The Research Division of Ecology & Biodiversity is one of the six Research Divisions in the Faculty of Science. DEB oversees a range of projects on fundamental research in ecology and evolution as well as applied work on environmental change, wildlife forensics and conservation. It has strengths in ecology, evolutionary and environmental biology, marine sciences, as well as in global change and conservation biology. For more information on DEB, see: https://www.scifac.hku.hk/research/research-divisions-and-units/research-divisions/ebd Interested candidates are encouraged to approach potential supervisors whose contact details can be found from: https://www.scifac.hku.hk/research/research-divisions-and-units/research-divisions/ebd/division-members 1. HKU Presidential PhD Scholar Programme (HKU-PS)

In order to attract top candidates from around the world to pursue full-time PhD studies at HKU, a HKU Presidential PhD Scholar Programme ('The Programme') is now inviting applications for the admission year 2022-23. The Programme offers the most prestigious scholarship package, namely, the HKU Presidential PhD Scholarship (HKU-PS), to selected outstanding full-time PhD students admitted to The University of Hong Kong.

The HKU Presidential PhD Scholars will also receive strong academic and training support from the University, e.g. individualised advisory service, training in teaching and opportunities to interact with leading scholars. A group of distinguished Faculty members will also give advice, provide additional mentorship and training opportunities, and oversee the academic career paths.

2. Hong Kong PhD Fellowships

The Hong Kong PhD Fellowship Scheme (HKPF), established by the Hong Kong Research Grants Council (RGC) in 2009, aims at attracting the best and brightest students across the world to pursue their research degree programmes in Hong Kong. Around 300 PhD Fellowships are awarded by the RGC each academic year.

For more information and how to apply, please visit:

https://gradsch.hku.hk/gradsch/prospective-students/scholarship-funding-and-fees Juha Merilä Division for Ecology & Biodiversity School of Biological Sciences The University of Hong Kong Kadoorie Building (office 3N-19) Pokfulam Road Hong Kong, SAR

Office tel: (+852) 2299 0607

merila@hku.hk

Division of Ecology and Biodiversity: https://www.scifac.hku.hk/research/research-divisions-and-units/research-divisions/ebd Google Scholar: https://scholar.google.com/citations?user=-cZJ7ifQAAAAJ&hl=en merila <merila@hku.hk>

KU Leuven
ModellingMicrobialEvolution

PHD POSITION IN MODELLING MICROBIAL EVOLUTION AT KU LEUVEN (BELGIUM)

PROJECT

We offer an interdisciplinary PhD position at the University of Leuven (Belgium). The research will concern mathematical and/or computational modelling of microbial evolution in changing and uncertain environments, and will be mainly supervised by Prof Piet van den Berg and co-supervised by Prof Jan Michiels. This set-up ensures close supervision on the modelling part (Prof van den Berg) but also the direct involvement of a world class experimental evolution lab (Prof Michiels), both to direct attention to the most relevant research questions and to test model predictions.

Research questions include (but are not limited to):

* How do environmental change and uncertainty affect the evolutionary response to antibiotic stress in bacteria (i.e. evolution of resistance vs persistence)? * Do different genetic backgrounds make some evolutionary responses to environmental change and uncertainty more likely than others?

The position is relatively flexible - the course of the project can to a reasonable extent be adapted to the interests and background of the candidate.

POSITIONING WITHIN KU LEUVEN

The PhD student will be positioned in the department of Microbial and Molecular Systems (M2S) at the Centre of Microbial and Plant Genetics (CMPG). In addition, there will be strong links to the Biology department, specifically the Division Ecology, Evolution and Biodiversity Conservation (EEBC). Research at CMPG focuses on fundamental aspects of (micro)biology and their biotechnological applications, with active researchers in the fields of microbial evolution and ecology, beneficial and pathogenic microbe-host interactions, antimicrobials, probiotics, biofilms, fermentation and biofuels, plant protection and embryogenesis. Research at EEBC focuses on various aspects of ecology and evolution, including socio-ecology and social evolution, aquatic ecology and conservation, evolutionary genomics, and plant population biology and conservation. The student in the advertised position will mostly be studying questions of microbial evolution, topics that are most directly related to research at CMPG, but much overlap in research interests exists in the EEBC (for example, questions revolving around adaptation to uncertain environments). Since the main supervisor (Prof. van den Berg) is part of both these departments, the student will be embedded in a group with researchers that work on both sides.

ABOUT LEUVEN

The University of Leuven is a top institution, ranked as the 5th university in the European Union (Times Higher Education ranking) and the 1st in Europe (7th in the world) in Reuters' ranking of the most innovative universities. Leuven is a relatively small town boasting a vibrant student scene (almost 58,000 students of which around 10,000 international), has an attractive city centre and many events year-round. Leuven is located 20 minutes by train from Brussels and only 15 minutes from Brussels international airport, which has many international connections. In addition, Brussels is exceptionally well connected to other European hubs by train, with direct connections to Paris (1 hour 20 minutes), Amsterdam (1 hour 50 minutes), London (2 hours), and Frankfurt (3 hours).

PROFILE

* MSc in Biology or a related field * Experience with theoretical modelling and/or systems biology * Capacity for creative and critical thinking and strong motivation to work on evolutionary questions

OFFER

Full time position, Standard Belgian PhD salary.

Three years of funding are currently secured for this position - the student will be asked to apply for FWO PhD funding (so has to be eligible). Eligibility criteria for application can be found here: https://www.fwo.be/en/fellowships-funding/phd-fellowships/phd-fellowship-fundamental-research/-regulations-phd-fellowships-fundamental-research/
INTERESTED?

For more information please contact Prof. dr. Piet van den Berg: piet.vandenberg@kuleuven.be

You can apply for this job no later than November 08, 2021 via the online application tool: http://www.kuleuven.be/eapplyingforjobs/light/-60065622&utm_medium=jobsites&utm_source=-AcademicPositions . KU Leuven seeks to foster an environment where all talents can flourish, regardless of gender, age, cultural background, nationality or impairments. If you have any questions relating to accessibility or support, please contact us at

diversiteit.HR@kuleuven.be.

Piet van den Berg <piet.vandenberg@kuleuven.be>

LeibnizInst Bonn 2 MinnowEvolution

Graduate position: LIB in Bonn, Germany. Population Genomics of Minnows.

The Leibniz Institute for the Analysis of Biodiversity Change (LIB) was established in July 2021 as an integration of the Centre of Natural History of the University Hamburg (CeNak) with its Zoological, Geological-Paleontological and Mineralogical Museums into the Zoological Research Museum Alexander Koenig ' Leibniz Institute for Animal Biodiversity (ZFMK), Bonn. As such, the LIB will be a foundation under public law and a research museum of the Leibniz Association. The LIB will contribute to biodiversity research with its extensive collections and through its research fields of taxonomy, morphology and molecular science. LIB will further contribute to the conservation of global biodiversity, to documenting and analyzing evolutionary and ecological biodiversity change, and engage in science transfer activities on biodiversity change and its potential causes.

The LIB is looking for a PhD student (f/m/d) studying population genomics of minnows in the framework of the Leibniz association-funded project "Hybrid swarm evolution of native and invasive Phoxinus spp. to the river Sieg, Germany" at the Centre for Molecular Biodiversity Research (ZMB)in Bonn, for the time of 3 years as a part-time job 65%. Earliest starting at April 2022.

Project background: Species hybridisations allow the combination of molecular and morphological characters into novel variants and therefore have the potential to create hybrids that can outcompete parental species. In the River Sieg, Germany, the native minnow Phoxinus phoxinus, is threatened by artificial stocking practices with what was believed to be P. phoxinus from other German drainages. Recent work, however, has shown that these stocking populations are in fact distinct Phoxinus species: hybridisation of autochthonous and allochthonous Phoxinus species gave rise to an invader. To unravel the molecular and morphological characteristics of Phoxinus hybrids and to shed light on the mechanisms involved in the formation of an invader through hybridisation, we investigate (i) the population genomics and the genomic architecture of the Phoxinus hybrid swarm for parental allele combinations, genomic rearrangements as well as transposable element content. (ii) We investigate the ecology and niche occupation of the hybrid and parental species in the River Sieg with other fish species to infer ecosystem impact of the invader. For this purpose, we seek two PhD students: one focusing on the genomics and another focusing on the ecology and niche occupation of Phoxinus. Please see companion add for the respective job descriptions.

Job description: The successful applicant will perform comparative genomics (RAD-seq or low-coverage WGS, and whole genome re-sequencing) to understand the role of standing and introgressed genetic variation as well as structural variation in the genomes of local minnow populations. Further, we will perform yearly abundance monitoring (approx. 20 days/year) in different river systems in the larger Bonn area, which the successful applicant is expected to support.

Your profile: The successful candidate is a creative, open-minded, resilient individual who should hold a master's degree in a relevant area such as but not exclusively evolutionary biology, molecular biology, ecology, genomics, bioinformatics or related fields; and have a genuine interest in evolutionary biology, population dynamics, and genome evolution. The willingness to learn new methods is a requirement, programming skills (e.g., R, python, workflow management tools, HPC computing), whole genome analyses and/or comparative genomics are an asset. A good command of English is required for communication with collaborators and publication of results. German is no requirement as Bonn is an international city. The successful candidate is expected to participate in the yearly field seasons in the Bonn area for sampling and abundance monitoring.

The Leibniz Association is committed to diversity and equal opportunities. LIB is certified as a family-friendly institution. We aim to increase the proportion of women in areas where women are under-represented and to promote their careers. We therefore strongly encourage women with relevant qualifications to apply.

Applications will be handled in accordance with the Landesgleichstellungsgesetz NRW (State Equality Act). Applications from suitable individuals with a certified serious disability and those of equal status are particularly welcome. We offer a highly motivating environment and ability to work independently. Salary and benefits are according to a public service position in Germany (TV-L E 13).

Please direct informal inquiries to Dr. Madlen Stange m.stange@leibniz-zfmk.de. Applications in English, accompanied by supporting documentation (CV, motivation letter (1-2 pages), certificates, transcripts of aca-

demic records, and contact information

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LouisianaStateU EvolutionaryBiology

PhD Position in Plant-Microbiome Symbiosis at LSU

The Tan lab at the Department of Biological Sciences of Louisiana State University is seeking one PhD student to join us in the fall of 2022. We use an integrative approach, including laboratory experiments, field observation, and data analysis, to explore a wide range of topics in community and evolutionary ecology, including community assembly, causes and consequences of biodiversity, and eco-evolutionary dynamics. For this position, we are specifically looking for candidates who are interested in microbiome assembly, plant-microbiome symbiosis, and/or the biodiversity-stability relationship.

The ideal candidates for the positions are expected to be highly self-motivated, have a general interest and research experience in ecology, evolutionary biology, microbiology, or plant biology. Previous experience in microbial ecology is preferred, but not required.

Interested students can send inquiries with CV, unofficial transcripts, and a brief statement of research experience and interests to Dr. Jiaqi Tan (jtan7@lsu.edu). Students of diverse backgrounds are welcome.

Information about Dr. Tan can be found at

https://jiaqitan.wixsite.com/mysite . Information about the graduate program in Biological Sciences can be found at https://www.lsu.edu/science/biosci/-graduateprogram/biosci.php . Jiaqi Tan

Assistant Professor

Department of Biological Sciences

Louisiana State University

Email: jtan7@lsu.edu

Jiaqi Tan <jiaqitan@hotmail.com>

MississippiStateU PlantEvoEco

The Folk lab at Mississippi State University is recruiting at Master's or PhD levels for Fall 2022! We are looking for students interested in plant evolution, biogeography, phylogenomics, or plant-microbe interactions.

We work broadly on projects at the intersection of plant evolution and ecology, with a focus on macroevolution and speciation processes. Current projects in the lab focus on (1) the evolution of nitrogen-fixing symbioses in plants and associated microbes and how this enabled invasion of harsh habitats, (2) the biogeography and radiation of the world's temperate flora, and (3) the contribution of hybridization to plant speciation. We stress interdisciplinary student training, and all of our work has strong wetlab, computational, field, AND herbarium-based components. This work is funded by the National Science Foundation. We work with students to develop their own projects in these areas or related themes and put a stress on student ownership of the work. Additional information about us can be found at: http://www.ryanafolk.com/. Students will be supported a full 12 months through a combination of research assistantships (both semester and summer) and TA appointments. We are highly collaborative and aim for an inclusive environment. We particularly encourage POC and LGBTQ+ individuals to consider us for their graduate careers.

Those interested should contact me directly by email (rfolk@biology.msstate.edu) before applying with an attached CV and some information on your research interests. Our graduate admissions deadlines are flexible but applications before December 31, 2020 are preferred. Mississippi State is located in Starkville, northeastern Mississippi, and a half-hour drive from Noxubee Wildlife Refuge and Tombigbee National Forest with excellent outdoor opportunities. We are 1.5 hours from Tuscaloosa, 3 hours from Memphis, and 4.5 hours from New Orleans. Additional departmental details can be found at: https://www.biology.msstate.edu/ . "Folk, Ryan" <rfolk@biology.msstate.edu>

MonashU AUS AnimalMicrobiomes

I invite applications for a PhD scholarship to investigate the ecological and evolutionary processes shaping animal microbiomes.

There is a remarkable similarity in the functional composition of microbiomes associated with animal hosts, at least when analysing genes with known functions. While some of these shared functions represent ubiquitous metabolic processes essential for bacterial survival, others are likely to be specific to animal microbiomes or represent widely distributed functional groups. The massive metagenomic datasets of microbiomes associated with a range of animals contain precious information on what is the minimal genetic make-up of a healthy animal-associated microbiome. This project proposes to leverage the accumulated information from a range of animal microbiomes to identify community assembly rules and evolutionary processes acting on microbial communities associated with metazoans. This research will help to evaluate the transferability microbiome research across animal hosts and will contribute to guiding microbiome engineering strategies.

Ideal start date is mid 2022. Please email your interests and CV to vanessa.marcelino@hudson.org.au, and I will be happy to chat and provide more details.

Requirements:

The candidate will need to apply for a Scholarship from Monash University: https://www.monash.edu/study/-fees-scholarships/scholarships/find-a-scholarship/-monash-graduate-scholarship-mgs Get in touch before submitting an application via Monash. To be competitive for this scholarship, the applicant should have a MsC or BSc with Honours, and have experience with bioinformatics.

*Vanessa Rossetto Marcelino*Microbiota and Systems Biology Lab. Hudson Institute of Medical Research 27-31 Wright St, 3168, VIC, AUS

vrmarcelino@gmail.com

NorthCarolinaStateU EvolutionaryGenomics

The Genetics & Genomics Academy at NC State isrecruitingstudents for the Genetics & Genomics (GG) Scholars fellowship program (deadline: January 15th, 2022). The GG Scholars program prepares future scientists for cutting edge, interdisciplinary research across the life sciences andis built on the philosophy that the exploration of genes and genomes informs all fields of biology. The GG Scholars program is open to incoming PhD students. Throughout PhD training, GG Scholars are provided with an array of opportunities for development as scientists, including a world-classGGA Seminar Series, interactions withGGA Research Interest Groups,and a network of partnerships at the University and beyond to support careers in research, education, outreach, policy, and industry.

Learn more about the programby visiting our websitehere(https://ggscholars.org/) or in the attached flyer. There are 17 differentaffiliated PhD programsto the GG Scholars where students will complete their PhDs after their first-year fellowship and training. There are two pathways toapplythe GG Scholars program and new students will join this program either through an affiliated program or the GG Scholars program itself. More details about the application process, links to the application, and application materials can be found on the web site and below.Applications are open September 1st, 2021.

Please share this program with anyone who you think might benefit from an umbrella graduate training program in Genetics and Genomics. If you have any questions please direct them to Dr. Martha Burford Reiskind (mbreiski@ncsu.edu) or email them directly to the GG Scholars program (gg_scholars@ncsu.edu).

Martha Burford Reiskind <mbreiski@ncsu.edu>

NTNU Norway
SticklebackPaleogenomics

PhD investigating evolution through time - and across the ecological transition from marine to freshwater - in threespine sticklebacks using paleogenomics

The NTNU University Museum invites applications for a PhD-position working on the "Stickle-back-in-time" project. The candidate will study positive and negative selection acting upon the genomes of three-spined stickleback populations that colonized freshwater lakes from the marine environment after the Last Glacial Maximum. This will involve analyzing genomes from both modern and ancient samples, and from time series of sedDNA. See the recent paper by Kirch et al. (2021) Current Biology for an example:

https://doi.org/10.1016/j.cub.2021.02.027 https://www.youtube.com/watch?v=ZFoOgCkCLPs The project will be conducted using the NTNU University Museum's computational resources and specialized genomics laboratory facilities, where you will be supervised by the PI: Associate Professor Andrew Foote and Professor Felicity Jones of the Friedrich Miescher Laboratory of the Max Planck Society.

We work closely with Mike Martin's Holomuseomics Group, which is comprised of international masters, doctoral and post-doctoral candidates. There is department dedicated to helping international students settle into life in Trondheim. The city is a vibrant place to live, nestled between the fjord and the mountains, with many social activities available.

The position is available from Dec 1, 2021. Master students graduating before this date can apply. The period of employment is 3, or 4 years with 25% of the time allocated to collection work, teaching and public outreach for candidates with the right background and motivation. Applications should include a cover letter (max. 1 page) that includes a statement of motivation, summary of scientific work and research interests; and that demonstrates how the applicant's experience satisfies the qualifications for the position.

The PhD will include some modern and ancient DNA lab work, but training will be given and prior experience in not a pre-requisite. The majority of the work will be developing bioinformatics pipelines and analyzing datasets that combine modern, paleo, and sedDNA data.

The successful candidate is also expected to conduct fieldwork in Finnmark, northern Norway to sample modern stickleback populations, and the attend conferences such as the upcoming stickleback meeting in Iceland in 2022.

The qualification requirement is that you have completed a master's degree or second degree (equivalent to 120 credits) with a strong academic background in evolutionary biology and genomics or closely related fields with a grade of B or better in terms of NTNU's grading scale. If you do not have letter grades from previous studies, you must have an equally good academic foundation. If you are unable to meet these criteria you may be considered only if you can document that you are particularly suitable for education leading to a PhD degree.

The following skills are also required:

Bioinformatics experience, i.e. NGS laboratory and computational analysis methods.

Familiarity with the UNIX command-line.

Excellent written and oral English language skills

PhD candidates are remunerated in code 1017, and are normally remunerated at gross from NOK 491 200 per annum before tax, depending on qualifications and seniority. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.

The period of employment is 3, or 4 years including 25% duty work.

Appointment to a PhD position requires that you are admitted to the PhD programme in biology within three months of employment, and that you participate in an organized PhD programme during the employment period.

The deadline for application is 14th November.

Applications can be submitted through

https://www.jobbnorge.no/ledige-stillinger/stilling/213378 For further information, please contact me at andrew.foote@ntnu.no

Andy Foote

Andrew Foote <andrew.foote@ntnu.no>

Pasteur Paris MicrobialPaleogenomics

A graduate position for the project entitled “Predicting migration histories of ancient human populations using phylogenomics of ancient commensal microbes” is now available in the Microbial Paleogenomics at Institute Pasteur, Paris, France.

About the Unit:

The Unit investigates how human microbes emerged, spread and changed at the genomic level over the course of human history, and uses this information to better understand the complexity of modern infectious diseases and human microbiomes. We do so by combining ancient DNA (using ancient human remains as sources of DNA), deep sequencing, genomics and metagenomics, phylogenetics, bioinformatics approaches. We closely interact with historians and archaeologist to properly contextualize our results.

More info at: https://research.pasteur.fr/en/team/microbial-paleogenomics/ < https://nicorascovan.wordpress.com >

About the supervisor: NicolaÃRascovan. https://nicorascovan.wordpress.com .For more info, please contact nicolas.rascovan@pasteur.fr (@NRascovan on twitter).

About the project:

Background - Humans and microbes have closely interacted throughout the evolutionary history of our species. Some of the microbial species that form part of the human microbiome can be found in populations from all continents, time periods and ecosystems. Moreover, different works have shown evidence that the genomes of certain core microbial species, and even the metagenome of the human microbiota, could be used to trace back migrations of individuals and populations. However, to date, no one has systematically investigated at which extent, how far in time and how precisely these migrations could be inferred from microbial DNA.

Goals and hypotheses - The ultimate goal of this project is to develop new methodological and statistical approaches to estimate migration patterns of ancient human populations (e.g., timings, directions), by using microbial genomes as a proxy. To do so, we will combine ancient and modern genomic data from humans and their oral microbial species, both retrieved from the same individuals, with samples spanning over thousands of years and vast geographic regions. Assuming that ancient human populations diverged from each other together with at least some of their associated microbes, our hypothesis is that these microbes will likely contain phylogenetic signatures reflecting the migration histories of their host populations. If so, phylogenomic and molecular clock analyses of such species could be used to estimate the divergence times and spread directions between ancient human populations.

Project description - This project will be centered in pre-Columbian populations from South America, a perfect model for this study because: a) we know very little about their migration histories across the continent and population movements over time, b) these populations have been isolated from other continents for millennia, thus representing a clear case to search for microbial species that entered the continent with the founding populations of the Americas, and those that were acquired from the environment while they spread and c) our lab has a large collection of data from these populations (ancient DNA datasets -human and oral microbes- from individuals spanning over millennia and vast geographic regions).

The first specific goal (AIM 1) will be to identify the microbial species that can be consistently found across individuals from different periods and regions. We will do so by mapping raw sequencing data on a genomic database we have generated in the lab that contains a comprehensive collection of genomes from oral microbial species recovered from worldwide populations and time periods. From these analyses, we expect to recover whole genome data from species that are persistently found in individuals from our collection and other populations.

The second specific goal (AIM 2) will be to identify microbial species with similar spread histories than their host human populations. To do so, we will first analyze ancient human genomes using classical human population genetics approaches widely used in the ancient DNA field to reconstruct known or highly suspected migration trajectories of these populations. We will then use phylogenomic and molecular clock analyses from all genomes of each microbial species collected in the previous goal and separate those exhibiting or not similar trends to the results obtained from human genomes. Finally, we will develop new statistical frameworks to collate the results from human and microbial data. This will allow to accurately identify species that could be used for estimating spread histories and divergence times between human populations, comparably as when using human genomes, but requiring much

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PennsylvaniaStateU EvolutionaryGeneticsBeeMimicry

The Hines lab at The Pennsylvania State University (Biology and Entomology Depts.) is recruiting a PhD-level graduate student to work on an NSF-funded project examining the genetic basis of mimetic color diversity and convergence in bumble bees. The graduate student will perform research projects examining the genetic basis of convergent coloration across several mimetic bumble bee lineages and track how the implicated alleles sort across a mimetic radiation. This research will involve field trips to collect bees in the western United States, genomic sequencing, and genome wide association analysis to assess the genetic targets of repeated evolution of mimetic phenotypes across bumble bees. Students working on these projects will obtain training in evolutionary genetics/evo-devo, developmental biology, and bioinformatics. Students must have a demonstrated passion for research, and an interest in evolutionary biology, molecular research, and in developing expertise in bioinformatics. The student may pursue additional projects related to insect evolutionary genetics/genomics, pigmentation, bumble bee biology and diversity, and/or bee health for their thesis research.

The student can potentially join one of several graduate programs at PSU including: Biology (preferred for this position), Entomology, Ecology, MCIBS, and Bioinformatics and Genomics programs. This opportunity is for a funded research assistantship, however, PSU offers several opportunities for teaching training and student stipends can combine teaching assistantships with research assistantships. The student for this position would preferably be willing to start in Summer 2022 so that the student can engage in important collecting trips, but a Fall 2022 start is possible as well.

The Hines lab integrates genetic, ecological, developmental and evolutionary approaches towards addressing questions on the evolution and conservation of Hymenoptera (bees and wasps) (hineslab.org). Graduate students will have numerous opportunities for training as PSU has a strong focus on Bioinformatics and Genomics, houses several project-relevant facilities in the PSU Huck Institute of Life Sciences (e.g., microscopy, genomics, proteomics, bioinformatics), is home to the Center of Pollinator Research and Insect Biodiversity Center, and hosts numerous cross-departmental seminars and programs. The student will also engage the labs of co-PIs Jeff Lozier (U. Alabama) and Jonathan Koch (USDA ARS, Logan Utah) in this research.

Please send an email with your interest in this opportunity along with your CV to Dr. Heather Hines (hmh19@psu.edu).

The Pennsylvania State University is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexualorientation, gender identity, national origin, disability, or protected veteran status. U.Ed.SCI 22-06

hmh19@psu.edu

QueensU Belfast ParentalCareEvolution

NERC DTP PhD project -—Ecological drivers and conservation implications of parental care diversity in vertebrates - a phylogenetic comparative study on the evolution of parental care diversity Lead Supervisor: Dr Isabella Capellini (Queen's University Belfast)—Co-Supervisor: Dr Greta Bocedi & Dr Lesley Lancaster (University of Aberdeen), Dr Domhnall Jennings (Queen's University Belfast)

There are astonishing differences in whether, how, and how long for, animals care for their offspring. In most species, such as many marine fishes, parents abandon their fertilized eggs to their own destiny, which is mostly being eaten by predators. Conversely, parents of other species provide protection and resources to their offspring. While parental care increases offspring survival, it also comes at considerable costs for the parents because resources and time are limited. Once evolved, not only does care affect the fitness of parents and offspring, but it also alters life history strategies, is related to sexual selection and mating system, leads to cooperation and conflict within the family, and promotes the evolution of sociality. Yet, we know very little about when care evolves and its knock-on effects on species reproduction, population dynamics and extinction risk.—

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Following our successful approach focusing on diversity in parental care [1,2],—this project combines state-of-the-art phylogenetic comparative approaches, datasets of parental care behaviours for hundreds of vertebrate species, and cutting-edge evolutionary modelling, to:—

(i)————————Investigate which ecological conditions promote the evolution of care diversity;

(ii)————————Unravel how reproductive traits co-evolve with different care forms;

(iii)————————Evaluate how care diversity influences population trends and extinction risk.—

The student will have the opportunity to shape the project by deciding the extent of theoretical modelling vs empirical analyses; selecting the model groups; expanding or reducing the components as best suited to their interests.

The student will be trained on data collection, data management, numeracy, statistical analyses, specifically:

i.————————Assemble accurate datasets on parental care diversity, ecological and reproductive traits, population trends and extinction risk for hundreds of species, using published data;

ii.————————Test theoretical predictions with phylogenetic comparative approaches in R and BayesTraits;

iii.————————Derive quantitative predictions with evolutionary modelling to guide the empirical analyses.—

Full project description:— https://www.quadrat.ac.uk/-projects/ecological-drivers-and-conservation-implications-of-parental-care-diversity-in-vertebrates/ Essential skills: the ideal candidate will hold a first-class degree in biology, ecology, zoology or related discipline; have very strong quantitative skills, outstanding organisational skills, excellent attention to detail, knowledge of phylogenetic methods.

— Desirable skills: a Masters degree in a relevant discipline, previous research experience with phylogenetic comparative methods and/or mathematical modelling, evolutionary biology and/or theoretical ecological modelling.— Deadline for application: 18th of January 2021.—Interested applicants are strongly encouraged to contact Dr Capellini (I.CapelliniATqub.ac.uk) to discuss their application and/or to find out more about the project.

To apply:—https://www.quadrat.ac.uk/how-to-apply/ How To Apply - QUADRAT

How To Apply - QUADRAT

Funding and Eligibility:—https://www.quadrat.ac.uk/-funding-and-eligibility/ References 1. Furness A. & Capellini I. (2019).—How diversity in parental care evolves: a phylogenetic comparative study in amphibians. Nature Communications, 10: 4709.—— 2. West H. E. & Capellini I. (2016).—Male care and life history traits in mammals. Nature Communications, 7: 11854.

Male care and life history traits in mammals - Nature Communications

Males help care for offspring in about 10% of mammal species. Here, West and Capellini perform phylogenetic comp...

Isabella Capellini <isab972@yahoo.co.uk>

SapienzaU LeibnizInst SandDuneArthropods

DUNArt - Diversity and Conservation of Arthropod Communities of Sand Dunes

Open PhD position (deadline: 27.10.2021): We are pleased to announce one PhD position in a project on the diversity and conservation of arthropod communities of sand dunes of the Mediterranean area. The project is available under a collaborative programme between the Sapienza University, Rome, Italy, and the Center for Integrative Biodiversity Discovery, Leibniz Institute for Evolution and Biodiversity Science, Museum für Naturkunde, Berlin, Germany. The position is for 3 years (36 months), and the student will be enrolled under a double-degree contract between the Sapienza University (host university) and the University of Berlin (partner university). For further information please contact: Pierfilippo Cerretti (pierfilippo.cerretti@uniroma1.it) and Rudolf Meier (Rudolf.Meier@mfn.berlin)

Project description

Background

Sand dunes are an integral and fundamental component of well-preserved coasts, representing the narrow and everchanging interface between terrestrial and marine environments. These deposits mostly form where winds tend to blow sand inland and the beach is wide enough to allow for its accumulation. Sand beaches and dunes harbour a unique fauna, with many species exclusive of this environment, especially among arthropods. The fauna of dunes faces challenging conditions, such as: lack

of soil and moisture, high insolation, strong winds, high temperatures and salty spray, thus it is characterized by unusual morphological adaptations or life history strategies to cope with these challenges. Coastal sand dunes are fragile ecosystems and are negatively affected by anthropic disturbance and impacts, such as: sand extraction, urban development, tourism, erosion and spread of alien invasive species. In the near future, a significant danger for these already imperilled ecosystems is also due to rising sea levels caused by climatic change, which could easily lead to the destruction of the remaining portions of this habitat. Unsurprisingly, the UE classifies coastal sand dunes as the most endangered environment in Europe. DUNArt will focus on the effect of the disappearance of these habitats on arthropod communities. Arthropods are a key component of terrestrial ecosystems, besides being the most diverse group of terrestrial animals, also comprising several dune specialists, making them excellent model organisms to test the impact of anthropic activities and climatic change on coastal sandy beaches. Arthropods themselves are on steep decline, with cascading impacts on terrestrial communities and trophic webs. The object of this project is to document arthropod diversity on sand dunes, investigate their response to a progressively disappearing habitat and locate potential key areas which may act as refuges for this unique fauna.

Aims

I. Document arthropod diversity on coastal sand dunes through dedicated samplings, testing the overall state of knowledge of arthropod fauna in these environments around the Mediterranean basin. II. Set up a geolocalized database of dune associated arthropods with an emphasis on Mediterranean and Italian species and selecting key- groups of herbivores, predators, parasitoids and pollinators. III. Test and model the response of insect groups to environmental changes, predicting the effect of these impacts on their future distribution and, ultimately survival. IV. Predict which traits make taxonomic and functional insect groups more susceptible to environmental changes. V. Pinpoint potential key conservation areas for dune-associated arthropods.

Description of the project, methodology and experimental design

Key taxonomic groups. The project will focus on selected key arthropod groups representing different trophic guilds, showing different adaptations and zonation to dune environment. A priority will be given to arthropod groups which are better known from a taxonomic and natural history point of view, maximizing their predictive potential in the analysis. In particular, the project will focus on dune associated species of talitrids (Amphipoda Talitridae), sowbugs (Isopoda Onyscidea), grasshoppers (Orthoptera), sphecoid wasps (Hymenoptera Apoidea), ground beetles (Coleoptera Carabidae), antlions (Neuroptera Myrmeleontidae), butterflies (Lepidoptera Papilionoidea), sphaerocerids (Diptera Sphaeroceridae) and bristle flies (Diptera Tachinidae), encompassing a broad range of trophic guilds from phytophages to predators/parasitoids and pollinators (though the representatives of each group may fill up different ecological roles).

Experimental scale. European and North African Mediterranean shores, with a particular emphasis on the Italian peninsula and islands.

Methodology and design of the main goals.

I. Dedicated and standardised field samplings will be carried out in selected sand dunes of the Mediterranea basin through Malaise,

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Taipei Taiwan EvolGenomics

*Funded graduate positions in evolutionary, regulatory and ecological genomics of eukaryotes and viruses *Application open until Jan. 30, 2022 or until positions are filled

PhD and MSc positions with stipends are available in the lab of Evolution and Ecology of Eukaryotic Microbes (EEEM) led by Dr. Chuan Ku at the Institute of Plant and Microbial Biology, Taipei, Taiwan.

The EEEM lab focuses on 1. evolutionary history of microalgae (which account for half of carbon fixation worldwide) and other eukaryotes, 2. genome evolution and regulation of giant viruses infecting diverse eukaryotes, and 3. dissecting microbial interactions and cell dynamics using single-cell omics approaches. Successful applicants will be enrolled in graduate programs at top Taiwanese universities the lab is affiliated to and complete required courses taught in English.

Our institute is part of Academia Sinica, the national academy of Taiwan. The working language in our lab and institute is English. Knowledge in Mandarin and other Taiwanese languages is not required, but students

are encouraged to take free Mandarin classes on campus if they want. More details about the programs, universities and stipends can be found on our website.

Application requirements: 1. a master/bachelor degree (received by 2022 or earlier) in biology, natural sciences, informatics or related fields 2. English proficiency for reading, writing, and oral communication 3. strong motivation to work in a research environment 4. ability to work both independently and as part of a team 5. any of these would be a plus: *programming skills *knowledge in evolutionary biology, genomics, microbiology, molecular biology or cell biology *research experience in related fields

To apply, please send an email with the subject IPMB_application_PhDorMaster_YourName directly to Chuan Ku, briefly describing your research interests, experience, skills, future plan, and contact details of referees (at least two for PhD applicants). A single PDF should be attached that includes your CV, transcripts, and, if available, degree certificates, thesis title and abstract, and proofs of relevant skills and experience. Shortlisted candidates will be invited for an interview.

Inquiries about other types of positions (postdocs and research associates) are also welcome.

Dr. Chuan Ku (assistant professor) email: chuanku@gate.sinica.edu.tw Lab website: https://chuanku-lab.github.io/kulab/ Institute website: https://ipmb.sinica.edu.tw/en Chuan Ku <chuanku@gate.sinica.edu.tw>

TexasAMU SpeciationBehaviorGenomics

The Delmore Lab at the University of Texas A&M is looking for a PhD student to join our group in Sept 2022.

We study speciation using hybrid zones and work at both the micro and macroevolutionary scale.

One research stream focuses on behaviour ??? how variation in behavioural traits contributes to speciation and the genetic basis of these traits. Two of the behaviors we study are seasonal migration and courtship behavior in thrushes and hummingbirds, respectively.

Another research stream takes a more comparative approach, focusing on processes that generate genome-wide variation in estimates of differentiation during speciation. We use both genomic data and computer simulations to address this question.

Students can pursue degrees in Biology (https://www.bio.tamu.edu/), EEB (https://www.eeb.tamu.edu) or Genetics (https://www.genetics.tamu.edu). All of these programs have collaborative, enthusiastic and supportive environment. They include students from many different international backgrounds and you will be able to develop knowledge in evolution and substantial genomic and computational skills while you???re here.

Texas A&M is a Tier 1 institution with an amazing number of facilities to support research. College Station itself is a friendly university town located between Austin and Houston. It is the perfect venue for getting work done while having access to vibrant city centers full of entertainment and culture.

You can find out more about our lab at delmorelab.com. If you are interested please email a CV (including names and contact details of two-three references) and a one-page cover letter stating your motivations to Kira Delmore (kdelmore@bio.tamu.edu) with the subject line "PhD application".

"Delmore, Kira" <kdelmore@bio.tamu.edu>

UAberdeen SocialInsectEvolution

UAberdeen Evolutionary Ecology of Social Insects - 2 positions

There are two opportunities to join the lab of Dr Fabio Manfredini at the University of Aberdeen (Scotland) as a PhD student through competitive DTP scholarships that are open to international applicants - see details below. Please visit the lab website if you'd like to know more about ongoing research in Dr Manfredini's group.

1) The first project is on the "Importance and sustainability of endangered communities of bee pollinators in the machair, a changing coastal ecosystem". This is a 3.5 years CASE project, part of a competition funded byQUADRAT NERC DTPand the Bumblebee Conservation Trust and in collaboration withDr Paul Williams(Queen's University Belfast),Dr Lesley Lancaster (University of Aberdeen) and Prof Robin Pakeman (The James Hutton Institute).Prospective candidates can find full details about the project, including criteria and eligibility, onFindAPHDor on theQUADRAT website.Deadline to apply to this program isWednesday, December 01, 2021.

FindAPHD advert: https://www.findaphd.com/-phds/project/quadrat-dtp-case-importance-and-sustainability-of-endangered-communities-of-bee-pollinators-in-the-machair-a-changing-coastal-ecosystem/?p134843 QUADRAT website: https:/-/www.quadrat.ac.uk/projects/importance-and-sustainability-of-endangered-communities-of-bee-pollinators-in-the-machair-a-changing-coastal-ecosystem-case/ 2) The title of the second project is "Identifying the link between viral infections and foraging behaviour in the honeybee brain".This is a 4 year PhD project, part of a competition funded byEASTBIO BBSRC DTPand in collaboration withDr Alan Bowman(University of Aberdeen) andDr Mark Barnett(University of Edinburgh,Roslin Institute). Prospective candidates can find full details about the project, including criteria and eligibility, onFindAPHDand on theEASTBIO website. Deadline to apply to this program isThursday, December 16, 2021.

FindAPHD advert: https://www.findaphd.com/-phds/project/eastbio-identifying-the-link-between-viral-infections-and-foraging-behaviour-in-the-honeybee-brain/?p135449 EASTBIO website: http://www.eastscotbiodtp.ac.uk/how-apply-0 –

Fabio Manfredini (BSc, MSc, PhD) Pronouns: he, him, his

Lecturer School of Biological Sciences 1.14 Cruickshank Building, St Machar Drive University of Aberdeen Aberdeen AB24 3UL

Phone.: +44(0)122-427-4144 Twitter: @fmanfredini79 Skype: fabio.manfredini2 Webpage

"Manfredini, Fabio" <fabio.manfredini@abdn.ac.uk>

UArizona ComputationalPopulationGenomics

The Gutenkunst group is recruiting PhD students. The group focuses on population genomics, with an emphasis on the development and application of novel computational methods. For more information, see http:/-/gutengroup.mcb.arizona.edu or contact Dr. Ryan Gutenkunst at rgutenk@arizona.edu.

The PhD student will contribute to an NIH-funded project to develop and apply methods for inferring novel models of natural selection from population genomic data. Potential projects include: 1) Inferring joint distributions of fitness effects between populations of humans or other ecologically interesting species 2) Developing machine learning approaches for inferring quantitative models of natural selection from population genetic data 3) Developing maximum likelihood approaches for inferring selection and recombination from two-locus statistics. The student will also have the freedom to develop their own projects that align with the goals of the student and group.

Applicants may come from a variety of backgrounds and join a variety of PhD programs. Students with backgrounds in biology, computing, and mathematics have all succeeded in the group. Depending on their interests and goals, students might join programs in Molecular and Cellular Biology, Genetics, Ecology and Evolutionary Biology, Statistics, or Applied Mathematics. Previous students have gone on to computational biology positions in industry or postdoctoral positions in academia, eventually leading to faculty appointments.

The University of Arizona has great strength in population and evolutionary genetics, offering potential interactions with Drs. Joanna Masel, David Enard, Betul Kacar, Mike Barker, and others. Computational resources are similarly excellent. The campus is highly interdisciplinary and very collegial.

Compensation includes an annual stipend of ~$27,500, plus tuition and benefits.

At 2,500 feet above sea level, culturally diverse Tucson, Arizona is nestled among five mountain ranges in the beautiful Sonoran Desert and is surrounded by Saguaro National Park. Housing is affordable, quality of life is high, and outdoor recreation opportunities include the southernmost ski area in the United States and over 100 miles of bike trails. The area receives over 350 days of sunshine per year and enjoys average high/low temperatures of 82/54 degrees F.

Interested students should contact Dr. Gutenkunst at rgutenk@arizona.edu with a cover letter, CV, and transcript. We can then discuss the student's interests and which graduate programs would best suit them.

"Gutenkunst, Ryan N - (rgutenk)" <rgutenk@arizona.edu>

UArkansas CnidarianNeuroEvoDevo

The Nakanishi lab at the University of Arkansas (https://-/wordpressua.uark.edu/nakanishi-lab/) seeks applicants interested in pursuing an MS or PhD in biology to start in the Fall of 2022. The lab is interested in addressing fundamental questions in neural development, function, and evolution ("neuro-evo-devo") by studying the biology of early-diverging animal groups ï¿½" cnidarians (sea anemone and jellyfish) in particular. Current NSF-funded research projects in the lab use the sea anemone Nematostella vectensis to investigate 1) the mechanism by which a single transcription factor controls distinct sets of target genes in different neural cell types, and 2) the mechanism by which neuropeptides modulate the timing of life cycle transition. Students may work on these and related problems in neuro-evo-devo. Student's specific project will be developed based on the student's research interests and educational background, in consultation with the PI of the lab. Research projects may involve gene expression analyses (e.g. in situ hybridization and immunohistochemistry), reverse genetics (e.g. CRISPR-Cas9), embryology (e.g. descriptive morphology, cell-lineage tracing and tissue transplantation), genomics (e.g. RNA-seq and ChIP-seq), and/or advanced microscopy (confocal and electron microscopy, and live-cell imaging). Research and teaching assistantships are available.

Requirements: Bachelor's degree in biology or related field. An ideal candidate will have successfully completed undergraduate coursework in evolutionary biology and genetics. Research experiences in molecular biology, developmental biology, neurobiology, genomics/bioinformatics and/or microscopy techniques are preferred. Knowledge of invertebrate zoology is a plus but not required.

Application: The applicant may apply through the Department of Biological Sciences (https://-fulbright.uark.edu/departments/biology/prospective-students/apply-for-graduate.php) or through the Cell and Molecular Biology (CEMB) program (https:/-/cell.uark.edu/). The deadline for Fall admission to the Biology Department is January 15, 2022, and that to CEMB January 1, 2022. In order to apply, the applicant will need to submit 1) an official graduate school application form (https:/-/graduate-and-international.uark.edu/_resources/-forms/admission-application.pdf), 2) official academic transcripts, 3) GRE scores, 4) three letters of recommendation from referees in academia, and 5) a program-specific application form (Biology: https://-fulbright.uark.edu/departments/biology/_resources/-pdf/appl-gradasst.pdf; CEMB: https://cell.uark.edu/-info-for-applicants/applicant_profile.php). In addition, the applicant requires a faculty sponsor for admission; the applicant should send an email to Nagayasu Nakanishi (nnakanis@uark.edu) before applying. This email should contain a brief summary of your qualification, research interests and goals, as well as your CV, copies of your academic transcripts, and GRE scores (if available).

Nagayasu Nakanishi, Ph.D

Assistant Professor

Department of Biological Sciences University of Arkansas Fayetteville, AR 72701 479-575-2031 (office) 479-575-7393 (lab) nnakanis@uark.edu https://-wordpressua.uark.edu/nakanishi-lab/ Nagayasu Nakanishi <nnakanis@uark.edu> Nagayasu Nakanishi <nnakanis@uark.edu>

UAuckland ThreatenedSpeciesGenomics

A genomic 'health check' of a threatened species

A PhD project on hihi, a threatened Aotearoa New Zealand bird species, is available with Dr Anna Santure and Dr Annabel Whibley in the School of Biological Sciences, University of Auckland, New Zealand. The project is an exciting opportunity to use genomics and evolutionary genetics approaches to understand the adaptive potential of a threatened species with only a few thousand individuals remaining. The project will focus on analysing a high quality genome assembly and population resequencing data for hihi, coupled with extensive individual-based long-term breeding data gathered from two hihi populations.

Please note we do NOT have funding for a PhD stipend or fees, so are seeking a candidate that will be competitive for a University of Auckland Doctoral Scholarship (https://www.auckland.ac.nz/-en/study/scholarships-and-awards/scholarship-types/-postgraduate-scholarships/doctoral-scholarships.html). Candidates should have the equivalent of a GPA/GPE of 8 (an A grade) or above in the New Zealand system (see https://www.gpecalculator.auckland.ac.nz/#/ for

a grade conversion calculator). Candidates must also be eligible for admission to the PhD programme at the University of Auckland (see https://www.auckland.ac.nz/-en/for/future-postgraduates/how-to-apply-pg/apply-for-a-doctorate/phd-entry-requirements.html; please note the English language proficiency requirements). International students are welcome to apply.

We are looking for a candidate with a strong background in genetics along with bioinformatics, computer science, statistics or similar analytical skills, as well as a passion for evolutionary biology and ecology.

This project is a collaboration with Dr Patricia Brekke and Dr John Ewen at the Zoological Society of London. To apply for this position, please email Dr Anna Santure (a.santure@auckland.ac.nz) with your CV, names and details of two referees, your academic transcript, your calculated GPA from the link above, and a short statement of interest. I welcome informal enquiries.

The PhD scholarship is available for an ideal start date in early-mid 2022 and is open until filled.

asanture@gmail.com

UBath ExperimentalEvolution CRISPR

We are seeking an enthusiastic PhD student to work on the evolution of regulatory control of bacterial antiviral defence systems with Dr Tiffany Taylor (University of Bath) and Prof Edze Westra (University of Exeter)

Deadline: Monday 6th December 2021

Enquiries and application:https://www.findaphd.com/-phds/project/swbio-dtp-phd-project-determining-the-regulatory-control-of-prokaryotic-antiviral-defence-systems/?p136393 Project Description: SWBio DTP PhD Project: Determining the regulatory control of prokaryotic antiviral defence systems

The spread of antimicrobial resistance is a slow-moving pandemic that has been identified by the WHO as one of the top 10 threats facing humanity. It has been estimated that in 2050 approximately 10 million people will die each year as a result of antimicrobial resistance.

Bacterial immune systems are key determinants of the spread of antimicrobial resistance. Moreover, they can severely hamper the efficacy of therapeutic application of phages in clinical settings, which is considered a viable alternative to conventional antibiotics to treat infections with resistant pathogens. For these reasons it is critical to identify bacterial defence systems and to understand how they operate.

Recent work has revealed that bacteria carry many more defences than previously thought, and we are only just beginning to understand how they work. In this project, the student will study the interplay between a novel defence system that was identified in the Westra lab and the CRISPR-Cas adaptive immune system of the important opportunistic pathogen Pseudomonas aeruginosa. This WHO priority pathogen is one of the leading causes of hospital acquired infections and a major cause of lung infections in cystic fibrosis patients. Because of its high levels of antimicrobial resistance, phage therapy is in some cases already being used to treat patients.

The project will benefit from expertise in evolution of novel regulatory and genetic innovations (Taylor, Bath), P. aeruginosa CRISPR-Cas evolution and discovery of the novel immune system (Westra, Exeter), and modelling the coevolution of host and parasite interactions (Ashby, Bath). Throughout this interdisciplinary project, the student will receive extensive training in experimental evolution, molecular microbiology, genetics and modelling. The student will be based in the Taylor lab as part of the Milner Centre for Evolution at the University of Bath with opportunities to work in the Westra lab at the Environment and Sustainability Institute at the Cornwall campus of the University of Exeter, and with the Ashby lab in the Department of Maths at the University of Bath.

Location: This project will be conducted under the direct supervision of Dr Tiffany Taylor with co-supervision from Prof Edze Westra. Based primarily at the Department of Biology and Biochemistry at the University of Bath (UK) in the new Milner Centre for Evolution (http://www.bath.ac.uk/groups/milner-centre-for-evolution/). The Milner Centre is a new research centre focused on doing ground breaking research that addresses major questions in evolutionary biology. There will also be some time spent in the Westra lab at the Univesity of Exeter's ESI in Cornwall (UK) (http://www.exeter.ac.uk/esi/). The University of Exeter's Environment and Sustainability Institute (ESI) is an interdisciplinary centre leading cutting-edge research into solutions to problems of environmental change.

Requirements: We are looking for a biology graduate who has a strong interest in microbiology, molecular biology and evolution. Applicants must have obtained, or be about to obtain, a First or Upper Second Class UK Honours degree, or the equivalent qualifications gained outside the UK, in an appropriate area of science or technology. Some practical experience in microbial

molecular techniques is highly desired, but training will be provided. If English is not your first language, you will need to have achieved Academic IELTS 6.5 overall (with no less than 6.5 in any of the four skills).

Start date: October 2022 (4 year PhD)

For informal enquiries please contact Dr Tiffany Taylor at: T.B.Taylor@bath.ac.uk

Funding Notes: This is a competition funded project by the South West Bioscience Doctoral Training Partnership (SWBio DTP), the selection process can be found here: https://www.swbio.ac.uk/programme/selection-process/ We welcome applicants form all backgrounds. A limited number (up to 30%) of UKRI fully-funded studentships are available through the SWBio DTP, that applicants who

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UBergen SpiderSystematics

We are seeking for a motivated candidates for a fully funded 4 year PhD position in spider systematics and biogeography at the University Museum of Bergen. If you like spiders and are interested in systematics and biogeography do not hesitate to apply.

In addition to offering excellent working conditions, the University of Bergen and its museum are in the hearth of Bergen and nearby some of the most beautiful Norwegian landscapes.

More information and application instructions are available at the following link

https://www.jobbnorge.no/en/available-jobs/job/212205/phd-fellowship-position-in-biosystematics-and-biogeography-linyphiid-spiders-biogeography-and-evolution Dimitar Dimitrov, PhD Associate Professor Department of Natural History, University Museum of Bergen, University of Bergen Postboks 7800, 5020 Bergen, Norway Home Page: http://www.dimitardimitrov.name Google Scholar: http://scholar.google.com/citations?user=mfemh8gAAAAJ Dimitar Dimitrov <dimitard.gwu@gmail.com>

UBern BeetleMatingEvolution

PhD in evolutionary ecology at University of Bern

"Evolution of mating and reproduction in an invasive beetle pest"

Application deadline: 15 November 2021

A fully funded 4-year PhD position is available at the University of Bern, Institute of Bee Health, starting on 01.01.2022 (a later start is negotiable). The salary is according to the SNF, including social security contributions from the Kanton of Bern (http://www.snf.ch/SiteCollectionDocuments/Annex_XII_Ausfuehrungsreglement_Beitragsreglement_E.pdf).

The project:

Biological invasions are major drivers of global change and can impact ecosystem functioning as well as human food security. The occurrence of such invasions is likely to increase drastically, thereby creating an urgent demand to better understand underlying evolutionary aspects, such as how biological mechanisms may contribute to the success and impact of an invasion. Despite major advances in the field, mechanisms for initial invasion success and optimal strategies to foster invasion impact are still debated. In particular, surprisingly little attention has been paid to the roles of mating systems and reproduction in insects, even though they are among the worst invaders globally both in ecologically and economically terms.

We seek a highly motivated PhD student to investigate evolution of mating and reproduction in an invasive beetle, the small hive beetle, Aethina tumida Murray (Coleoptera: Nitidulidae), which is a nest parasite of bees endemic to sub-Saharan Africa. Different selection scenarios will be considered in the endemic range, during transport, and after establishment in its novel ranges. Behavioural, genetic, morphological and physiological data for phenotypic traits will be combined across multiple endemic and invasive populations. The PhD student will be based and conduct DNA work in Switzerland and will also work in the field at least at three locations (Australia, Brazil, Italy, Kenya, South Africa or USA). The research work also includes statistical data analysis and publication of results in international peer-reviewed journals (N=3 papers minimum). We offer membership in an ambitious global research team and state-of-the-art facilities.

Requirements:

MSc in Biology or related subjectKnowledge of and keen interest in insect evolution, mating and reproductionWillingness to work under potentially uncomfortable field conditions abroadExperience with statistical analysisKnowledge and experience in molecular biologyGood self-organization, communicative personality and team-orientedExperience in speaking and writing in English

For queries concerning the application process and for project-related questions, please contact Dr.AnnaPapach (anna.papach@vetsuisse.unibe.ch).

Selected candidates will be invited to an online interview. All applications should include:

Cover letter in English describing your motivation, research interests and relevant experience (up to two pages); Curriculum vitae including names and contact details of at least two scientific references; Digital copies of MSc/BSc/Diploma certificates and transcript of records.

Please send all documents as a single PDF to Prof.Dr.PeterNeumann (peter.neumann@vetsuisse.unibe.ch).

Anna

"anna.papach@vetsuisse.unibe.ch"
<anna.papach@vetsuisse.unibe.ch>

UBern EvolutionaryGenetics

PhD student in Evolutionary Genetics A funded, 4-yr PhD position is available within the Division of Evolutionary Ecology (http://www.ee.iee.unibe.ch/-index_eng.html) led by Professor Catherine (Katie) Peichel at the University of Bern, Switzerland on a recently funded SNF project to study the evolutionary forces that act on inversions as well as the genetic mechanisms by which inversions affect phenotypic evolution and adaptation in stickleback fish.

The aim of the PhD project is to identify the phenotypic effects of inversions that are segregating in natural populations of threespine stickleback fish, using a combination of association mapping in wild Swiss populations and genetic mapping in controlled laboratory crosses. The project will involve fieldwork, phenotypic analyses (e.g. morphology, physiology, behavior, parasites) of large numbers of fish, PCR genotyping, fish husbandry, CRISPR/Cas9 genome editing, and genetic analyses.

The Division of Evolutionary Ecology is a dynamic, international, and interdisciplinary group. We are part of the Institute of Ecology and Evolution at the University of Bern in Switzerland. The Institute currently has seven research divisions spanning a broad range of research in ecology and evolution including conservation biology, behavioural ecology, aquatic and terrestrial ecology, population and evolutionary genomics, and evolutionary theory. Across these divisions, there is a shared interest in the mechanisms that underlie adaptation to changing environments. The PhD student will have ample opportunities for interactions and collaborations with an international community of graduate students, postdoctoral researchers, and professors. The University of Bern is situated near the heart of the beautiful old city, and the quality of life in Bern is very high.

Candidates must be highly motivated and creative, able to work independently and collaboratively, have a strong background in evolutionary genetics and molecular biology, and a willingness to work with live fish. Experience in fieldwork, morphological, physiological, and/or behavioral analyses is a plus. Candidates must have excellent written and spoken communication skills in English, which is the working language of our institute. A masters degree is required. This position is open to applicants worldwide. We are committed to increasing diversity, equity and inclusiveness in evolutionary biology and especially encourage applications from underrepresented groups.

The starting date for the PhD student is as early as February 2022. Starting salary is 47,040 CHF and includes social security contributions.

Please submit your application via email by 1 December 2021 to Prof. Catherine Peichel: catherine.peichel@iee.unibe.ch

Prof. Dr. Catherine (Katie) Peichel Head of Division, Evolutionary Ecology Institute of Ecology and Evolution University of Bern Baltzerstrasse 6 3012 Bern Switzerland website: http://www.ee.iee.unibe.ch email: catherine.peichel@iee.unibe.ch phone: +41 31 684 30 22 phone: +41 31 684 45 18 (secretary)

catherine.peichel@iee.unibe.ch

UBritishColumbia EvolutionaryEcology

A graduate position in evolutionary ecology is available starting September 2022 supervised by Dr. Dolph Schluter in the Biodiversity Research Centre and Zoology Department at the University of British Columbia in Vancouver, Canada. The Centre and Department provide a highly supportive and collaborative environment with many seminar and discussion groups, mixed lab meetings, and a physical arrangement that breaks down divisions between lab groups, students and faculty.

Research topics in the Schluter lab are diverse and include studies of: causes of adaptive radiation, the evolutionary consequences of species interactions, the ecology and genetics of speciation, selection on genes underlying adaptation, natural and sexual selection on phenotypic traits, and the evolution of Earth's major biodiversity gradients. Many of these topics are addressed experimentally in the lab and ponds using threespine stickleback fish. Students have the flexibility to develop independent projects or work closely with the supervisor on these or other topics of interest.

Application requirements include a Master's or Bachelor's degree in biology, natural sciences, or related field, English proficiency for reading, writing, and oral communication, a strong motivation to conduct a research, the ability to work both independently and as part of a team, and a commitment to principles of equity, diversity and inclusion.

The Department guarantees a minimum student salary of CAN $28,000 for MSc and PhD students making progress on their theses, achieved by a combination of scholarships, teaching assistantships, graduate research assistantships, and competitive four-year fellowships. Tuition is free for PhD students in the first four years.

To apply, please send an email by November 15, 2021, to schluter@zoology.ubc.ca.

The Biodiversity Research Centre and the Department of Zoology at UBC are committed to fostering a workplace in which individual differences are recognized, appreciated, respected, and responded to in ways that fully develop and utilize each person's talents and strengths.

The Student Diversity Initiative (SDI) seeks to embed UBC's core values of equity, diversity, and inclusion throughout the operations, systems, culture and organizational structures that directly impact the campus experience for diverse students. To learn about the Student Diversity Inititive, please visit the Equity & Inclusion Office website https://equity.ubc.ca/ or call +1 (604) 827 1773.

The Centre for Accessibility at UBC provides guidance finding the right resources and disability-related accommodation to remove barriers for students with disabilities or ongoing medical conditions. For more information, visit https://students.ubc.ca/about-student-services/centre-for-accessibility or call +1 (604) 822 5844.

Dolph Schluter <schluter@zoology.ubc.ca>

UCopenhagen PopulationGenomics

PhD fellowship in statistical and population genomics - From correlations to explanations: towards a new European prehistory (COREX)

We invite applications for a PhD student position at the University of Copenhagen, as part of the COREX synergy project. Synergy projects represent the top level of European Research Council funding, with a budget of euro 10 million over six years. In the project "From correlations to explanations: towards a new European prehistory (COREX)" geneticists and archaeologists from the University College London (led by Mark Thomas and Stephen Shennan) join forces with archaeologists from Gothenburg (led by Kristian Kristiansen and Karl Göran-Sjögren), and geneticists from Copenhagen (led by Kurt KjÃr, Eske Willerslev and FernandoRacimo). The project will combine prehistoric human genomic, archaeological, environmental, stable isotope and climate data to better understand the processes that shaped our biological and cultural past from the time of the first farmers to the Iron Age.

The applicant will be advised by Assoc. Prof. Fernando Racimo, whose research group focuses on using ancient and present-day DNA to understand patterns of selection and admixture over time, in combination with archaeological and paleo-environmental data, and to develop methods to infer dynamic population processes while accounting for both spatial and temporal variation.

OBJECTIVES

The candidate will be able to work with unprecedentedly large ancient genomic, archaeological and paleo-

vegetation datasets from a period spanning the last 10,000 years of West Eurasian history. The focus of the project will be on performing exploratory analyses and developing computational models to connect population genetic processes (population expansions, migrations and admixture), patterns of material culture distribution (i.e. diffusion of technology and art forms), environmental factors (climate, ecozones, subsistence strategy and the presence of pathogens), sedimentary DNA and demographic data (such as population density estimates from radiocarbon date density data). This will be done using a variety of geostatistically-aware models that account for auto-correlations in both space and time.

This will serve as a pioneer example of how to build statistically-supported conceptual bridges between archaeological and genetic inference. Our project will serve to determine what the impact of the movement of people was on the European landscape, simultaneously on multiple scales: continental, regional and local.

The fully funded PhD position will be carried out at the Lundbeck Foundation GeoGenetics Centre, a unique center of research excellence in Denmark, with the aim to understand the evolution of complex traits using ancient DNA. The candidate will have to opportunity to collaborate with leaders in the fields of paleogenomics, sedimentary DNA and archaeology, including Mark Thomas, Stephen Shennan, Kristian Kristiansen, Kurt KjÃr, Karl Göran-Sjögren, Eske Willerslev, Ralph Fyfe, Karin Frei and Jesse Woodbridge. The University of Copenhagen is a world-leading institution of higher learning and provides excellent PhD programs in biology, statistics, computer science and mathematics. The candidate will have the opportunity to take courses in bioinformatics, computer science, statistical inference, machine learning, data science, population genetics, paleogenomics, paleoproteomics, and archaeological science, among many others.

The employment as postdoc is a full time position for 3 years. Tentative starting date is 1 March 2022 or after agreement.

QUALIFICATIONS

The candidate must have an MSc degree or equivalent at the start of the PhD position. The degree can be in one or more of the following areas: statistics, data science, evolutionary biology, population genetics, computational biology, bioinformatics, mathematics, or related areas. The ideal candidate will demonstrate a working proficiency in one or more programming languages commonly used in data science (e.g. experience in Python, R, C/C++, Java or Julia) and have experience in the UNIX operating environment.

As a prerequisite for a PhD fellowship employment, your master's degree must be equivalent to a Danish master's degree. We encourage you to read more in the assessment database: https://ufm.dk/en/education/-recognition-and-transparency/find-assessments/-assessment-database .Please note that we might ask you to obtain an assessment of your education performed by the Ministry of Higher Education and Science.

SALARY AND TERMS OF EMPLOYMENT

The employment as PhD fellow is full time and for 3 years.

It is conditioned upon the applicant's successful enrolment as a PhD student at the Graduate School at the Faculty of Health and Medical Sciences, University of Copenhagen. This requires submission and

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UExeter PaternalEffectsBirds

We have a PhD position available at the Centre for Ecology & Conservation, University of Exeter, UK to explore the mechanisms and evolutionary consequences of paternal condition-transfer effects in birds. The project is co-supervised by Dr Barbara Tschirren, Prof Chris Bass and Dr Bram Kuijper, and involves two external collaborators, Dr Nicola Hemmings (University of Sheffield, UK) and Dr Oscar Vedder (Institute of Avian Research, Wilhelmshaven, Germany). Please see here for more information about the project: https://bit.ly/3peu0LI and here for more information about the BBSRC SWBio DTP programme: https:/-/www.swbio.ac.uk/programme/ UK and non-UK students are eligible for this 4 year studentship. Deadline Monday, 6 December 2021

Email me for more information: b.tschirren@exeter.ac.uk

"Tschirren, Barbara" <B.Tschirren@exeter.ac.uk>

UFlorida EvoBio MachineLearning

The Zhou lab in the department of biology at the University of Florida is seeking a highly motivated and collaborative PhD student with interests in evolutionary biology and machine learning.

Research in the Zhou lab is centered around the fundamental biological question of how genotype determines phenotype. For example, how mutations in the amino acid sequence of a protein affect the protein function. Understanding the genotype-phenotype map is critical to evolutionary biology as well as many other fields including medicine and bioengineering. Our lab tackles this problem through a combination of modern machine learning technology and high-throughput wet lab experiments. Our lab is part of a large campus-wide initiative to integrate AI-based approaches into research and teaching.

This PhD position is sponsored by the Biology department graduate program at UF and will be funded through an initial two years of research assistantship followed by a combination of RA/TAships.

Project overview A fundamental question in biology is how the genotypes of an organism determine its various phenotypes. For example, the amino acid sequence of a protein determines its 3D structures, which in turn defines its function. Any mutations in the sequence can lead to changes in the function of the protein.

This mapping from sequence to phenotype and to fitness is critical to evolutionary biology as it determines the tempo and mode of adaptive evolution. It also has many real-world applications, including predicting the evolution of antimicrobial resistance, predicting disease phenotype from genomics data, and engineering highly optimized biomolecules.

The overarching goal of the lab is to integrate machine learning and high-throughput experiments to reveal both local and global structures of the fitness landscapes of proteins and complex traits and extract general principles of adaptive evolution.

We are developing various machine learning methods for experimental (labeled) as well as evolutionary (unlabeled) data to interrogate the structure of genotype-phenotype maps. Current research projects encompass supervised methods such as Gaussian processes and unsupervised methods including language and generative models.

We also use wet lab experiments to empirically measure the genotype-phenotype map for proteins as well as complex traits. This project will apply massively parallel reporting assays to budding yeast and have a special focus on how mutations interact to affect fitness.

Job description This PhD position will focus on understanding the genotype-phenotype mapping through high-throughput experiments on budding yeast. The PhD student will work to establish a workflow of high-throughput experimental assays. The workflow includes cell culture, library preparation, and next-generation sequencing. The student's dissertation will be developed around this workflow and focus on important biological questions about genotype-phenotype maps.

The student will also receive substantial assistance from the machine learning projects in the lab. And depending on the student's interests, the machine learning components in the dissertation can range from simple data analyses to being the main focus of one or two chapters.

Qualifications The successful candidate should be enthusiastic, collegial, and show wet lab and/or quantitative skills evidenced by coursework or previous projects. Desirable skills include: basic molecular biology techniques including PCR, cloning, cell culture; knowledge of evolutionary biology; understanding of yeast genetics; bioinformatics; mathematics; statistics and programming.

Note that these skills are desirable but not required and our lab will provide many training opportunities. Please do not be discouraged if you do not check all the boxes but are eager to learn these skills. Our work involves many collaborations in and out of campus, so a collaborative attitude and communication skills are very important.

It will be helpful to think about the following questions before you apply:

Are you interested in studying genotype-phenotype maps?

Do you find our research exciting and what do you like about our work?

Why is our lab a good fit for you?

Are you interested in using machine learning to answer questions in biology?

What makes you a strong candidate?

If you are interested, please send your CV, along with a brief informal statement about your background and why you are interested in joining the lab to me (Juannan Zhou) at: juannanzhou@ufl.edu

More information about research in the lab can be found on our website: jzhoulab.org

The application deadline is December 1. And more information about the application process can be found on the department website: https://biology.ufl.edu/-graduate-programs/application/ . "Zhou, Juannan" <juannanzhou@ufl.edu>

UGeneva EvolutionaryBiology

We are pleased to announce the next call for applications to the PhD School of Life Sciences at the Faculties of Medicine and Science - University of Geneva. The application deadline is Nov 15th, 2021. PhD positions will be available in six innovative programmes:

* Biomedical Sciences * Ecology and Evolution * Genomics and Digital Health * Molecular Biosciences * Pharmaceutical Sciences * Physics of Biology

For further information please visit: https://-lifesciencesphd.unige.ch To apply, please follow instructions in our application portal: https://-apply.lifesciencesphd.unige.ch/login and visit our FAQs for applicants: https://lifesciencesphd.unige.ch/faq-applicants Best regards,

Claudine Neyen, Program coordinator Faculty of Science

phd-lifesciences-sciences <phd-lifesciences-sciences@unige.ch>

UGuelph PlantEvolution

Graduate student positions in plant evolutionary ecology at the University of Guelph

I am looking for graduate students (MS or PhD) interested in studying the effect of pollinator declines on floral evolution in native wildflowers.

For more information on my lab, check out:

www.christinamariecaruso.com Students will have considerable freedom to develop their projects, and could start in either Fall 2022 or Winter 2023.

Interested candidates should email me atcarusoc@uoguelph.ca. Please include a statement of interest, CV, and transcript (unofficial is fine). Because of funding restrictions, preference will be given to candidates who are Canadian citizens or landed immigrants.

Christina M. (Chris) Caruso Associate Professor

Department of Integrative Biology

University of Guelph

Guelph, OntarioN1G 2W1Canada

–

Christina M. (Chris) Caruso (she/her/hers) Associate Professor

Editor-in-Chief, International Journal of Plant Sciences

Department of Integrative Biology, University of Guelph, Guelph, Ontario N1G 2W1 Canada

519-824-4120 x52030 carusoc@uoguelph.ca christinamariecaruso@gmail.com www.christinamariecaruso.com Chris Caruso <carusoc@uoguelph.ca>

UIowa EvolBiol

The Integrated Biology Graduate Program (iBio) at the University of Iowa is actively recruiting motivated students to join a diverse Biology Department and work on exciting problems in the field of evolutionary biology.

The iBio program highlights the uniqueness of our departmental research, which integrates multiple organizational levels, from the molecular to the ecological, as well as multiple scales of biological time, from embryogenesis to aging to phylogenetic analyses, in a wide array of experimental organisms. Key areas of strength in the field of evolutionary genetics include: the molecular evolution of meiosis and of speciation, the molecular genetics of sexual reproduction, speciation genetics, evolution of developmental networks and stress responses, molecular causes and evolutionary consequences of recombination variation.

In addition to the broad range of research we can offer to our students, our focus on basic biological questions, as well as on high-quality writing and teaching, provides a firm foundation necessary for students to take the next steps in their careers, whether these are in basic or disease-centered academic research or in other areas of science. In this regard, iBio represents a departure from many traditional programs because our aim is to produce well-rounded scientists who excel in research and are prepared to become the next generation of gifted

educators and enthusiastic scientific communicators.

To apply for admission to the iBio Program, please visit the iBio Application page: https://biology.uiowa.edu/-ibio/application. For best consideration, apply before Dec 1. Applications will continue to be reviewed on a rolling basis until Jan 15th, 2022.

Successful Ph.D. applicants typically have:

- Undergraduate GPA of > 3.00 (on a 4.00 scale). - Substantial independent research experience. - Most or all of these recommended undergraduate courses: college physics or upper level statistics, organic chemistry and/or biochemistry, one semester of calculus, and one semester of fundamental genetics. - Note: Submission of GRE scores is not required, although these can be provided if available.

Competitive candidates residing in the U.S. will be invited for an interview weekend in February at the expense of the iBio Program. Applicants may be notified about acceptance and financial support shortly thereafter, or by April 1st at the latest. Offers made by April 1st require students to notify the department of their decision by April 15th.

International applicants will be invited to a video interview on or before the domestic applicants' on-campus interview and a decision will be made at the same time.

For questions, please email Bin Z. He, <bin-he @ uiowa.edu>

– Sincerely yours

Bin HE Assistant Professor Biology Department, the University of Iowa website: https://binhe-lab.org Bin HE <bin-he@uiowa.edu>

UJyvaskyla SexualSelectionTheory

Doctoral Researcher, Evolutionary Biology

Applications are invited for a 4-year fully funded PhD position to study sexual selection at the University of Jyvaskyla in Finnish Lakeland.

Does selection act differently on the two sexes? Are there universal differences we should expect to see between females and males, based on scientific principles and the most fundamental, definitional properties of the sexes alone? These questions date back to the days of Charles Darwin but are widely debated to this day. This PhD project will address the above topics using mathematical modelling and literature reviews, supervised by Assistant Professor Jussi Lehtonen. The results will help us identify and understand the fundamental evolutionary mechanisms driving sex-specific selection and sexual dimorphism.

Jyvaskyla is a mid-sized city in Finnish Lakeland, surrounded by beautiful nature, countless lakes, nature trails, and national parks. It is also known as the 'capital of sport' with excellent opportunities for both summer and winter outdoor activities. Jyvaskyla is a relatively affordable city and university students form a large part of the population, bringing a lively atmosphere with them.

The Department of Biological and Environmental Science at the University of Jyvaskyla hosts expertise in empirical as well as theoretical evolutionary biology, including sexual selection.

To apply and for further details, see the full position description at the following address:

https://rekry.saima.fi/certiahome/-open_job_view.html?did=5600&jc=-12&id=000012123&lang=fi&_ga=-2.258584834.981816189.1635161258-463969467.1611649046 Applicants are kindly asked to submit their applications using the online application form by 30 November 2021.

For details, please contact Assistant Professor Jussi Lehtonen: jussi.o.i.lehtonen@jyu.fi

"Lehtonen, Jussi" <jussi.o.i.lehtonen@jyu.fi>

UKansas DrosophilaEvolution

KU Drosophila Evolution Graduate Student Recruitment for Fall 2021

Drosophila research labs in the departments of Molecular Biosciences (MB) and Ecology and Evolutionary Biology (EEB) at the University of Kansas seek talented applicants for graduate admission to begin study in the Fall of 2021. Our strengths include evolutionary and quantitative genetics, with labs working on specific projects including genetic conflict, mating behavior, the genetics of complex traits, and the evolution of immunity.

Faculty members: -Justin Blumenstiel (genetic conflict, EEB, can also take students through MB) - https://eeb.ku.edu/people/justin-blumenstiel -Jennifer

Gleason (evolution and genetics of courtship behavior, EEB, can also take students through MB) - https://eeb.ku.edu/people/jennifer-gleason - Stuart Macdonald (genetics of complex traits, MB) - https://molecularbiosciences.ku.edu/people/stuart-j-macdonald -Rob Unckless (evolution of immunity and genetic conflict, MB, can take students through EEB) - https://molecularbiosciences.ku.edu/people/-robert-unckless -Jamie Walters (sex chromosome evolution and reproductive proteomics in lepidoptera, EEB) - https://eeb.ku.edu/people/jamie-walters Applicants to the EEB program (https://eeb.ku.edu/how-apply) are either admitted directly to work with a specific advisor or may do a lab rotation, while applicants to the MB program (https://molecularbiosciences.ku.edu/-program-description) complete a rotation cycle before choosing a laboratory. Interested candidates should peruse the MB faculty website (https://-molecularbiosciences.ku.edu/faculty) and the EEB faculty website (https://eeb.ku.edu/faculty) and contact the department or specific faculty members for more information.

Application materials can be found at:

Molecular Biosciences - https://-molecularbiosciences.ku.edu/program-description Ecology and Evolutionary Biology - https://eeb.ku.edu/-how-apply Deadlines for Fall 2021 admission: December 1

EEB and MB are both diverse departments ranging from ecosystem ecology to biophysics with significant interaction within and between groups.

About KU:

The University of Kansas is located in Lawrence, KS, less than an hour from Kansas City. Lawrence, Kansas is a terrific place to live, with a vibrant downtown, fantastic restaurants, lively arts scene, and beautiful rural scenery. The KU campus is an exciting, beautiful, invigorating environment with highly active research faculty.

EEO Statement:

The University of Kansas prohibits discrimination on the basis of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, and genetic information in the university's programs and activities. Retaliation is also prohibited by university policy. The following persons have been designated to handle inquiries regarding the nondiscrimination policies and are the Title IX coordinators for their respective campuses: Executive Director of the Office of Institutional Opportunity & Access, IOA@ku.edu, 1246 West Campus Road, Room 153A, Lawrence, KS 66045, 785-864-6414, 711 TTY (for the Lawrence, Edwards, Parsons, Yoder, and Topeka campuses); Director, Equal Opportunity Office, Mail Stop 7004, 4330 Shawnee Mission Parkway, Fairway, KS 66205, 913-588-8011, 711 TTY (for the Wichita, Salina, and Kansas City, Kansas medical center campuses).

unckless@ku.edu

UKentucky 2 EvolutionEcol

The Van Cleve Research Group (http://-vancleve.theoretical.bio) in the Department of Biology at the University of Kentucky is currently recruiting Ph.D. students to join the lab in Fall 2022. The lab is generally interested in quantitative and mathematical approaches to evolutionary biology and ecology. Past and current research areas include social evolution and other topics in evolutionary ecology, the evolution of phenotypic plasticity and bet-hedging, how populations cross fitness valleys, and epigenetic processes including genomic imprinting (see here for publications: http://vancleve.theoretical.bio/publications).

Additionally, the lab aims to be broadly interdisciplinary across complex biological systems from the molecular to metapopulation scales and welcomes applicants interested in quantitative approaches and with diverse backgrounds including (but not limited to) mathematics, physics, computer science, and economics.

The exact research project topics for potential students are flexible, though interested individuals should contact Jeremy Van Cleve (jvancleve@uky.edu) with a CV and short statement of interests before applying.

Applicants should apply to the Department of Biology Graduate program (http://bio.as.uky.edu/grad-program), and admission guidelines can be found at: http://bio.as.uky.edu/admissions-0. Stipend, tuition, and medical insurance, are covered as part of a teaching assistantship and research assistantships and fellowships are competitively available.

Questions about the Biology Graduate program can be sent to Van Cleve (jvancleve@uky.edu) or the Director of Graduate studies, Jessica Santollo (j.santollo@uky.edu).

Please note that applications should be received by January 1st 2022 for full consideration.

– Jeremy Van Cleve

Associate Professor Department of Biology University of Kentucky E-mail: jvancleve@uky.edu Webpage: http://vancleve.theoretical.bio Phone: (859) 218-3020

The Project Many arthropods are infected with bacterial endosymbionts that confer a variety of phenotypic effects on their hosts. We are seeking a *graduate research assistant* to conduct research on symbiont interactions in a species of Linyphiid spider, *Mermessus fradeorum*. This spider is infected by up to 5 different strains of inherited symbiont, which result in different reproductive anomalies for the host depending on which combination of symbionts are present. A newly *NSF funded, 4-year research project* will explore the interface between symbiont interactions within a host, and interactions among differentially infected spiders in the population. This project is a collaboration among Dr. Jen White (https://entomology.ca.uky.edu/person/jennifer-white) and Dr. Jeremy Van Cleve (http://vancleve.theoretical.bio/) at the University of Kentucky, as well as Dr. Yuval Gottlieb-Dror (http://ksvm.agri.huji.ac.il/staff/gottliebdror_yuval.htm) at the Hebrew University of Jerusalem.

The Position We are looking for a *student to be co-supervised* by Dr. Van Cleve and Dr. White, who will *focus on computational and evolutionary models of symbiont and host dynamics*, as well as empirical studies of spider phenotype, population dynamics, and evolutionary trajectory. The assistantship will include an annual salary stipend, graduate tuition waiver, and student health benefits. Selection criteria will include 1) experience/interest in computational modeling, 2) previous entomological or ecological research experience, and 3) experience with basic molecular techniques such as PCR and gel electrophoresis.

The Location We are at the University of Kentucky, in Lexington, Kentucky. Lexington is a mid-sized city of ~300,000 people, within a 1.5 hr drive from both Cincinnati, OH and Louisville, KY. We are also less than an hour from *great hiking, camping, and climbing in the Red River Gorge*.

The Process Please contact Dr. Jen White at jenawhite@uky.edu or Dr. Jeremy Van Cleve at jvancleve@uky.edu for more information and include a letter of interest, unofficial transcript, and CV/resume. Prospective students will then be referred to apply to the University of Kentucky through the Biology or Entomology graduate programs, as appropriate. The *priority deadline for applications is Dec 1, 2021* and applications will be considered until the position is filled.

Dr. White will be attending the Entomological Society of America meeting (in person!) in Denver and would be happy to meet with any interested prospective students at the meeting.

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ULausanne Biodiversity

a PhD position is open in my new Biodiversity Change group at University of Lausanne. I am looking for a highly motivated candidate in environmental sciences, with particular interest in biodiversity, community ecology and global change biology.

https://career5.successfactors.eu/sfcareer/jobreqcareer?jobId=18208&company=universitdP
Gianalberto Losapio

Gianalberto Losapio <losapiog@stanford.edu>

UMiami PlantEvolution

PhD UMiami.BioticInteractionsCarbonCycling

We have upcoming graduate student positions to join our research group at University of Miami (https://amyzanne.org/vacancies).Students would join an interactive lab group and develop an independent research focus in line with ongoing lab projects.Broadly we study how biotic interactions impact biogeochemical cycles. Many in our group explore how plant construction influences community structure and function (from morphology to genes) of biotic decay agents. Our lab also examines the consequences of these interactions for ecosystem carbon cycles, especiallyin USA, Australia, South America as climate changes.New lab projects will be based in the New World Tropics including south Florida and Brazil.Other lab projects include solar radiation impacts on litter and wood decay, microbiome assembly on leaves and fruits, and macroevolution and functional ecology of plants, termites and microbes around the globe.The

fully funded graduate work will be completed at University of Miami. If you are interested in working with us, send an email to me (Amy Zanne:aezanne@gmail.com) with brief details about your GPA, research interests and experiences, why our group is a fit for you and why you want to go to graduate school. For information about applying to the program, go to the University of Miami, Department of Biology website (https://-biology.as.miami.edu/graduate/index.html). For fall 2022 admission, the application deadline will likely be early December 2021. I am happy to answer any further questions you might have!

Aresty Chair in Tropical Ecology Department of Biology University of Miami 204A, Cox Science Center 1301 Memorial Dr. Coral Gables, FL 33146 Email:aezanne@gmail.com Website:amyzanne.org/ Twitter: @amyzanne

Amy Zanne <aezanne@gmail.com>

UNevada Reno PopulationGenetics

The Parchman and Leger labs in the Biology Department at the University of Nevada Reno are recruiting a PhD student to work at the intersection of population genetics and applied, trait-based restoration ecology. Funds are available to support field and greenhouse work in addition to DNA sequencing for research that will address the genetic and phenotypic consequences of seed increase practices for a suite of Great Basin forbs and grasses. Project goals include asking if and how genetic variation and diversity is affected by seed collection, agricultural seed production, and restoration seeding. The student would be supported by both RA and TAships available through the Biology Department as needed. The student would be advised by Dr. Thomas Parchman and co-advised by Dr. Elizabeth Leger. Ideal applicants would have strong interest in plant evolutionary genetics and some combination of the following qualifications (or a strong desire to learn these skills): 1) molecular genetic laboratory experience, 2) experience working with data using R, Unix, and/or or Python, 3) interest in the ecology and evolutionary biology of western North American native plants 4) past experience or strong interest in restoration ecology and/or restoration genetics or 5) interest in working with land managers on restoration projects.

UNR has a strong interdisciplinary PhD program in Ecology, Evolution, and Conservation Biology (http:/-/environment.unr.edu/eecb/). Graduate students accepted into the EECB program are guaranteed financial support through Teaching Assistantships (TAs), which includes health insurance and an out-of-state tuition waiver. For this position, funds are anticipated for a number of semesters through Research Assistantships (RAs). The successful applicant could begin the PhD program as soon as Fall 2022, with the possibility of joining the lab sooner as a technician.

University of Nevada, Reno (UNR) is an R1 university located in a spectacular environment at the confluence of the Great Basin and the Sierra Nevada Mountains. The faculty and graduate students are highly interactive and include an internationally known group of evolutionary biologists and ecologists. The Parchman lab has recently been renovated and is equipped with ample molecular and computational resources for the analysis of high throughput DNA sequencing data, and the Leger lab maintains all resources needed for implementing field projects and ample greenhouse space, and has many working relationships with state, federal, and NGO partners working on restoration in the Great Basin. We are located in an ideal setting for field-based projects in the Great Basin and Sierra Nevada regions, allowing enviable access to spectacular montane and desert ecosystems. Reno is only 40 minutes from Lake Tahoe, offers a high quality of living, an excellent climate, and is a large enough city to offer diverse activities and amenities. World class rock climbing, skiing, and mountain biking opportunities are in extremely close proximity.

Interested applicants should send a CV, copies of transcripts, and a statement of research experience and interests to Tom Parchman (tparchman@unr.edu) and Elizabeth Leger (lelizabeth@unr.edu). Consideration will begin on December 1, and applications will be reviewed until the position is filled.

I would like to post the attached advertisement for a graduate student position at the University of Nevada Reno. Please let me know if additional information or clarity is needed, and thank you for continuing to maintain evoldir.

Best,

Tom

Thomas L. Parchman Associate Professor Department of Biology, MS 314 University of Nevada, Reno Max Fleishman Agriculture Building 1664 N. Virginia Street Reno, NV 89557-0314

Thomas L Parchman <tparchman@unr.edu>

UNorthCarolina Greensboro FunctionalTraits

The McLean Lab (https://www.mclean-lab.org/) at University of North Carolina Greensboro (http://-www.uncg.edu/) is recruiting a graduate student at the PhD or MS level to develop functional trait-based approaches to studying community assembly in mammalian, ectoparasite, or paired host-parasite systems. The lab is especially interested in a) use of large-scale trait data from museum specimens and ecological monitoring initiatives, and b) development of new functional traits, and application of both to understanding faunal response to past and present environmental change. We are also especially interested in utilizing new approaches in micro-computed tomography (CT) scanning for this work.

Research in the McLean Lab bridges mammalian evolution and ecology and relies on an integrative toolkit including fieldwork, specimen-based research, phylogenomics, community ecology, and biodiversity informatics. Prospective students will be encouraged to develop projects applying these tools in one of the ecological contexts we work in, including: the Southern Appalachian Mountains, western North America, or Central Asia (Mongolia and Kazakhstan). Students will also be able to take advantage of new CT scanning infrastructure at the Joint School of Nanoscience and Nanoengineering (a joint campus of UNCG), plus a host of other core microscopy and analysis instruments.

To inquire about positions, please email Bryan McLean (b_mclean@uncg.edu) no later than November 15th and describe: a) your broad research interests in ecology and evolution, b) a summary of academic and research experiences, and 3) an updated CV.

Students accepted into the lab will join the MS or PhD (Environmental Health Science) program at UNCG and be provided a tuition waiver and a competitive stipend. Additional competitive fellowships are available by specific application. The deadline for application to the Environmental Health Science PhD program is 15 January 2022 and the deadline for the MS Program is 1 April 2022 (both beginning August 2022).

For more information about the UNCG Graduate Program in Biology, please visit:

https://biology.uncg.edu/graduate/mission/ . For more information about the HIGH quality of life and LOW cost of living in Greensboro, please visit:

https://www.greensboro-nc.gov/i-want-to https://-/realestate.usnews.com/places/north-carolina/-greensboro Bryan McLean Assistant Professor University of North Carolina Greensboro Greensboro, NC 27402 www.mclean-lab.org *> explore UNCG Mammal < https://arctos.database.museum/-SpecimenSearch.cfm?guid_prefix=UNCG%3AMamm > and Parasite < https://arctos.database.museum/-SpecimenSearch.cfm?guid_prefix=UNCG%3APara > Collections via Arctos <*

Bryan McLean <bryansmclean@gmail.com>

UNorthDakota PopulationGenomicsPaleoecology

U. North Dakota. PopulationGenomicsPaleoecology.

The Laboratory of Evolutionary and Forensic Genetics at the University of North Dakota (www.und.edu) is inviting applications from highly motivated students who pursue a PhD degree. MS candidates will be also considered.

Students will be engaged in a project on the historic, current, and future status of bison herds from biological, ecological, and cultural perspectives. This cross-disciplinary project represents an opportunity to get intensive training in the methods of ancient and modern DNA analyses including high-throughput genome sequencing, stable isotope studies, computational analysis, and statistical modelling. The examples of our recent publications: Ovchinnikov et al. Diversity and Origin of the Feral Horses in Theodore Roosevelt National Park. PLoS One, 2018, 13(8); Davies et al. Isotopic Paleoecology of Northern Great Plains Bison during the Holocene. Scientific Reports, 2019, 9(1): 16637. Although the population project is focused on bison genomics and paleoecology, we have opportunities to develop new projects on computational analysis of big oral and environmental microbiome data as well as on genomics and microbiome study of human migrations and evolution.

Candidates should demonstrate motivation for hard laboratory work and strong interest in genomics and computational biology. Preference will be given to candidates with a proven record of computational analysis and bioinformatics skills. Additional experience in se-

quencing technologies is a plus.

If you are interested, you need to apply to the University of North Dakota Biology Graduate Program using the regular procedure. Requirements and How to Apply procedure can be found in the UND Biology Graduate School websites:

https://und.edu/programs/biology-phd/-requirements.html https://und.edu/admissions/-graduate/apply.html The additional information can be also found in the Biology Department website:

https://arts-sciences.und.edu/academics/biology/ The position starts in January 2022. To receive full consideration, the Biology Graduate Program needs to receive your application and required materials by October 15, 2021 for priority consideration. Later applications will be also considered.

Potential graduate students are also encouraged to contact Dr. Igor Ovchinnikov.

Contact information:

Dr. Igor Ovchinnikov Associate Professor Lab. of Evolutionary and Forensic Genetics Department of Biology University of North Dakota

Email: igor.ovtchinnikov@und.edu

"Ovtchinnikov, Igor" <igor.ovtchinnikov@und.edu>

UPittsburgh EvolutionaryBiology

Seeking PhD Students in Ecology & Evolutionary Biology at The University of Pittsburgh

The Department of Biological Sciences < https://-www.biology.pitt.edu/ > Ecology and Evolutionary Biology Program (EE) at the University of Pittsburgh is seeking applications from prospective graduate students interested in pursuing a Ph.D. We have a strong and collaborative research program that seeks students interested in a wide variety of topics including behavioral ecology, coevolution, community ecology, conservation biology, disease ecology, eco-evolutionary dynamics, evolutionary biology, evolutionary ecology, evolutionary development, genomic evolution, microbiome studies, molecular evolution, physiology, and quantitative ecology. As a student here, you will develop skills in critical thinking, lab and field research, experimental design, grant and publication writing, and computational and statistical analysis. You will also have the opportunity to apply cutting-edge methods in biological sciences including genomics and machine learning.

The goal of our department is to recruit, welcome, and develop students and researchers from a range of backgrounds, career stages, and research interests. We aim to provide an inclusive and supportive environment for all scholars. Once admitted into our program, you will receive five years of guaranteed support, including a competitive salary, tuition waiver, and health benefits regardless of citizenship. You will also be encouraged and supported as you apply for internal and external independent funding opportunities – our students frequently receive multi-year predoctoral fellowship awards from major granting institutions (e.g. NSF GRFP). Students may participate in our Teaching Minor program that helps develop teaching portfolios. We focus on career development and our graduate students go on to secure competitive postdoctoral research fellowships, science communication fellowships, and careers as research or teaching faculty, science communicators, staff scientists at conservation organizations and government agencies.

To apply to the Ecology & Evolution program, we highly encourage and welcome all interested students to reach out to potential advisors early in the application process. If you are enthusiastic about ecology and evolutionary biology, we are excited to meet you! Applications for the 2022-2023 school year are due December 7, 2021 and may be found here < https://app.applyyourself.com/-AYApplicantLogin/fl_ApplicantLogin.asp?id=up-as >. More details about applying are below.

*** UPCOMING VIRTUAL Q&A SESSIONS ABOUT APPLICATIONS*** Attend one of our Q&A sessions (on 10/29 and 11/19) to learn more about our program, the application process, and how your application will be evaluated. Sign up here < https://pitt.co1.qualtrics.com/jfe/form/-SV_4UfkeMtGHQGLnSt >!

*** FIELD RESEARCH OPPORTUNITIES *** We conduct our research in temperate and tropical ecosystems, forests, grasslands, wetlands, lakes, ponds, rivers, and streams in urban and rural areas. We work globally–including Mexico, Panama, Costa Rica, and China– as well as around the US–California, Hawaii, Michigan, Florida. Many of our faculty and students utilize nearby field sites including our own field station–the Pymatuning Lab of Ecology < https://-www.biology.pitt.edu/facilities/pymatuning >–as well as other nearby natural areas including the Carnegie Museum of Natural History's Powdermill Nature Reserve < https://carnegiemnh.org/visit-powdermill/ >, the US Forest Service's Allegheny National Forest <

https://www.fs.usda.gov/allegheny >, Audubon Society of Western Pennsylvania's Beechwood Farms < http://www.aswp.org/pages/beechwood >, and Pittsburgh City Parks < https://www.pittsburghparks.org/-your-pgh-parks >. We collaborate with biologists at nearby institutions like The Carnegie Museum of Natural History < https://carnegiemnh.org/ >, The National Aviary < https://www.aviary.org/ >, the Pittsburgh Zoo < https://www.pittsburghzoo.org/ >, Civil and Environmental Consultants, Inc. < https://-www.cecinc.com/ >, Pittsburgh Parks Conservancy < https://www.pittsburghparks.org/ >, and the Western Pennsylvania

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USheffield AvianEvolution

*** Fully funded 3.5 year PhD position, start Sept 2022 ***

The project

Explaining the spectacular diversity of life is one of the greatest challenges in biology. A particularly striking component of this diversity concerns the diverse array of sexual signalling traits found in nature, such as colour patterns, songs and behaviours. Such traits represent the outcome of the interplay between natural and sexual selection, and the evolution of sexual signalling traits and preferences has long been recognised as a potentially powerful mechanism for triggering reproductive isolation and speciation among diverging populations. However, despite much historical focus, only now are we in a position to unpick the evolutionary forces shaping the huge diversity of sexual signalling traits found in nature and to decipher their role in driving speciation and patterns of species richness at global scales.

Focusing on the diverse global radiation of birds (>10,000 species), this project will make use of unparalleled datasets of plumage colouration and song structure for thousands of bird species with cutting-edge phylogenetic comparative methods to answer unresolved questions at the core of evolutionary research. Possible research directions include examining how sexual, social and ecological conditions combine to shape the evolution of sexual signalling traits, and testing the role of sexual signal evolution in speciation and the build-up of community species richness.

The successful applicant will have the opportunity to work with premier global natural history museum collections (e.g. NHM Tring) and will acquire advanced statistical, computational and communication skills that are highly transferable. In addition, there is scope within the PhD to develop fieldwork-based projects related to these topics in various international locations.

The result will be a comprehensive assessment of the drivers of sexual signal evolution and its role in avian speciation processes. It is anticipated that the work will result in several important publications.

The team

The PhD student will be embedded within Dr Chris Cooney's lab (www.cooneylab.co.uk) in the School of Biosciences at the University of Sheffield. The PhD project is part of an ongoing collaboration with Dr Gavin Thomas (University of Sheffield) and it is anticipated that the successful applicant will work closely with both supervisors and their respective collaborators around the world.

We encourage applications from candidates from all backgrounds with broad interests in ecology and evolution. ***Informal enquiries are strongly welcomed and encouraged.*** If you are interested, please contact Dr Chris Cooney at c.cooney@sheffield.ac.uk.

Science Graduate School

As a PhD student in one of the science departments at the University of Sheffield, you'll be part of the Science Graduate School. You'll get access to training opportunities designed to support your career development by helping you gain professional skills that are essential in all areas of science. You'll be able to learn how to recognise good research and research behaviour, improve your communication abilities and experience the breadth of technologies that are used in academia, industry and many related careers. Visit www.sheffield.ac.uk/sgs to learn more.

Funding notes

- This is a fully-funded 3.5-year project for UK students and/or UK permanent residents, including a stipend of 15,609 per year (2021 rate).

- Entry Requirements: First class or upper-second degree in a relevant subject.

- To formally apply for the PhD, you must complete the University's application form using the following link: https://www.sheffield.ac.uk/postgraduate/phd/-apply/applying - All applicants should ensure that both

references are uploaded onto their application as a decision will be unable to be made without this information.

- Closing date: 31st Jan 2022 (or until filled)

- Start date: Sept 2022

References

Cooney, C.R., Tobias, J.A., Weir, J.T., Botero, C.A. & Seddon, N. (2017). Sexual selection, speciation and constraints on geographical range overlap in birds. Ecol. Lett., 20, 863-871.

Cooney, C.R., MacGregor, H.E.A., Seddon, N. & Tobias, J.A. (2018). Multi-modal signal evolution in birds: re-assessing a standard proxy for sexual selection. Proc. R. Soc. London Ser. B, 285, 20181557.

Cooney, C.R., Varley, Z.K., Nouri, L.O., Moody, C.J.A., Jardine, M.D. & Thomas, G.H. (2019). Sexual selection predicts the rate and direction of colour divergence in a large avian radiation. Nature communications, 10, 1773.

Cooney, C.R. & Thomas, G.H. (2021). Heterogeneous relationships between rates of speciation and body size evolution across vertebrate clades. Nature Ecology & Evolution, 5, 101-110.

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USheffield EvolutionaryGenomics

*** Fully funded 3.5 year PhD position ***

Life on Earth is facing unprecedented challenges as a result of climate change. Understanding how organisms rapidly adapt to their environment is essential in not only reducing the number of species that will go extinct, but also in safeguarding future food production. Adaptation requires genetic variation for natural selection to act on. This project will focus on the processes that result in genes present in some individuals but not others from the same species, and ultimately how this variation impacts adaptation.

As part of this project, the student will combine cutting-edge genomic techniques, comparative analyses and experimental approaches to study two contributors of intra-specific gene content variation; [1] lateral gene transfer (LGT) and [2] extrachromosomal circular DNA (eccDNA). LGT can enable organisms to evolve beyond their innate capability by borrowing genetic information from distant relatives, and eccDNA can act as a vehicle for evolutionary change based on lifetime experience. The student will use the grass family as a model system, a key group of plants that cover 30-40% of the Earth's terrestrial surface and produce a majority of our food.

The student will receive training in a broad range of skills (including fieldwork in the UK and abroad, molecular ecology laboratory techniques, and genomics), with the exact focus of the project being flexible so that it can be tailored to the students interests.

For informal queries please contact Dr Luke Dunning (l.dunning@sheffield.ac.uk).

Science Graduate School

As a PhD student in one of the science departments at the University of Sheffield, you'll be part of the Science Graduate School. You'll get access to training opportunities designed to support your career development by helping you gain professional skills that are essential in all areas of science. You'll be able to learn how to recognise good research and research behaviour, improve your communication abilities and experience the breadth of technologies that are used in academia, industry and many related careers. Visit http://www.sheffield.ac.uk/-sgs to learn more.

Funding Notes

This is a fully-funded 3.5-year project for UK students and/or UK permanent residents, including a stipend of 15,609 per year (2021 rate). Entry Requirements First class or upper second 2(i) in a relevant subject. To formally apply for a PhD, you must complete the University's application form using the following link: View Website www.sheffield.ac.uk%2fpostgraduate%2fresearch%2fapply%2fapplying *All applicants should ensure that both references are uploaded onto their application as a decision will be unable to be made without this information.*

References

Relevant recent publications: [1] Hibdige SG, Raimondeau P, Christin PA, Dunning LT (2021) Widespread lateral gene transfer among grasses. New Phytologist. 230:2474-2486 [2] Dunning LT, Christin PA (2020) Reticulate evolution, lateral gene transfer, and innovation in plants. American Journal of Botany. 107:541-4. [3] Dunning LT, Olofsson JK., Parisod C, Choudhury RR, Moreno-Villena JJ, Yang Y, Dionora J, Quick WP, Park M, Bennetzen JL, Besnard G, Nosil P, Osborne CP,

Christin PA (2019) Lateral transfers of large DNA fragments spread functional genes among grasses. PNAS. 116:4416- 4425. Popular science articles: [1] Dunning LT. 2021. Natural GM: how plants and animals steal genes from other species to accelerate evolution. The Conversation. Lab websites: [1] Dunning Lab: https://-dunning-lab.group.shef.ac.uk/ [2] Christin Lab: https:/-/christinlab.group.shef.ac.uk/ @LukeTDunning @PAC-grass

– *Dr Luke T. Dunning*

NERC Fellow Ecology and Evolutionary Biology School of Biosciences University of Sheffield @LukeTDunning < https://twitter.com/luketdunning > https://dunning-lab.group.shef.ac.uk Luke Dunning <l.dunning@sheffield.ac.uk>

USheffield PhD EvolutionaryGenomics

We are seeking a highly motivated and enthusiastic PhD student to study the evolution and genomics of sexual dimorphism across birds.

The evolution and genomics of sexual phenotypes

Deadline for applying: 14th Jan 2022

Lead supervisor: Dr Alison Wright, University of Sheffield Co-supervisors: Prof Jon Slate (University of Sheffield), Prof Steve Paterson (University of Liverpool)

The Project

Sexual dimorphism is one of the most conspicuous sources of biodiversity and can be observed across a range of phenotypes, including morphology, life history and behaviour. Understanding the genetics and evolution of sex differences are therefore key goals in biology.

This project will test how the sexual genome evolves and develops using next-generation sequencing data and birds as a model system. Birds are an ideal system to ask these questions as they exhibit a spectacular diversity of sexual dimorphisms and many species are subject to strong sexual selection. The specific approach taken can be tailored to the particular interests of the student and could include studies of sex chromosomes, gene regulation, sexual selection and genome evolution. This work would suit a highly motivated student with strong analytical skills and an enthusiasm for evolution and genomics. Prior experience with bioinformatics or programming is welcomed but certainly not required. The project will involve computational and laboratory work, and the successful candidate will receive high quality training in programming, wet-lab skills and state-of-the-art genomic techniques. Additionally, there will be ample opportunity for the student to develop their own research interests over the course of the project.

The Team

The PhD student will be joining a productive and collaborative research group in the School of Biosciences at the University of Sheffield. There will be many opportunities to collaborate with ongoing work in the lab. For more details see www.alisonewright.co.uk. The applicant will also benefit from the diverse range of expertise offered by the co-supervisors Prof Jon Slate (University of Sheffield) and Prof Steve Paterson (University of Liverpool). Applicants are strongly encouraged to contact Dr Alison Wright for more details on the group, project and facilities (a.e.wright@sheffield.ac.uk).

Funding Notes

This PhD project is part of the NERC funded Doctoral Training Partnership "ACCE" (Adapting to the Challenges of a Changing Environment. ACCE is a partnership between the Universities of Sheffield, Liverpool, York, CEH, and NHM, for more information about ACCE and how to apply please visit the website: https://accedtp.ac.uk/ The NERC ACCE DTP and the University of Sheffield are committed to recruiting future scientists regardless of age, ethnicity, gender, gender identity, disability, sexual orientation or career pathway to date. We understand that commitment and excellence can be shown in many ways and we have built our recruitment process to reflect this. We welcome applicants from all backgrounds, particularly those underrepresented in science, who have curiosity, creativity and a drive to learn new skills.

For details on how to apply, including eligibility, see: https://accedtp.ac.uk/how-to-apply-to-acce-dtp/ & https://www.findaphd.com/phds/-project/acce-dtp-fully-funded-studentship-the-evolution-and-genomics-of-sexual-phenotypes/-?p136541 "a.e.wright@sheffield.ac.uk" <a.e.wright@sheffield.ac.uk>

USouthampton PlastidTransloconEvolution

A PhD position focused on the evolution of chloroplast protein trafficking is available through the Doctoral Training Program the University of Southampton co-supervised by Ivo Tews (UoS), Jan Janouskovec (UoS), and Anastasios Tsaousis (U Kent). Details at: https://southcoastbiosciencesdtp.ac.uk/project/-illuminating-chloroplast-origin-and-function-through-a-discovery-of-novel-protein-transport-route/ Jan JanouÂkovec <janjan.cz@gmail.com>

USouthCarolina EvolutionaryBiology

The faculty of the Evolutionary Biology group in the Department of Biological Sciences at the University of South Carolina are recruiting graduate students (M.S. and Ph.D.) to start in Fall 2022. We seek applicants who are highly motivated and enthusiastic, keenly interested in evolutionary biology, and looking to join a dynamic group of evolutionary scientists. Our department also has strengths in ecology, marine biology, neurobiology, and plant biology, and many of the evolution faculty participate in those groups as well. More information about our Department can be found at http://www.biol.sc.edu . Graduate students in our program are guaranteed financial support through TA and RA appointments for five years, including tuition and health insurance. Outstanding applicants will be nominated for a variety of university fellowships.

Applications are due on December 1st. Potential applicants should contact one or more of our faculty well before the deadline to discuss their interests; students are admitted only with the endorsement of a faculty member. Additional information on our graduate program, including instructions on how to apply, can be found at https://sc.edu/study/colleges_schools/-artsandsciences/biological_sciences/study/graduate/-index.php . The members of the Evolution Group, their areas of interest, and links to websites are below.

Labs actively recruiting graduate students this year include:

Jeff Dudycha (dudycha@biol.sc.edu) Evolutionary ecology & genetics; life history, phenotypic plasticity, diversification, vision/eyes, mutation https://www.tangledbank.org/ Brian Hollis (brian.hollis@sc.edu) Evolutionary genetics; sexual selection and sexual conflict, experimental evolution https://experimentalevolution.org/ Tim Mousseau (mousseau@sc.edu) Evolutionary ecology & genetics; ecological and evolutionary consequences of radioactive contaminants http://cricket.biol.sc.edu/Mousseau/-Mousseau.html Dan Speiser (speiser@mailbox.sc.edu), Evolutionary ecology & genetics; macroevolution, physiology, sensory ecology, vision, neurobiology https://www.speiserlab.com/ Carrie Wessinger (wessinc@mailbox.sc.edu), https://wessingerlab.github.io/-index.html Genetics/genomics of adaptation, parallel evolution, plant speciation.

Additional Labs in the Evolutionary Biology Group include: Carol Boggs (boggscl@mailbox.sc.edu), Evolutionary ecology & genetics; physiology, resource allocation, invasions, small populations https://www.sc.edu/study/colleges_schools/-artsandsciences/biological_sciences/our_people/-directory/boggs_carol.php Jerry Hilbish (hilbish@biol.sc.edu) Evolutionary ecology & genetics; hybrid zones & speciation, species ranges, climate change https://sc.edu/study/colleges_schools/-artsandsciences/biological_sciences/our_people/-directory/hilbish_jerry.php Joe Quattro (quattro@biol.sc.edu) Evolutionary genetics; population & conservation genetics of rare/threatened aquatic animals https://sc.edu/study/colleges_schools/-artsandsciences/biological_sciences/our_people/-directory/quattro_joe.php Nate Senner (senner@mailbox.sc.edu) Evolutionary ecology & genetics; responses to environmental change, extreme environments http://www.sennerlab.com/ Ward Watt (wattw@mailbox.sc.edu) Evolutionary ecology & genetics; biochemical evolution, physiology, population biology

Our department is located in the heart of Columbia, South Carolina, a metropolitan area of 750,000 people (and 186,000 dogs!). Columbia ("Cola," or "Soda City" to locals) enjoys more than 300 days of sunshine annually and has ready access to clean beaches, lakes, rivers, and mountains. Congaree National Park, Sesquicentennial State Park, Lake Murray, and Harbison State Forest offer excellent wilderness areas nearby, along with several greenways on the city's three rivers. The Famously Hot/Surprisingly Cool city hosts historical and cultural attractions, performing arts and sporting events, and many annual festivals including the Rosewood Crawfish

Festival, the Indie Grits Film Festival, the

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USouthernCalifornia IslandFoxEvolution

We seek to recruit a highly motivated doctoral student to pursue dissertation research on the evolutionary history of the island fox,Urocyon littoralis. The island fox is smaller than its progenitor, the mainland gray fox, and includes six subspecies, each restricted to a different island in Southern California's Channel Islands due to their unique migratory history during the Ice Age and thereafter. Extreme population crashes occurred on several of the islands in the 1990s, followed by dramatic demographic recoveries, but incomplete genetic recoveries. The work will take advantage of fossils and historical samples from museum collections, taken before the population crashes, as well as recent samples.

The research will be part of a multidisciplinary project (morphological, paleontological, molecular) involving collaboration between the Natural History Museum of Los Angeles County, the Wrigley Institute for Environmental Studies and the University of Southern California. This is a funded project and the Ph.D. student will have five years of support (including tuition remission) through a combination of RAships, TAships and fellowships.

Analyses of morphological and genetic changes can be used to address a number of important questions. When did the fox arrive at each island and how much migration has there been amongst islands? Were humans (Paleo-Indians) involved in the colonization of each island? What is the genetic basis for the evolution of dwarfism? Is dwarfism a result of natural selection or artificial selection? What morphological changes, at various levels of bone anatomy, are associated with reduction of body size?

Potential applicants are encouraged to contact Xiaoming Wang (xwang@nhm.org) and/or Suzanne Edmands (sedmands@usc.edu) for more information. Before applying, candidates should complete a pre-interview by December 20, 2021. Applications should then be submitted by January 7, 2022 to the Marine Biology and Biological Oceanography Program at the University of Southern California (https://dornsife.usc.edu/meb/prospective-students/).

Suzanne Edmands Gabilan Distinguished Professor in Science and Engineering Professor, Marine & Environmental Biology Department of Biological Sciences 3616 Trousdale Parkway, AHF 130 University of Southern California

Los Angeles, CA 90089

(213)740-5548 http://dornsife.usc.edu/labs/edmands/
Suzanne Edmands <sedmands@usc.edu>

UStAndrews CrowToolEvolution

PHD: TOOL CRAFTING IN NEW CALEDONIAN CROWS

A fully-funded PhD studentship for research on New Caledonian crows is available in Professor Christian Rutz's group at the University of St Andrews, UK (deadline: 03 December 2021). A summary is provided below, and the full advert can be found on FindAPhD:

https://www.findaphd.com/phds/project/tool-crafting-in-new-caledonian-crows/?p125512 SUMMARY

New Caledonian crows are renowned for their ability to manufacture complex foraging tools from plant materials. For example, using an elaborate sequence of actions, they craft hooked stick tools from branching vegetation, and employing completely different techniques, they cut a variety of tool shapes from the barbed edges of screwpine leaves. Professor Christian Rutz's research group has been studying the behavioural ecology of New Caledonian crows since 2005, focussing on seven established study sites. Building on some of the group's recent advances, this PhD project will provide a detailed investigation of the tool-manufacture behaviour of wild crows. There is considerable flexibility with regards to specific study objectives, but the successful candidate is likely to conduct both field observations and aviary-based experiments with temporarily captive subjects, with excellent scope for collaboration with other group members and external project partners. This fully-funded PhD project offers exciting opportunities for a highly motivated student to join a dynamic research group, to conduct topical research on the behavioural ecology of one of the most accomplished non-human tool users, and to receive training in state-of-the-art field-ornithological

research methodologies.

CENTRE FOR BIOLOGICAL DIVERSITY

The Centre for Biological Diversity (CBD) at the University of St Andrews provides a highly interactive and stimulating environment for doctoral students, with particular strengths in animal behaviour and evolution. The successful candidate would benefit from frequent interactions with postgraduates, postdocs and PIs, including lab chats, seminars, and discussion groups.

CONTACT

Please address any inquiries, with CV and a cover letter outlining your interest in the position, to Professor Christian Rutz (christian.rutz@st-andrews.ac.uk). Before you get in touch, please consult the references listed below, to get a good understanding of the group's current research activities. All formal applications must be made through the university's Online Application Portal (see below).

SELECTION CRITERIA

+ outstanding academic track record

+ excellent analytical, writing and communication skills

+ demonstrable skill and enthusiasm for behavioural research and fieldwork

+ high degree of self-motivation and independence

+ ability and willingness to live and work overseas, for extended periods of time and sometimes under challenging field conditions

+ clean driving licence

+ prior research experience is an advantage

+ basic French language skills are an advantage

HOW TO APPLY

Please make a formal application to the School of Biology through our Online Application Portal:

https://www.st-andrews.ac.uk/study/apply/-postgraduate/research/ We require the following documents: CV, personal statement, 2 references, academic qualifications, English language qualification (if applicable).

Keywords: Animal Behaviour, Behavioural Ecology, Evolutionary Ecology, Animal Cognition, Tool Use, Social Learning, Cultural Evolution

FUNDING NOTES

Funded PhD Project (UK and international students (including EU)).

Funded by the School of Biology, University of St Andrews. The studentship covers tuition fees (Home and Overseas) and a living allowance for a duration of 3.5 years.

REFERENCES

Hunt GR (1996) Manufacture and use of hook-tools by New Caledonian crows. Nature 379, 249-251.

Hunt GR, and Gray RD (2003) Diversification and cumulative evolution in New Caledonian crow tool manufacture. Proc. R. Soc. B 270, 867-874.

Hunt GR, and Gray RD (2004) The crafting of hook tools by wild New Caledonian crows. Proc. R. Soc. B (Suppl. 3) 271, S88-S90.

Hunt GR, and Gray RD (2004) Direct observations of pandanus-tool manufacture and use by a New Caledonian crow (Corvus moneduloides). Anim. Cogn. 7, 114-120.

Kenward B, Weir AAS, Rutz C, and Kacelnik A (2005) Tool manufacture by naïve juvenile crows. Nature 433, 121.

Klump BC, Cantat M, and Rutz C (2019) Raw-material selectivity in hook-tool-crafting New Caledonian crows. Biol. Lett. 15, 20180836.

Klump BC, Sugasawa S, St Clair JJH, and Rutz C (2015) Hook tool manufacture in New Caledonian crows: behavioural variation and the influence of raw materials. BMC Biol. 13, 97.

Rutz C, Hunt GR, and St Clair JJH (2018) Corvid technologies: how do

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UStAndrews SocialEvolutionTheory

PhD position | Social evolution: cooperation and conflict between genes, individuals and groups (University of St Andrews, Scotland).

Natural selection explains the appearance of design in the living world. But at what level is this design expected to manifest - gene, individual or group - and what is its function? Social evolution provides a window on this problem, because it is in the context of social

interaction that the interests of genes, individuals and groups come into conflict with each other.

I invite applications for a PhD studentship in my research group at the School of Biology, University of St Andrews, Scotland, to develop new theory on the topic of social evolution. The project will suit a Biology graduate with a strong interest in social evolution, but applications from graduates with other backgrounds are also encouraged, and although prior experience in mathematical modelling would be helpful this is certainly not required as the requisite training will be provided.

Current research in my lab involves development of general theory - using kin selection, multilevel selection, game theory and theoretical population genetics approaches - as well as more specific mathematical and computer simulation models that are tailored to the biology of particular organisms, from microbes to insects to humans. Much of our ongoing work is focused on intragenomic conflicts and associated clinical pathologies, plus the role of sex and gender in social evolution

If evolutionary biology really fascinates you, and you are a careful thinker, then you will flourish in the kind of project that I enjoy supervising. Please direct informal enquiries to Prof Andy Gardner (andy.gardner@st-andrews.ac.uk).

Apply by 3 Dec 2021. For more details, see: https://twitter.com/drandygardner/status/1448561149834825728 Andy Gardner <andy.gardner@st-andrews.ac.uk>

UTennessee EvolutionaryDynamics

The Blum Lab in the Department of Ecology & Evolutionary Biology (EEB) at the University of Tennessee, Knoxville (UTK) is seeking a PhD student to join research endeavors focusing on eco-evolutionary dynamics arising from global change. The student will have opportunities to contribute to ongoing pursuits leveraging highly persistent soil-stored seed banks in Chesapeake Bay marshes to reconstruct century-long records of eco-evolutionary responses of a landform engineering plant to elevated CO2 and sea level rise. The student also will have opportunities to become involved in a newly funded "Bridging Ecology and Evolution" project that will assess whether and how rapid evolution of an ecologically dominant plant to nutrient enrichment and elevated CO2 influences carbon cycling in Chesapeake Bay marshes. Joining one or both pursuit(s) could involve collaborations with partners at the University of Notre Dame, the Smithsonian Environmental Research Center, Bryn Mawr College, and Oak Ridge National Laboratory.

Candidates should have a mix of primary interests related to evolutionary biology, quantitative genetics, population genetics and genomics, transcriptomics, and epigenetics. Interests should also extend to plant physiology and functional traits, plant-microbe associations, coastal ecology, global change ecology, soil biogeochemistry and/or ecosystem processes related to carbon and nutrient cycling.

The student will be provided a competitive stipend as well as support for tuition and health insurance through a graduate research and/or teaching assistantship. Support is available for students to begin in the Fall semester of 2022. Further information about the UTK EEB department can be found ateeb.utk.edu.Further information about work being undertaken in the Blum Lab can be found at eeb.utk.edu/people/michael-j-blum/.

Candidates must have an undergraduate degree in ecology, evolutionary biology, genetics, botany, plant sciences or a related discipline. Preference will be given to candidates with a MS degree and/or with relevant work experience.

The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services. All qualified applicants will receive equal consideration for employment and admission without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, genetic information, veteran status, and parental status.

For further details about this opportunity, please contact Dr. Michael Blum (mblum@utk.edu).

"Blum, Michael J" <mblum@utk.edu>

UTexas ElPaso ArcticPlantPopGenomics

We are seeking a highly motivated student for a NSF funded PhD position in the Moody Lab at the University of Texas at El Paso (UTEP). The research will focus on comparative transcriptomics and population genomics of arctic plants along an Alaskan latitudinal gradient. The research is part of a collaborative research program

that will examine the mechanisms that result in ecotypic differences in phenology involving a sedge and two shrubs in reciprocal transplant garden and growth chamber experiments. This includes examination of potential adaptions related to light quality, light quantity, photoperiod, temperature using gene expression data and population genomics. The position will have two years guaranteed research funding and guaranteed TA assistantship up to a combined six years within the Ecology and Evolutionary Biology (EEB) PhD Program at UTEP. The candidate for this position will have the opportunity to work with a collaborative team involving UTEP, the Marine Biological Laboratory (MBL), and Wilkes University, as well as an opportunity for research at the Toolik Field Station in Alaska.

The ideal candidate will have research experience, interest in molecular ecology, strong communication skills, and strong performance in science courses. Experience with -omics research and computer language is preferred, but not required. The position will begin Fall 2022. Interested students should send a current C.V. and a brief letter of interest to Dr. Michael Moody mlmoody@utep.edu. More information about my lab at UTEP is available at https://www.michaelmoodyplants.com/ More information about the Department of Biological Sciences and the EEB graduate programs can be found at https://www.utep.edu/science/biology/index.html https://www.utep.edu/science/eeb/ and https://-www.utep.edu/science/eeb/Academic%20Programs/-phd.html .Applications for graduate school are due Feb 1.

Michael Moody Associate Professor Director Herbarium UTEP Director/Advisor MS Biology

Biological Sciences The University of Texas at El Paso Office: 915-747-5087 michaelmoodyplants.com

"Moody, Michael L" <mlmoody@utep.edu>

UToronto EvolutionaryGenetics

I am recruiting MSc and PhD students to join my lab for Fall 2022 in the Department of Ecology & Evolutionary Biology at the University of Toronto, St. George campus. Applications for the MSc program are only open to domestic (Canadian) students, while the PhD program is open to both domestic and international students.

Research topics in the Sztepanacz lab include studies of: natural and sexual selection on phenotypes, the evolution of genetic variation and the genetic architecture of quantitative traits, and the evolution of sexual dimorphism and sexual conflict. Many of these topics are addressed experimentally in the lab using Drosophila and quantitative genetic/genomic approaches, and/or using computer simulations. Students have the option to develop independent projects aligned with lab interests or to work closely with me on existing projects.

The Department of Ecology & Evolutionary Biology at the University of Toronto has many world-class biologists and is great place to do science. You will join a great group of graduate students who are actively engaged in all aspects of our community including reading/discussion groups, seminars and social events. The St. George campus is located in the heart of downtown Toronto.

Interested candidates should email me at j.sztepanacz@utoronto.ca. Please include a statement of interest, CV, and transcript (unofficial is fine). Deadline to contact me is December 1st, but I will begin reviewing applications as they arrive.

For more information on my lab, check out:

sztepanacz.eeb.utoronto.ca

Jacqueline Sztepanacz

Jacqueline Sztepanacz | Assistant Professor Department of Ecology and Evolutionary Biology | University of Toronto 25 Willcocks St., Toronto, ON, M5S 3B2 email: j.sztepanacz@utoronto.ca | phone: 416-978-2457 sztepanacz.eeb.utoronto.ca

Jacqueline Sztepanacz <j.sztepanacz@utoronto.ca>

UToulouse PalmEvolution

Jonathan Rolland | CNRS researcher at the University of Toulouse 3 | https://jorolland.wordpress.com The link between micro- and macro-evolution of Geonoma Palms in the Neotropics.

Since the development of the synthetic theory of evolution (Huxley 1942), researchers in the field of evolutionary biology have mainly worked on two different time scales: microevolution, i.e. the evolution of populations below the species level (such as population genetics, phylogeography and quantitative genetics), and macroevolution, i.e. the evolution of species or clades to a higher taxonomic level (such as phylogenetics, paleobiology

and biogeography).

Our understanding of the evolutionary mechanisms from micro to macroevolution is limited by the fact that there are few studies integrating different time scales (Uyeda et al. 2011, Rolland et al. 2018).

Do factors important for the differentiation/divergence among populations also act on the divergence between species? The internship aims to answer this question with unique data. Datasets encompassing both micro and macro-evolutionary timescales are particularly scarce (Rolland et al. 2018), as large numbers of individuals need to be sampled at the population level and at the species level. In collaboration with N. Salamin, we sequenced ~ 4,000 regions of nuclear DNA for more than 800 individuals in 53 species of Geonoma palms on an altitudinal gradient ranging from sea level to over 3,000 m in the rainforests of Central and South America. For these data, the trainee will calculate the genetic distance for each gene between each pair of individuals (e.g. using PLINK, Purcell et al. 2007). This genetic divergence is a continuous measurement, which does not depend on the concept of species because it will be calculated between individuals, between populations and between species. It is then possible to test hypotheses on the origin of the genetic divergence, such as the calculation of the contribution of geographical distance (Isolation By Distance, IBD) and environmental factors (Isolation by Environment, IBE) to the genetic divergence. The geographic distances will be calculated directly on the map with GIS softwares, and the environmental climate will be extracted for each occurrence using data from Worldclim (Hijmans et al. 2005). This method has already been used on Caribbean anolis lizards (Wang et al. 2013). The internship will build on work already carried out on Geonoma (Loiseau et al. 2019). Other main collaborator of the project: Nicolas Salamin (UNIL, Switzerland).

Hijmans, R. J., Cameron, S. E., Parra, J. L., Jones, P. G., & Jarvis, A. (2005) Very high resolution interpolated climate surfaces for global land areas. International Journal of Climatology: A Journal of the Royal Meteorological Society, 25, 1965-1978.

Huxley, J. (1942) Evolution. The modern synthesis.

Evolution. The Modern Synthesis.

Loiseau, O., Olivares, I., Paris, M., de La Harpe, M., Weigand, A., Koubinova, D., et al. (2019) Targeted capture of hundreds of nuclear genes unravels phylogenetic relationships of the diverse Neotropical palm tribe Geonomateae. Frontiers in plant science, 10, 864.

Purcell, S., Neale, B., Todd-Brown, K., Thomas, L., Ferreira, M. A., Bender, D., et al. (2007) PLINK: a tool set for whole-genome association and population-based linkage analyzes. The American journal of human genetics, 81, 559-575.

Uyeda, J. C., Hansen, T. F., Arnold, S. J., & Pienaar, J. (2011) The million-year wait for macroevolutionary bursts. Proceedings of the National Academy of Sciences, 108, 15908-15913.

Rolland, J., Silvestro, D., Litsios, G., Faye, L. and Salamin, N., (2018) Clownfishes evolution below and above the species level. Proceedings of the Royal Society London B. 285, 20171796.

Wang, I.J., Glor, R.E., & Losos, J.B. (2013) Quantifying the roles of ecology and geography in spatial genetic divergence. Ecology letters, 16, 175-182.

This 2nd year master internship will be funded (~ 550 euro / month) from January to June 2022 (dates to be discussed) and will be supervised by Jonathan Rolland (researcher at the CNRS) at the Laboratoire Evolution et Diversité Biologique in Toulouse (FRANCE). Candidates willing to apply to a PhD fellowship for the following year are welcome.

Please send me your CVs and / or cover letter now to jonathan.rolland@univ-tlse3.fr. Candidates with some programming experience will be appreciated.

Rolland Jonathan <jonathan.rolland@yahoo.fr>

UValencia DrosophilaSexualConflict

PhD Student- The evolution of sexual conflict We offer a fully funded 3+1 yr PhD position starting ca. July-August 2022; meaning that, if the PhD is finished in less than 4 years, the student can transfer to a junior post doc position for the remaining time. We are looking for a PhD student interested in studying the evolutionary factors modulating the intensity of male-male competition and sexual conflict, and its consequences in terms of population viability. Strong sexual selection can improve population viability and evolvability through processes such as genic capture. However, strong sexual selection will also often give rise to sexual conflict and female harm, which does not only tend to deviate females from their evolutionary optima, but can drastically affect population viability, leading to a “reproductive tragedy of the commons”. We are interested in understanding what factors modulate the evolution of male-male competition, female harm levels, and sexual conflict at large, and how this all feeds back into population viability and

evolvability.

We work mainly with (mostly wild) Drosophila melanogaster, which typically involves behavioural experiments in the lab, experimental evolution, some fieldwork across Europe and the USA/Australia, and potentially some genomics/proteomics. This PhD position may also involve some mathematical modelling. We are looking for a motivated, enthusiastic, hard-working candidate with some background (and a strong interest) in sexual selection, and evolutionary biology and animal behaviour at large.The student will be supervised by Dr. Pau Carazo and based at the Behaviour and Evolution group of the Ethology Lab, at the Cavanilles institute of Biodiversity and Evolutionary Biology (University of Valencia, Spain). For information about our group visit our website (http://paucarazo.com). Mathematical modelling will be supervised by Dr. Gonçalo Faria (University of East Anglia). For further information and expressions of interest, please contact Pau Carazo (University of Valencia; pau.carazo@uv.es). The deadline for applications for this position is the 15th of October.

Pau Carazo, PhD Cavanilles Institute ofBiodiversity and EvolutionaryBiology University of Valencia Tel: +34 963544051 http://paucarazo.com Pau Carazo <pau.carazo@uv.es>

UWaikato 2 PopGenomics Bioinformatics

Hi evoldir,

I have two exciting PhD positions available in my lab at the University of Waikato (New Zealand). One is on biocontrol, the other is on Antarctic mosses, as outlined below. To apply for either of these opportunities to do exciting, cutting-edge research with real-world applications, please send an interest statement and CV to amcgaugh@waikato.ac.nz by 30 November 2021. Enquiries at the same email address are welcome.

CONTROLLING DAMAGING INVASIVE PESTS BY LEARNING FROM SUCCESSFUL BIOCONTROL

New Zealand's primary production and conservation estates are threatened by invasive species. Biocontrol can be an effective, pesticide-free, non-GMO method of controlling damaging invasive pests, but new biocontrol agents are often ineffective. We need to be able to better predict when they will work well before we release them to be sure that we are not introducing new damaging species.

Our project leverages a remarkable 35-year experiment on a parasitoid wasp biocontrol agent (to target the Argentine stem weevil, pictured left; Image: Simon Hinkley, Ken Walker; Museums Victoria) to identify hologenomic factors associated with biocontrol success and failure. We will also use this information to predict the effectiveness of biocontrol agents that are slated for release in New Zealand, thus improving existing biocontrol systems, reducing uncertainty around proposed systems, and ensuring that effective methods are available to control future pests without increasing pesticide use.

This project is fully-funded by MBIE (Smart Ideas programme) and we are now seeking a PhD applicant with skills in population genomics and/or bioinformatics. The successful applicant will be based at the University of Waikato under the Chief Supervision of Dr. Ang McGaughran, and will work together with the project team (Prof Peter Dearden, University of Otago; Mr Mark McNeill, AgResearch; Prof Stephen Goldson, AgResearch/Lincoln University). The main focus of the PhD will be population hologenomics and the position will involve spending time in the Dearden lab at Otago.

HOW ISOLATED IS ANTARCTICA? ASSESSING PAST AND PRESENT PLANT COLONISATIONS

Antarctica has long been considered biologically isolated from the rest of the world. Encircled by the enormous Southern Ocean ?¿‘ home to some of the world's strongest oceanic and atmospheric currents ??” and with a harsh, cold climate, the continent should be protected from natural incursions of non-native plants and animals. However, the development of molecular techniques in recent decades has revolutionised our capacity to test for past dispersal events, and emerging data demonstrates that natural incursions into Antarctica by terrestrial species have occurred; the Southern Ocean is therefore not the impenetrable barrier to dispersal that it is often thought to be.

The project aims to discover how, when, and where natural colonisations of the Antarctic continent have occurred, focusing on mosses - the dominant Antarctic plant group. Cutting-edge genomic tools will be combined with environmental, spatial, and ecological data to assess mechanisms and directions of dispersal to and around Antarctica, and to predict areas most likely to be colonised in the future. The research will help us understand the processes underpinning evolution and diversity of Antarctic species, and the vulnerability and adaptability of their ecosystems. Such knowledge is critical for Antarctic conservation in the face of rapid environmental change.

We have generated next generation sequencing data from museum specimens of Antarctic moss and are seeking a PhD applicant with skills in population genomics and/or bioinformatics - especially the analysis of exon capture data - to work on the outlined topic. The successful applicant will be based at the University of Waikato under the Chief Supervision of Dr. Ang McGaughran, and will be co-supervised by Assoc. Prof. Crid Fraser (University of Otago). There will be opportunities to spend time in the Fraser lab and to participate in fieldwork (e.g., in locations such as New Zealand, South America, Australia, sub-Antarctic) to augment the existing data with fresh collections and/or new locations. The chosen applicant will need to be successful in an application for a University of Waikato Doctoral Scholarship (*https://www.waikato.ac.nz/scholarships/-s/university-of-waikato-doctoral-scholarship?gclid=-CjwKCAjwq9mLBhB2EiwAuYdMtUwiJGOdi9M8LnWAbGNsNup8xUV1Ibcl24e7XiETWy9pbIfffoQfeRoC_4UQAvD_BwE*) - the closing date for these applications is 31 January 2022 and the application (open to New Zealand citizens, permanent residents, add international students) takes place as part of the enrolment process.

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UWisconsin StevensPoint FishConservation

The Molecular Conservation Genetics Lab at University of Wisconsin-Stevens Point seeks an MS student to apply genetic tools to evaluate brook trout hatchery supplementation practices. The position will involve collection and analysis of genetic data to perform pedigree reconstruction and quantify genetic diversity of wild and domesticated populations to identify factors that contribute to brook trout stocking success in Wisconsin. The student will work closely with biologists from the Wisconsin Department of Natural Resources throughout their research. Limited opportunities for field work will also be available.

BS in Fisheries, Biology, Ecology, or related field. Experience in generating and/or analyzing genetic data is preferred, but not strictly required.

To apply, please email cover letter, CV/resume, unofficial transcripts, and contact information for three references to Jared Homola (jhomola@uwsp.edu). Additional questions regarding the project should be sent via email (jhomola@uwsp.edu).

Start Date: 01/15/2022 Last Date to Apply: 10/29/2021 Jared Homola Assistant Unit Leader USGS, Wisconsin Cooperative Fishery Research Unit Director, Molecular Conservation Genetics Lab University of Wisconsin-Stevens Point 800 Reserve St. Stevens Point, WI 54481

jhomola@uwsp.edu

Vienna PopulationGenetics

Call for PhD students: apply by December 12, 2021

Start date: February 2022 (or later)

Over the past years, Vienna has developed into one of the leading centres of population genetics. The Vienna Graduate School of Population Genetics has been founded to provide a training opportunity for PhD students to build on this excellent on-site expertise.

We invite applications from highly motivated and outstanding students with a love for evolutionary research and a background in one of the following disciplines: evolutionary genetics, functional genetics, theoretical or experimental population genetics, bioinformatics, mathematics, statistics.

Topics include:

- Are piRNA clusters the central force limiting the abundance of selfish DNA? - Evolution from de novo mutations - influence of elevated mutation rates. - Evolution of sex-specific neuronal signaling. - Identifying signatures of adaptation using time-series genomic and phenotypic data. - Inference of selection signatures from time-series data. - Invasion dynamics of selfish DNA - Long-term dynamics of local Drosophila populations. - Microbiome evolution in Drosophila. - Temperature adaptation in Drosophila: phenotypic adaptation.

Only complete applications (application form, CV, motivation letter, university certificates, indication of the two preferred topics in a single pdf) received by December 12, 2021 will be considered. Two letters of recommendation need to be sent directly by the referees.

Depending on the project, PhD degrees will be awarded either in genetics, mathematics or statistics. PhD stu-

dents will receive a monthly salary based on currently 2.237,60 before tax according to the regulations of the Austrian Science Fund (FWF).

All information about the about available topics, the training program and the application procedure can be found at www.popgen-vienna.at – Dr. Julia Hosp

Vienna Graduate School of Population Genetics Coordinator

www.popgen-vienna.at https://twitter.com/-PopGenViennaPhD c/o Institut fi¿½r Populationsgenetik

University of Veterinary Medicine, Vienna

T +43 1 25077 4302 julia.hosp@vetmeduni.ac.at

Veterinaerplatz 1, 1210 Vienna, Austria

Building HA

http://www.vetmeduni.ac.at/en/population-genetics/ https://twitter.com/PopGenVienna Julia Hosp <Julia.Hosp@vetmeduni.ac.at> Julia Hosp <Julia.Hosp@vetmeduni.ac.at>

VirginiaTech GiantVirusEcolEvolution

The Aylward Lab has several open positions for PhD students. Projects focus on giant viruses that infect protists and other novel large DNA viruses. Directions include culturing novel viruses, multi-'omics of uncultivated virusesÂ and phylogenomics of host-virus co-evolution. Projects can be purely computational, purely experimental, or a mixture. Virginia Tech has a beautiful campus in the Appalachian Mountains. Blacksburg is a small town with a low-cost of living, and stipends are competitive. The Aylward lab is a vibrant group with wonderful people! More information can be found at www.aylwardlab.com Students should be excited about giant viruses, and microbial ecology/evolution in general, and preferably have some background in microbiology, bioinformatics, and genomics. Questions can be directed to Frank Aylward: faylward@vt.edu

Interested students can apply to: The Biological Sciences graduate program at Virginia Tech: https://-www.biol.vt.edu/Graduates.html, The Genetics, Bioinformatics, and Computational Biology program: https:/-/gbcb.graduateschool.vt.edu/, The interdisciplinary graduate program in infectious disease: https://-infectiousdisease.fralinlifesci.vt.edu/igep.html –

Frank O. Aylward Assistant Professor Department of Biological Sciences Virginia Tech Blacksburg, VA, 24061 Office: 540-231-8657 *www.aylwardlab.com* Frank Aylward <faylward@vt.edu>

Jobs

ArizonaStateU EvolutionBiophysics

Open Rank Professor in Evolution and Biophysics

Department of Physics

Arizona State University

The Biodesign Center for Mechanisms of Evolution (https://biodesign.asu.edu/mechanisms-evolution) and Department of Physics (https://physics.asu.edu/) at the Arizona State University invites applications for a full-time, open-rank, tenured or tenure-track faculty position in any area linking evolution and biophysics, with an anticipated start date of August 2022. Rank and tenure status will be commensurate with experience. Areas of interest include both experimental and theoretical approaches to understanding evolution from a physics perspective from the molecular to the cellular level.

This position is one of six new CME faculty positions focused on the mechanistic processes underlying evolutionary change, particularly at the cellular level. The growing group consists of scientists from the areas of cell biology, microbiology, biophysics, biochemistry, and population genetics. The CME is located within the Biodesign Institute, which itself supports a diversity of other interdisciplinary centers and is well-equipped with state-of-the-art facilities. The CME is part of a growing community of evolutionary biologists at ASU (https: //sols.asu.edu/evolutionary-biology-faculty and http: //asupopgen.org/). The candidate will also be associated with one of the largest biophysics groups within a Physics Department in the US, the Center for Biological Physics (https://cbp.asu.edu/).

Successful candidates will be expected to develop an innovative, extramurally-funded, independent research program; fulfill teaching requirements at both the undergraduate and graduate levels, including mentoring undergraduate and graduate students, and postdoctoral trainees; and have a commitment to outreach and service at levels within and outside the University community. Interaction and collaboration with faculty in the School of Life Sciences, the School of Molecular Sciences, the Center for Biological Physics as well as within other groups in the Biodesign Institute is encouraged.

The College values our cultural and intellectual diversity, and continually strives to foster a welcoming and inclusive environment. We are especially interested in applicants who can strengthen the diversity of the academic community. Learn more about what The College of Liberal Arts and Sciences has to offer by visiting

https://thecollege.asu.edu/faculty . Minimum Qualifications:

* Doctorate in physics, biophysics, or a related discipline (e.g., bioengineering, physical chemistry, population genetics) by time of appointment.

* Demonstrated potential to establish an innovative externally-funded research program commensurate with experience.

* A significant commitment to integrating theory with experiments elucidating mechanisms of evolution.

* Commitment to excellence in teaching.

Desired Qualifications:

* Postdoctoral experience.

* An established record of research accomplishments commensurate with experience.

* Experience working in an interdisciplinary environment, and research that complements the expertise of existing faculty and will expand our overall research and instructional capabilities

* Demonstrated success meeting the needs of diverse student populations and/or reaching out to diverse communities.

Review of applications will begin on November 15, 2021If not filled, applications will be evaluated every two weeks thereafter until the search is closed. To apply, please submit electronically, to http://apply.interfolio.com/-95791: (1) a cover letter, including the names and email addresses of three references; (2) a curriculum vitae with a list of publications; (3) a succinct (2-5 page) outline of future research plans; (4) a 1-page statement of teaching philosophy and interests; and (5) a brief statement addressing how your past and/or potential contributions to diversity and inclusion will advance ASU's commitment to inclusive excellence. Inquiries and nominations should be directed to: Michael Lynch at mlynch11@asu.edu

Background check is required for employment. Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law.“ https://www.asu.edu/aad/manuals/-acd/acd401.html and https://www.asu.edu/titleIX/ In compliance with federal law, ASU prepares an annual report on campus security and fire safety programs

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To read the entire message look it up at http://life.biology.-mcmaster.ca/~brian/evoldir.html

Atlanta CDC COVID-19 genomics

The CDC's National Center for Immunizations and Respiratory Diseases is recruiting a bioinformatics scientist with an emphasis on genomic epidemiology and evolution of respiratory viruses. This is an expedited “direct hire” due to the COVID-19 pandemic, and will have quick turn-around time, so applications should be submitted by Nov 2. This position is open to US citizens and nationals.

—Applications may be submitted at USA Jobs: https:/-/www.usajobs.gov/GetJob/ViewDetails/617838400 Additional COVID-19 related positions will continue to be posted at USA Jobs: https://www.usajobs.gov/-Search/Results?mco=09&mco=COVID-19 < https:/-/www.usajobs.gov/Search/Results?mco=09&mco=-COVID-19 > Relevant job titles to monitor may include “biologist”, “Health Scientist (informatics)”, and “Microbiologist”, among others.

Adam Retchless aretchless@cdc.gov

Adam Retchless <adam@retchless.us>

AuburnU EvolutionaryEcol

JOB OPENING - ASSISTANT PROFESSOR OF ECOLOGY. The Department of Biological Sciences at Auburn University is hiring an Ecologist. Applicants in any area of Ecology are encouraged to apply. Join our young, interactive, and dynamic faculty at an R1 university. Enjoy great weather, year-round opportunities for outdoor adventure, college football, and the strong sense of community that comes with being part of the ?Auburn family'.

The Department of Biological Sciences at Auburn University invites applications for a tenure-track faculty position at the Assistant Professor level in Ecology, beginning August, 2022. The successful candidate is expected to establish an extramurally funded, internationally recognized research program focused on innovative

approaches to the study of Ecology. All candidates with strong research programs in any ecological field will be considered. Those researchers whose work complements our existing expertise, and fills in gaps in community and population ecology, are desired. The candidate will be expected to engage in the training of graduate and undergraduate students. The candidate will have teaching responsibilities in undergraduate ecology and will be expected to develop a graduate course in their research specialty.

Applicants should submit a cover letter, curriculum vitae, a description of research interests, a statement of teaching philosophy and experience, a diversity statement and the names and contact information of three professional references. The cover letter should include explicit reference to how the applicant's research complements the existing expertise of our department. The statement regarding diversity, inclusion and equity in STEM fields should detail how past and future contributions in teaching, research, and/or service will advance the College of Sciences and Mathematics' mission of creating an inclusive environment. For more information, please click here < https://www.auburn.edu/cosam/-about/mission-vision-oied.htm#mission-statement >.

More information about the department and its programs can be found at the following web site: http://www.auburn.edu/cosam/departments/-biology/index.htm Auburn University is an R1 University and one of the nation's premier land, sea and space grant institutions. It maintains high levels of research activity and high standards for teaching excellence. Its 2020 enrollment of 30,737 students includes 24,725 undergraduates and 6,012 graduate and professional students. Organized into 12 academic colleges and schools, Auburn's 1,450 faculty members offer more than 200 educational programs. Auburn University is ranked in the top 50 public universities in the country for its undergraduate programs. Auburn University is understanding of and sensitive to the family needs of faculty, including dual-career couples. For more information, please visit: http://www.auburn.edu/academic/-provost/facultyjobs/ Minimum Qualifications Applicants must have a Ph.D. in Biological Sciences or a closely related discipline at the time employment begins as well as relevant postdoctoral experience. The successful candidate must possess excellent written and interpersonal communication skills. The candidate selected for the position must be able to meet eligibility requirements to work in the United States at the time appointment begins and continue working legally for the proposed term of appointment.

Desired Qualifications Desired qualifications include a strong record of publication, teaching experience, and ability to acquire extramural funding.

Review of applications will begin December 1, 2021 and will continue until a suitable individual is hired. Please upload your Statement of Diversity, Inclusion and Equity under the other category under applicant documents.

Wendy R Hood, PhD Biological Sciences, Auburn University 334-844-7437 thehoodlaboratory.com

wrh0001@auburn.edu

Barcelona Bioinformatics

Dear all,

—We would like to inform you about a new job opportunitiy offered by Barcelona Supercomputing Center:

- Postdoctoral researcher in high-throughput transcriptomics (R2).

Deadline: 31 December, 2022 Link here < https://-www.bsc.es/join-us/job-opportunities/35919lstfglr2 >

We would appreciate that you share the information with your contacts.

Sincerely,

/Human Resources/* Barcelona Supercomputing Center - Centro Nacional de Supercomputación* Tel. +34-934137745 anais.delastre@bsc.es www.bsc.es BSC Human Resources <rrhh@bsc.es>

BioDiversity CloudProgrammer

GBIF Secretariat seeks applications from individuals or institutions that can improve the quality and usability of GBIF-mediated data in cloud-computing environments. With funding through a grant from the GEO-Microsoft Planetary Computer Programme, the selected contractor will implement protocols for analysing phylogenetic diversity on the Microsoft (MS) Azure environment using Biodiverse software, occurrence data from the GBIF network, and phylogenies from OpenTree of Life (OToL).

The GBIF Secretariat will lead the project with the support of Shawn Laffan (Biodiverse software | University of New South Wales) and Emily Jane McTavish

(OpenTree of Life | University of California Merced) and in partnership of the Phylogenetic Diversity Task Force (PDTF) of the IUCN Species Survival Commission.

Background and scope of work

In May 2021, GBIF began placing monthly snapshots of GBIF occurrences in the Microsoft Azure Data Catalogue. The contracted individual or institution will extend this work, first by implementing Biodiverse software in MS Azure and then developing and assessing the quality of data-filtering pipelines for the GBIF-mediated occurrence data in the Microsoft Azure Data Catalogue.

The filtered subset of data will then be name-matched with the latest Open Tree of Life phylogeny, producing spatially explicit phylogenetic diversity products for analysing various clades and geographic areas. The PDTF will help assess the quality of the resulting data products.

The goal of the project is to generate automated monthly data products suitable for use in research on phylogenetic diversity by the end of the grant period.

Primary tasks include:

- Preparing workflows for filtering GBIF-mediated data - Assessing the quality of filtered data - Matching names between OToL and GBIF-mediated data - Running and assessing metrics on phylogenetic diversity that integrate OToL and GBIF-mediated occurrence data using Biodiverse - Drafting a first-authored manuscript based on the work in either a methodological paper or an analysis of a large clade

The selected candidate is expected to carry out the work remotely or at their host institution. Candidates must show the ability to work independently and meet virtually with project leads on three continents.

Preferred skills and experience

The incumbent should possess outstanding bioinformatics skills, good knowledge of GBIF-mediated data and an understanding of cloud computing and phylogenetic analyses.

Preferred skills include:

- Experience in analysis of GBIF-mediated data - Knowledge of R, Perl or Python and APIs - Demonstrable experience of development of open-source software and repeatable data-processing workflows - Knowledge of phylogenetic diversity, as shown by other phylogenetic and spatially explicit biodiversity analyses - Experience in cloud-based or distributed computing systems - Advanced degree in a field relevant to biodiversity or informatics or GBIF's work, or equivalent experience - Full professional proficiency in English - Demonstrated experience in writing scientific publications - Ability to work remotely with limited supervision

This is an exciting opportunity for the right individual to strengthen cloud-based biodiversity informatic skills while working with a global data infrastructure. The contract is open to any professional stage from graduate student/postdoc to a sabbatical scientist. If your motivation, interests and experience match these requirements, we look forward to hearing from you.

Remuneration

Payment for the contract will be US$60,000, with its term length dependent on the experience of the contractor and meeting project deliverables. The contract and deliverables must be completed in one year.

Application procedure and deadline

The deadline for receipt of email applications at info@gbif.org is 15 November 2021.

Applications in English must include a letter addressing the candidate(s)'s experience, qualifications and availability for the work, curriculum vitae, and a sample scientific publication. Please indicate in the application where you saw this advertisement. Enquiries concerning the contract can be addressed to Executive Secretary Joe Miller jmiller@gbif.org.

If the work is to be carried out in parallel with another role, the Secretariat will require written confirmation from the candidate's employer indicating their awareness of the additional hours committed through this contract.

Candidate interviews are expected to take place starting in late November 2021. The successful candidate should be prepared to start work in January 2022 or soon thereafter.

GBIF the Global Biodiversity Information Facility is an international network and data infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth.

GBIF is an equal opportunities employer and accepts applications without

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BOKU Vienna ForestPathologist ApplDeadlineExt

Job: BOKU Vienna, Forest Pathologist, Application Deadline Extended (18 October 2021)

The University of Natural Resources and Life Sciences Vienna, BOKU, Department of Forest and Soil Sciences, Institute of Forest Entomology, Forest Pathology and Forest Protection, is currently seeking a Postdoctoral

Research Associate.

Extent of employment: 40 hours per week

Duration of employment: 6 years, plus the potential option of a permanent position after this period Gross monthly salary and pay grade in terms of collective agreement for Austrian university staff (payable 14 times per year): B1 lit. b, euro 3.945,90

The successful applicant works predominantly in the working group 'forest pathology' of the institute. The research focus depends on current projects at the institute, collaborative opportunities between staff members as well as the expertise and interests of the appointed candidate. Completion of postdoctoral lecturer qualification ('Habilitation') within the employment period will be encouraged.

Responsibilities: - Independent research and publishing in the fields of forest pathology and/or forest mycology

- Teaching in forest pathology, forest protection, mycology and/or ecology in Bachelor and Master programs at BOKU

- Co-supervision of Bachelor, Master and PhD theses

- Acquisition, execution and management of third-party funded projects

- Administrative tasks at the institute

- Engagement in the academic self-administration and in committees of the Department of Forest and Soil Sciences and/or the University of Natural Resources and Life Sciences, Vienna

Required skills and qualifications: - Doctoral/PhD degree - Diploma/Master degree in Biology, Forest, Agricultural or Plant Sciences, Plant Health and Plant Protection or other equivalent university degree - Excellent expertise and research experience in the fields of Forest/Plant Pathology, Mycology, Plant Sciences, and/or Molecular Ecology (applied in the aforementioned fields of research)

Desirable skills and qualifications: - Scientific publications in the above-mentioned fields (preferentially connected to forests)

- Record of third-party funded projects

- Experience in academic teaching and supervision of student theses

- Know-how, methodological competence and laboratory experience in molecular ecology

- Experience in conducting laboratory and field studies

- Profound knowledge in statistics, expertise in data analysis and experience with appropriate software programs

- Knowledge in related disciplines (e.g. forest/plant protection, forest entomology, silviculture, ecology)

- Experience in knowledge transfer (oral and written) to various target audiences

- Excellent language skills in German and English (oral and written); German can also be learnt after starting the job

- National and international scientific mobility

- National and international collaborations

- High capability to conduct scientific work independently, goal- oriented and timely

- Excellent communication and cooperation skills to work in a team

- Driving license

Applications can be submitted until: 18th of October 2021

The University of Natural Resources and Life Sciences Vienna seeks to increase the number of its female faculty and staff members. Therefore, qualified women are strongly encouraged to apply. In case of equal qualification, female candidates will be given preference unless reasons specific to an individual male candidate tilt the balance in his favour. People with disabilities and appropriate qualifications are specifically encouraged to apply.

Please send your job application incl. motivation letter, CV, list of publications (in SCI-listed / non SCI-listed journals), congress contributions, third-party projects, teaching and supervision activities, short draft concept of planned research activities as part of the position (max. 3 A4-pages), to the Personnel Department, University of Natural Resources and Life Sciences, Peter-Jordan-Straße 70, 1190 Vienna; E-Mail:

kerstin.buchmueller@boku.ac.at. (Reference code: 172)

For more information about this position, please contact: Univ.Prof. Dr. Thomas Kirisits (+43-1-47654-91611, E-Mail: thomas.kirisits@boku.ac.at).

More information about BOKU, the Department of Forest and Soil Sciences and the Institute of Forest Entomology, Forest Pathology and Forest Protection can be found on the following websites: www.wabo.oku.ac.at and www.wabo.boku.ac.at/-ifff . https://boku.ac.at/fileadmin/data/H01000/-mitteilungsblatt-jobs/2021/KZ172_mDe.pdf Martin Schebeck <martin.schebeck@boku.ac.at>

BoyceThompsonInst NY Bioinformatics

Summary A Research Associate position with project management duties is open in the Mueller lab at the BTI in the field of bioinformatics, with a focus on databases.

*Lab overview*The Mueller lab at the Boyce Thompson Institute (https://btiscience.org/), which maintains several advanced databases, including the Solgenomics (https://solgenomics.net/), Cassavabase (https://cassavabase.org/) and Citrusgreening.org (https://citrusgreening.org/), has an open position for a Research Associate in the field of bioinformatics, genomic and breeding databases,omics analysis, and genome sequencing and annotation. The genomics databases (e.g. https://citrusgreening.org/ and https://agrivectors.org/) contain genomics, marker, phenotype and transcriptomics information and also comprise genome browsers, an expression atlas, and a pathway database. The main goal of the project is to support the research community in the search for treatments for the citrusgreening disease as well as other diseases.

Skills Major responsibilities will include leading genomics and transcriptomics analysis, genome annotation, code development and maintenance of genomics databases and websites. Proficiency in Perl, BioPerl, shell scripting , JavaScript, jQuery and a good working knowledge of Linux (Debian), git, PostgreSQL, ontologies and web servers (Catalyst, apache2, nginx) is desired. Experience with genome and transcriptome assembly, manual gene annotation using Apollo and mentoring undergraduate and graduate students will be a plus.

Essential Job Functions

- Develop an increasingly independent research program in the context of the lab - Interact closely with collaborators for Citrusgreening HLB therapy, ACP genome annotation and AgriVectors projects and the respective research communities - Conduct and document research; interpret results and design new lines of bioinformatics analysis and potential experimental inquiry - Author publications and presentations - Contribute to securing extramural funding for the laboratory's research program - Participate and present in group meetings, institute seminars, national and international research conferences

Education Doctoral degree (Ph.D.) or equivalent in a related scientific field. A background in programming, databases and computational biology with strong interests in plant and insect/ vector biology is desired.

*Experience and Knowledge*3-5 years of relevant experience, generally as a Postdoctoral Scientist. Ability to work independently.

*Supervisory Responsibilities*Supervision and mentoring of undergraduate student workers, graduate students, and/or research assistants as required

Communication Skills Effective written and verbal communication and interpersonal skills required. Ability to maintain accurate and thorough documentation. Ability to draft manuscripts and develop presentation materials. Ability to write protocols for bioinformatics analysis. Ability to present information to groups internal and external to the Institute.

Travel Occasional travel to off-site meetings or conferences. Occasional fieldwork may be required.

Application: http://bti.hrmdirect.com/employment/-job-opening.php?req=1765948&&#job < http://-bti.hrmdirect.com/employment/job-opening.php?req=1765948&&#job >

Questions? Let me know!

Cheers, Surya

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Surya Saha Sol Genomics Network Boyce Thompson Institute, Ithaca, NY, USA https://citrusgreening.org/ https://orcid.org/0000-0002-1160-1413 http://-www.linkedin.com/in/suryasaha https://twitter.com/-SahaSurya Surya Saha <ss2489@cornell.edu>

CaliforniaPolytechnic ConservationGenomics

The Biological Sciences Department in the College of Science and Mathematics at California Polytechnic State University, San Luis Obispo is seeking a full-time, academic year, tenure track faculty member in the field of conservation genetics/genomics, with appointment beginning September 12, 2022. Appointment at the Assistant Professor rank is anticipated; higher ranks will be considered. Rank and salary are commensurate with qualifications and experience.

Excellent candidates will create synergy in the department via the application of molecular methods to the conservation of biodiversity in the Western U.S.; specific research areas could include conservation genetics/genomics, applied population ecology and/or landscape genetics.

We seek candidates who are enthusiastic about undergraduate teaching and implementing a student-centered research program that mentors undergraduates and Master's students in study design, field data collection and data analysis.

Teaching responsibilities will include lower and upper division undergraduate courses in population ecology, evolution and/or conservation biology for both majors and non-majors, as well as the opportunity to develop new courses in the candidate's area of specialty. Faculty in our department typically teach 2-3 courses per quarter, with the opportunity to reduce this by mentoring student research and procuring extramural research funding.

At California Polytechnic State University, San Luis Obispo, we believe that cultivating an environment that embraces and promotes diversity is fundamental to the success of our students, our employees and our community. Bringing people together from different backgrounds, experiences and value systems fosters the innovative and creative thinking that exemplifiesCalPoly's values of free inquiry, cultural and intellectual diversity, mutual respect, civic engagement, and social and environmental responsibility.CalPoly's commitment to diversity informs our efforts in recruitment, hiring and retention. California Polytechnic State University is an affirmative action/equal opportunity employer. Review of applications will begin November 8, 2021. For more information: https://jobs.calpoly.edu/en-us/job/505208/-tenure-track-position-conservation-genetics-genomics
Dena Grossenbacher <denagros@gmail.com>

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of applications will begin November 8, 2021. For more information: https://jobs.calpoly.edu/en-us/job/505208/-tenure-track-position-conservation-genetics-genomics
Dena Grossenbacher <denagros@gmail.com>

Caltech EvolEcolOrganismal

The Division of Biology and Biological Engineering (BBE) at Caltech is seeking new faculty in all areas of biological science and biological engineering, with particular interest in individuals who are interested in pursuing research in areas that benefit from the interdisciplinary environment of Caltech's BBE division and its linkages to other disciplines at Caltech.

Areas of interest include, but are not limited to (alphabetically):

- biological engineering - cellular, developmental and regulatory biology - ecological and biosphere science and engineering - neural and behavioral biology - organismal and integrative biology - virology, immunology and infectious disease.

Successful applicants are expected to develop innovative research programs and to be committed to high quality teaching. Preference will be given to candidates at the Assistant Professor level; however, well-qualified applicants at the associate or full professor level may also be considered. The term of an initial untenured appointment is for four years and is contingent upon completion of the Ph.D. degree.

Please submit on-line applications, and include a brief cover letter; curriculum vitae; relevant publications, a description of proposed research; and a statement of teaching interests. Applicants should submit a diversity and inclusion statement that discusses past and/or anticipated contributions to improving diversity, equity, and inclusion in the areas of research, teaching, and/or outreach. Instructions will be provided for having 3-4 reference letters uploaded.

To apply, visit: https://applications.caltech.edu/jobs/-bbe Applications will be reviewed starting on 1 November and must be submitted no later than 1 December, 2021.

Questions about the application process may be directed to bbesearch@caltech.edu

"Parker, Joseph" <joep@caltech.edu>

CDC Atlanta Covid-19Genomics

The CDC's National Center for Immunizations and Respiratory Diseases is recruiting a bioinformatics scientist with an emphasis on genomic epidemiology and evolution of respiratory viruses. This is an expedited "direct hire" due to the COVID-19 pandemic, and will have quick turn-around time, so applications should be submitted by Nov 2. This position is open to US citizens and nationals.

—Applications may be submitted at USA Jobs: https://-www.usajobs.gov/GetJob/ViewDetails/617838400 Additional COVID-19 related positions will continue to be posted at USA Jobs: https://www.usajobs.gov/Search/-Results?mco=09&mco=COVID-19 Relevant job titles to monitor may include "biologist", "Health Scientist (informatics)", and "Microbiologist", among others.

Adam Retchless aretchless@cdc.gov

adam@retchless.us

ClemsonU DrosophilaResearchTechnician

The laboratories of Trudy Mackay and Robert Anholt at the Clemson University Center for Human Genetics invite applications for a Drosophila Research Technician to support NIH funded research. The world's population is rapidly growing older, with a concomitant decrease in physical function of older individuals. Pharmacological inhibition of the angiotensin-converting enzyme (ACE) is an effective therapy in improving age-related impairment of physical function and is a potential strategy to slow human aging, but there is variation in improvement of physical performance following ACE inhibition that is likely due to genetic variation. This research will identify novel genes, pathways, and mechanisms that contribute to the beneficial effects of angiotensin-converting enzyme inhibitor therapy on age-related decline in physical mobility, one of the most debilitating effects of aging. Ideally, the successful applicant will have previous experience in Drosophila genetics and basic molecular biology (PCR, genotyping). Salary will be commensurate with credentials and experience.

Enquiries should be addressed to Dr. Trudy F. C. Mackay, Self Family Endowed Professor and Director of the Center for Human Genetics, Clemson University, Self Regional Hall, 114 Gregor Mendel Circle, Greenwood, SC 29646 (tmackay@clemson.edu). Applications must include a cover letter explaining the qualifications for this position and the names of three references. The position is available immediately. Clemson University is an equal opportunity employer.

To apply, visit: https://-jobs.clemson.edu/psc/ps/JOBS/EXT/c/-HRS_HRAM_FL.HRS_CG_SEARCH_FL.GBL?Page=-HRS_APP_SCHJOB_FL&Action=U and enter "Drosophila Research Technician" in the search box.

TRUDY F. C. MACKAY, PhD, FRS

SELF FAMILY ENDOWED CHAIR OF HUMAN GENETICS DIRECTOR, CENTER FOR HUMAN GENETICS PROFESSOR OF GENETICS AND BIOCHEMISTRY Center for Human Genetics Clemson University 110 Self Regional Hall 114 Gregor Mendel Circle Greenwood, SC 29646

w 864-889-0522 c 919-604-6531

tmackay@clemson.edu

CollegeCharleston PlantEvolution

Hi All,

Our department has an open position for an assistant professor in Plant Biology (https://jobs.cofc.edu/-postings/11436). The job is broadly defined, and candidates focused on evolutionary biology and/or plant ecology would be welcome.

[https://jobs.cofc.edu/hr/assets/social_share.jpg] < https://jobs.cofc.edu/postings/11436 >

Assistant Professor of Biology (plant biology) < https:/-/jobs.cofc.edu/postings/11436 >

Plant BiologistThe Department of Biology at the College of Charleston invites applications for a tenure-track position in Plant Biology at the Assistant Professor level to begin August 2022. We encourage applications from a variety of (dis)abilities, cultural, ethnic, race, sex, gender identity/expression, national origin, age, veteran status, color, religious, socio-economic, sexual orientation and belief backgrounds. Candidates must have a Ph.D. in plant biology or a related field and a strong commitment to teaching and maintaining an active research program involving undergraduate and possibly master's students. Preference will be given to candidates with teaching and post-doctoral experience, and a strong publication record. We seek a scholar who will complement strengths of existing faculty, and whose area of research can include but is not limited to: biodiversity, global change, species interactions including fungal relationships, and biogeography. Primary teaching responsibilities may include: plant jobs.cofc.edu

Thanks, allan strand

Plant Biologist

The Department of Biology at the College of Charleston invites applications for a tenure-track position in Plant Biology at the Assistant Professor level to begin August 2022. We encourage applications from a variety of (dis)abilities, cultural, ethnic, race, sex, gender identity/expression, national origin, age, veteran status, color, religious, socio-economic, sexual orientation and belief backgrounds. Candidates must have a Ph.D. in plant biology or a related field and a strong commitment to teaching and maintaining an active research program involving undergraduate and possibly master's students. Preference will be given to candidates with teaching and post-doctoral experience, and a strong publication record. We seek a scholar who will complement strengths of existing faculty, and whose area of research can include but is not limited to: biodiversity, global change, species interactions including fungal relationships, and biogeography. Primary teaching responsibilities may include: plant taxonomy, botany, other graduate and/or undergraduate courses in an area of expertise, introductory biology, and/or sophomore-level biodiversity and conservation biology. A typical semester load for a faculty member with an active research program would normally include 9 contact hours. The College of Charleston, located in Charleston, SC, is a public liberal arts and sciences institution of 11,000 students, with MS programs in Marine Biology and Environmental and Sustainability Studies, and a commitment to excellence in teaching and research. Satellite facilities include the 850+ acre Stono Preserve located 18 miles west of Charleston, SC and the Grice Marine Laboratory which is close to the downtown campus. There are numerous nearby natural areas including Francis Marion National Forest, protected areas, barrier islands, and there are ample opportunities to collaborate with researchers at neighboring research institutions including: the Citadel, South Carolina Department of Natural Resources, USC, Clemson Coastal Research and Education Center, and USDA Vegetable lab. Information about the department is available at http://biology.cofc.edu/. Applicants should submit electronic (pdf) copies of a cover letter,

curriculum vitae, statements of teaching and research interests, up to three relevant publications, and names and contact information for three colleagues capable of providing a recommendation to https://jobs.cofc.edu/postings/11397. We encourage applicants to highlight their mentorship of under-represented groups in their cover letter and teaching statement. Questions regarding this position can be directed to Dan McGlinn, search committee chair, at mcglinndj@cofc.edu. This is a nine-month appointment; salary is competitive and commensurate with experience and qualifications. Review of applications will begin December 1, 2021 and will continue until the position is filled. The College of Charleston is an Affirmative Action, Equal Opportunity Employer and does not discriminate against any individual or group on the basis of gender, sexual orientation, gender identity or expression, age, race,

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This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at http://life.biology.mcmaster.ca/~brian/evoldir.html

ColumbiaU EvolutionaryBiology

Position *Lecturer in Ecology, Evolution and Environmental Biology; Director of M.A. Program * Columbia University in the City of New York: Arts and Sciences Core - Academic: Department of Ecology, Evolution and Environmental Biology

Description

Columbia University invites applications for a Lecturer in Discipline position in the Department of Ecology, Evolution and Environmental Biology. E3B represents broad interests in ecology, evolution, behavior, conservation biology, and environmental science and maintains strong links to Columbia's Earth Institute, the American Museum of Natural History, Wildlife Conservation Society, New York Botanical Garden, and EcoHealth Alliance.

We seek a scholar with a serious commitment and proven record in teaching, advising (ideally at a graduate level), and research. The candidate will serve as Director of the M.A. Program (DMAP), and will teach a student research development seminar, a core graduate conservation biology course and other graduate and advanced undergraduate courses that complement departmental offerings. As many students have a particular interest in conservation biology, the ability to teach in this area is particularly valuable. The teaching load is 5 courses per year, divided over two semesters. The DMAP will also advise individual students about course selection, research projects and careers.

The department's M.A. program, which is separate from the department's Ph.D. program, includes students with diverse backgrounds, interests and aspirations. For example, some plan to join conservation organizations or teach at a K-12 level, while others wish to continue in academia and proceed to Ph.D. programs in various areas of integrative biology. Many are interested in gaining research experience, and the DMAP plays an essential role in linking individual students with research opportunities both within the department and in the research institutes listed above. Breadth in research and teaching as well as experience in building links among partner groups are likely to be valuable in this context.

Although the position emphasizes teaching, advising and leading the M.A. program, we expect the DMAP to be research active and include students in research. It is important that the research plan shows an ability to balance teaching, advising and a research program that includes students.

Lectureships at Columbia University are faculty appointments with a primary focus on instruction; as noted above, however, the Department of E3B expects its lecturers to be research-active as well. Lectureships at Columbia University are faculty appointments with a primary focus on instruction; as noted above, however, the Department of E3B expects its lecturers to be research-active as well. Initial appointment is for one year with renewal pending successful performance reviews.

Qualifications

Minimum Degree Required: Ph.D.

*Minimum Qualifications: *Strong research and publication record.

*Preferred Qualifications: *Experience in teaching, advising, and research at a graduate level.

Application Instructions

All applications must be made through Columbia University's Academic Search and Recruiting (ASR) system. https://apply.interfolio.com/94981 Candidates should submit a cover letter, a CV, a 2-page teaching and mentoring statement (including philosophy, experience and plans), a 2-page statement of research plans commensurate with a significant teaching and administrative load, and contact information for three references. Ap-

plications received by October 20, 2021 will receive full consideration.

Appointment to begin July 1, 2022.

Questions about the position should be directed to Prof. Maria Diuk-Wasser (mad2256@columbia.edu).

New York City is one of the most diverse cities in the United States, and this diversity is reflected throughout the campus of Columbia University. Applications from women and minorities are especially encouraged. Columbia University is an Equal Opportunity/Affirmative Action Employer.

"Maire K. Keane" <mk4283@columbia.edu>

ConcordiaU Evolution

TENURE TRACK and TIER II CANADA RESEARCH CHAIR IN SUSTAINABILITY OF ECOLOGICAL SYSTEMS, DEPT OF BIOLOGY, CONCORDIA UNIVERSITY, MONTREAL, CANADA

The Department of Biology at Concordia University seeks to appoint a Tier II Canada Research Chair (CRC) in Sustainability of Ecological Systems. The selected candidate will receive a tenure-track faculty appointment in the Department of Biology in the Faculty of Arts and Science. Research areas of interest for this position are broadly defined and could include research in ecology or evolution at the population, community, or ecosystem levels. We seek applicants whose research engages in areas including (but not limited to) climate change, environmental genomics, aquatic or terrestrial ecosystem ecology, eco-evolutionary dynamics, conservation biology, microbial ecology, socioecological systems, fisheries, forestry, soil science, disease ecology, or chemical ecology. The successful candidate will be expected to build an active and externally funded research program involving graduate students and postdoctoral researchers. The ideal candidate will have experience with multidisciplinary research towards collaborative sustainability initiatives and a demonstrated commitment to supporting our department's equitable and inclusive learning environments.

The Department of Biology is a research-intensive department with high levels of external funding and strengths aligned with, and complementary to, the proposed CRC (i.e., ecology, conservation, and biodiversity sciences). The successful hire will also benefit from the Department of Biology's strong ties across multiple Concordia units, including the Loyola Sustainability Research Centre; Social Justice Centre; Strategic Cluster in Smart, Sustainable, and Resilient Communities and Cities; Department of Geography, Planning and Environment; Department of Chemistry and Biochemistry; and Centre for Structural and Functional Genomics.

Profoundly global, Concordia is North America's top university under the age of 50. Driven by ambition, innovation and a commitment to research and community engagement, Concordia is celebrated for advancing transformative learning, convergent thinking and public impact. Concordia's two campuses are located in Tiohtià:ke/Montreal, on the traditional lands and waters of the Kanien'kehá:ka Nation. Montreal, our home, is a truly unique city safe, clean, vibrant and diverse, with new things to discover around every corner. With a population of 1.7 million, it is home to four major universities and several clinical research centres and has been named the best student city in the world. It offers the most affordable tuition in Canada. The city enjoys a thriving multicultural scene. Bilingualism is a part of Montreal's tradition and adds to its inspiring atmosphere. While supporting a significant anglophone population, it is one of the largest French-speaking cities in the world.

Application Deadline: December 15, 2021. Candidates eligible for Tier II chair positions must be excellent emerging scholars within 10 years of their highest degree at the time of nomination (exclusive of career interruptions).

For full details on this position and how to apply: https://www.concordia.ca/artsci/about/jobs/canada-research-chairs/crc-tier-ii-sustainability-of-ecological-systems.html Pedro R. Peres-Neto Professor & Canada Research Chair in Spatial Ecology and Biodiversity Department of Biology, Concordia University

Pedro Peres-Neto <pedro.peres-neto@concordia.ca>

EastTennesseeStateU MolecularEcologist

BIOLOGICALSCIENCESTENURETRACK- East Tennessee State University, Department of Biological Sciences invites applications for a 9-month tenure-track Assistant Professor beginning 15th August 2022.

Successful applicants will have a Ph.D. in Life Sciences (e.g. biology, genetics, molecular biology, ecology, evolu-

tion or related field) and a record of research excellence as demonstrated by high quality publications in molecular ecology or related fields. Postdoctoral experience is also required. The ideal candidate will address fundamental questions in ecology using state of the art molecular, genomic, or genetic approaches. Those who use molecular approaches to study responses to environmental stresses (climate change), biotic interactions, chemical ecology and/or use a gene-to-ecosystems approach are particularly encouraged to apply. Candidates working on any system will be considered but candidates working on plant or microbial systems and with a field research component are especially encouraged to apply. The position will complement departmental strengths in evolutionary biology, ecology, genetics, and cell and molecular biology.

The successful candidate is expected to build an innovative, nationally recognized, and externally-funded research program, as well as contribute to effectively engaging undergraduate and graduate teaching, and mentoring that support diversity and inclusion. Candidates will be expected to teach in the following areas: Functional Genomics and Bioinformatics, Genetics, Introductory Biology, and/or Biochemistry. Development of an introductory or advanced course in the candidate's specialty is also expected. The successful applicant will also assist in development and implementation of strategies for student success and retention in our biology program, and participate in service activities in the department, university, and community. The position is subject to availability of funds.

To apply, submit a cover letter, curriculum vitae, teaching philosophy including a demonstrated commitment to engaging diverse student populations, statements of research interests, and names and contact information for three references via ETSU's eJobs online application system: https://jobs.etsu.edu/postings/20100 .

The Department of Biological Sciences currently comprises thirteen faculty members engaged in a wide range of teaching and research activities. The Department serves approximately 500 majors and 40 M.S. and Ph.D. students. East Tennessee State University enrolls over 12,000 undergraduate students, and offers 40 master's degree programs, 12 doctoral degree programs, and 24 graduate certificates to over 2,300 graduate students.ETSUis located in Johnson City, Tennessee, a city of about 67,000 located in the southern Appalachian Mountains, which is one of the most biodiverse regions in the US. The region has a total population of more than 400,000 and combines a low cost of living with amenities found in larger urban areas.

Equity and Inclusion is at the core of our work at East Tennessee State University. We are intentional about pursuing diversity, developing and building inclusive learning and working environments, and making sure all faculty, staff, and students are respected and welcomed in the Department of Biological Sciences. We believe all roads-Teaching, Research, and Service-lead to equity and inclusion. Our programming, scholarly activities, and academic offerings reflect our shared commitment to understanding and engaging the world around us. We embrace difference and believe it enriches our academic mission. We seek a faculty who shares our vision.

Search Committee Chair: Dr. Lev Yampolsky,ETSUDepartment of Biological Sciences, Box 70703, Johnson City, TN 37614-0703, email: yampolsk@etsu.edu. For more information, refer to websitehttps://www.etsu.edu/cas/biology/. ETSUis an Affirmative Action/Equal Opportunity Employer. We encourage applications from or information about women and minority candidates.

Lev Yampolsky

Professor Department of Biological Sciences East Tennessee State University Box 70703 Johnson City TN 37614-1710 Cell 423-676-7489 Office/lab 423-439-4359 Fax423-439-5958

"Yampolsky, Lev" <YAMPOLSK@mail.etsu.edu>

Embark Bioinformatics

Join Embark on our mission to improve the life and longevity of dogs everywhere! Embark is the only canine genetics company using research-grade technology, allowing us to make new scientific discoveries.

Designed by world leaders in dog genetics in partnership with Cornell University, the Embark Dog DNA Test provides information on genetic health risks and breed make-up, allowing dog owners, breeders, and veterinarians to make personalized care plans based on a dog's unique genetic profile. Embark is also home to the world's only canine DNA relative finder. No wonder The New York Tim= es recently called Embark's Breed and Health Kit the best dog DNA test availabl= e!

We are looking for highly motivated and mission-driven employees who will join us as Embark leads the cutting edge of creativity and innovation in the fast-growing consumer genetics space.

ABOUT THE ROLE:

This role is designed for the bioinformaticist/informaticist who is committed to applying their technical skills and experience to advance health-related R&D.

On the Lead Generation team, you will have access to the largest collection of canine genotype and phenotype data in the world.

Our rapidly expanding database is the backbone of Embark's research discovery and product innovation engine. We aim to uncover new understanding of canine biology by integrating detailed phenotypic data with genetic data collected using state-of-the-art sequencing and array genotyping methods, and then assist in deploying these discoveries as unique features and products for our customers. This role will provide informatics support for experiments involving genomics, phenomics, and other -omics data from a ariety of projects in canine health and behavior. You will work closely with other Scientists, Engineers, and Product Managers to solve important scientific problems, develop the next generation of canine DNA test products, and promote health and longevity in future generations of dogs.

Successful candidates will have experience working in collaborative environments with cross-functional teams that integrate science and engineering expertise. The ideal candidate is informatically proficient, highly motivated, and possesses a solid foundation in statistical principles.

This role reports to the Senior Director of Discovery and Commercialization= . The position will reside in Ithaca, NY, with the possibility to reside in Boston, MA.

WHAT YOU'LL DO:

The Research Scientist specializing in data connectivity and analytics will create the circuitry for heuristic lead generation as part of Embark's eff= ort to deliver a best-in-class genetic health product to pet parents, breeders, and veterinarians.

This person will work closely with outstanding multi-omics experts to * Improve and innovate discovery analytics and data visualization tools * Support lead generation by developing and improving code for multi-omics R&D * Help develop methods to identify the 'best next experimentâ euro for algorithm-based prioritization * Partner with engineering teams to capture operational data as metrics of efficiency and effectiveness of lead generation * Collaborate with statisticians and data scientists to advance unstructured exploration of datasets * Work closely with epidemiologists and veterinary scientists to integrate new data streams * Be an excellent contributor through standardized reporting and documentation

What experience we're looking for: * 3+ years of experience in bioinformatics and/or programming with python, R and cloud computing * Specialized experience in graphics and data visualization * Plus if experience with SQL or other databasing languages * Plus if proficient in statistics and data science * Plus if industry experience in biotechnology and/or biopharma * Ability to thrive and adapt in a high growth, results-oriented environment * Strong interpersonal skills and a desire to collaborate * Excellent written and verbal communication skills * Deep passion for dog health

WHAT WE CAN OFFER:

At Embark, we might be dog lovers, but we're passionate about peopl= e too. We're committed to building an inclusive culture where all employee= s can belong and flourish. Here are some of our benefits and perks:

* Working with the world's largest team of PhDs, DVMs and engineers focused on canine genomics and devoted to making the next generation of discoveries and technologies that will make the lives of dogs today and in the future longer and healthier * A flexible vacation policy so you can take off the time you need when you need it * Paid parental leave (plus paw-rental leave for new pets) * Every other Friday off each summer * Dog-friendly office downtown Ithaca, NY (when we get back to the office), with some flexibility (eg work from home at least 2 days a week, flexibility around child care needs, etc) * Perks tailored for dog lovers including subsidized pet insurance and

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at http://life.biology.mcmaster.ca/~brian/evoldir.html

GeorgeMasonU EvolutionaryGenetics

The George Mason University Department of Biology in the College of Science invites applications for an Assistant Professor to teach undergraduate and graduate courses in Evolutionary Genetics/Genomics and to develop a vigorous, externally funded research program. This is a full-time, tenure-line position to begin in August 2022. George Mason University has a strong institutional commitment to the achievement of excellence and diversity among its faculty and staff, and strongly

encourages candidates to apply who will enrich Mason's academic and culturally inclusive environment.

About George Mason University and the Biology Department:

George Mason University (Mason) is an Association for the Advancement of Sustainability in Higher Education (AASHE) STARS Silver-rated, innovative, entrepreneurial, public institution of national distinction with a student enrollment of over 36,000. It was founded in 1972 and is a Carnegie Classifications of Institutions of Higher Education "Highest Research Activity (R1)" University with research expenditures exceeding $200 million (2020). Mason's enrollment is approximately 38,255 (with approximately 11,000 graduate students) with students studying in over 210 degree programs (127 graduate degree programs) from bachelors to doctoral, as well as Law. Mason is ranked #24 Most Diverse University in the United States (Diversity Index = .71; U.S. News & World Report, 2020) with 49% of undergraduates from underrepresented groups and 37% considered first generation. Located in the metropolitan Washington, D.C. area, Mason has campuses in Arlington, Fairfax, Loudoun, and Prince William counties. The Department of Biology includes 12 tenured and tenure-track and 14 term faculty focused on undergraduate and graduate education. It maintains research facilities including a 1700 sq. ft. climate-controlled greenhouse and an active 80,000 specimen herbarium. The Department has over 1500 undergraduate majors and employs more than 50 Graduate Teaching Assistants as well as adjunct faculty. Faculty from the Department of Environmental Science and Policy, the School of Systems Biology, the School of Integrative Studies, and the STEM Accelerator Program also contribute to the Biology Department through courses and research collaborations.

Position Responsibilities:

Candidates are expected to develop and maintain a nationally recognized and externally funded research program in their area of expertise and teach in the department's undergraduate and graduate programs. Teaching responsibilities will include a lecture section of a core undergraduate course or another within the candidate's expertise, as well as a graduate course, such as Systematics/Phylogenomics, Functional Genomics, Computational Biology and/or Evolutionary Genetics. The successful candidate will have access to significant university resources including the Microbiome Analysis Center, Smithsonian-Mason School of Conservation, a BSL-3 laboratory, and research computing facilities. The new hire will also be in close proximity to the major research institutes in the metropolitan Washington, D.C. area, such as the Smithsonian Institution, with which departmental faculty frequently collaborate. Required Qualifications:

Candidates must have completed a Ph.D. in a relevant discipline and share the department's commitment to excellence in undergraduate and graduate instruction; Candidate's research should center on Genome Evolution, Functional Genomics, Quantitative Genetics, or other areas that explore the genotype to phenotype relationship within the framework of integrative biology; Ability to collaborate with faculty and graduate students will be expected. Preferred Qualifications:

Individuals with post-doctoral experience and a proven record of external research funding; Candidates whose research uses a variety of eukaryotic systems and experimental approaches, and candidates with a research focus in botany is preferred.

Applicants must apply for position number F6219z at http://jobs.gmu.edu/; submit the online application; upload a cover letter, CV, a list of three references with contact information, and statement of teaching experience/philosophy and research interests. For full consideration, applications should be submitted by November 5, 2021. This position will remain open until filled.

HC Lim

Asst. Professor, George Mason University Hlim22@gmu.edu https://sites.google.com/view/-gmuevogen/home hlim22@gmu.edu

GeorgiaTech QuantitativeGenomics

Faculty Positions in Quantitative Genomics and Neuroscience

The School of Biological Sciences (biosci.gatech.edu) at the Georgia Institute of Technology invites applications for tenure-track faculty positions in the fields of computational biology/genomics, quantitative systems neuroscience, and cell/ molecular neurobiology. Applicants will be considered at all ranks with priority given for exceptional candidates at the assistant or early-associate professor stage of their career. We especially encourage applications from candidates using integrative genomic approaches in human genetics, including single cell genomics and microbiome studies, as well as evolutionary and statistical genetics. Hiring objectives in neuroscience accommodate a wide range of subfields and study models centering either on molecular/cellular neurobiology or on quantitative systems neurobiology,

with specific interest in information processing by interconnected sets of neurons. Candidates are expected to demonstrate an exceptional commitment to the teaching and mentoring of students.

Georgia Tech is a top-ranked public research university situated in the heart of Atlanta, a diverse and vibrant city with great economic and cultural strengths. The Institute is a member of the University System of Georgia, the Georgia Research Alliance, and the Association of American Universities. Georgia Tech prides itself on its technology resources, collaborations, high-quality student body, and its commitment to diversity, equity, and inclusion. Applicants should submit a letter of application, curriculum vitae, a statement of research interests, a description of teaching interests as well as their advising/mentoring philosophy, and the names and contact information for at least three references. To apply, go to careers.gatech.edu and search for "Quantitative Genomics and Neuroscience" under view all jobs. Requests for information may be directed to searches@biosci.gatech.edu. Applications will be considered beginning November 1, 2021, but the search will continue until the positions are filled. An earned doctorate is required by the start of the appointment, and a background check must be completed prior to employment. Georgia Tech is an equal education/employment opportunity institution dedicated to building a diverse community. We strongly encourage applications from women, underrepresented minorities, individuals with disabilities, and veterans. Georgia Tech has policies to promote a healthy work-life balance and is aware that attracting faculty may require meeting the needs of two careers.

Required qualifications: An earned doctorate is required by the start of the appointment.

Applicants should submit a letter of application, curriculum vitae, a statement of research interests, a description of teaching interests as well as their advising/mentoring philosophy, and the names and contact information for at least three references.

Requests for information may be directed to searches@biosci.gatech.edu.

Georgia Tech provides equal opportunity to all faculty, staff, students, and all other members of the Georgia Tech community, including applicants for admission and/or employment, contractors, volunteers, and participants in institutional programs, activities, or services. Georgia Tech complies with all applicable laws and regulations governing equal opportunity in the workplace and in educational activities. Georgia Tech prohibits discrimination, including discriminatory harassment, on the basis of race, ethnicity, ancestry, color, religion, sex (including pregnancy), sexual orientation, gender identity, national origin, age, disability, genetics, or veteran status in its programs, activities, employment, and admissions. This prohibition applies to faculty, staff, students, and all other members of the Georgia Tech community, including affiliates, invitees, and guests.

https://tinyurl.com/xb3wzs2 — Joseph Lachance (joseph.lachance@biology.gatech.edu)

"Lachance, Joseph L" <joseph.lachance@biology.gatech.edu>

HarvardU TeachingEvolution

Title: Preceptor in Organismic and Evolutionary Biology

Position Description: The Department of Organismic and Evolutionary Biology is seeking a Preceptor in Organismic and Evolutionary Biology (OEB). The Preceptor will work closely with Harvard faculty and students to develop and implement innovative curricula and course materials. Preceptors are expected to launch a successful teaching career by developing superior teaching and administrative skills as part of team of educators.

The Preceptor inOEBis expected to develop substantial new pedagogical approaches and is responsible for designing and supervising all aspects of the laboratory, discussion, and field work components of two Introductory undergraduate courses, OEB55, Ecology (enrollment 40 students) offered in the Spring Term andOEB10, Foundations of Biological Diversity (anticipated enrollment 100) offered in the Fall Term . This entails: (1) collaborating with faculty to develop innovative course materials, including problem sets, hands-on activities, guided/independent student projects, review sessions, laboratory experiments and written examinations; (2) teaching weekly review lectures and leading recitation sections, laboratories, and field trips, (3) acting as primary liaison between instructional staff and the laboratory support team; and (4) overseeing course administration and supervising and training teaching fellow staff.

During the semester, the Preceptor will also be responsible for the organization and supervision of laboratories and field trips for these courses. If reappointed in future years, the Preceptor may rotate into otherOEBSpring Term courses (e.g.,OEB11, other 50-levels) to assist with redesign of lectures, lab, and/or field trip experiences.

Basic Qualification:

Candidates are required to have teaching experience in biological sciences. Ph.D. in biological sciences or on track to complete the degree by the time of appointment. Other Qualifications: A strong commitment and background in undergraduate science education using modern pedagogical approaches. Leadership skills to assist in training teaching fellows and to manage relationships with up to 100 undergraduates. Experience working with individual undergraduates and with both bench-based and field-based science research. Candidate should have strong organizational, communication and interpersonal skills required. Specialized per course: Strong background in evolutionary and ecological principles, and a familiarity with plant, prokaryotic, and invertebrate and vertebrate biology and diversity.

Instructions: Please submit the following items at https://academicpositions.harvard.edu/postings/-10683 1. Cover letter, including a description of teaching/advising experience and philosophy and comments on any efforts to encourage diversity, inclusion, and belonging. 2. Curriculum Vitae 3. Statement of Teaching Philosophy 4. Names and contact information of three to five references (three letters of recommendation are required, and the application is complete only when all three letters have been submitted) Applications will be reviewed until the position is filled.

Please note that Harvard University is not able to sponsor visas for this position.

Other: The position start date is January 2, 2022, with annual reappointments possible up to eight years. Contact:

sarine_derkaloustian@fas.harvard.edu We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, gender identity, sexual orientation, pregnancy and pregnancy-related conditions or any other characteristic protected by law.

"Preheim, Christopher S." <cpreheim@oeb.harvard.edu>

cpreheim@oeb.harvard.edu

LouisianaStateU EvolutionaryBiology

Work Location: Baton Rouge, LA

To apply, please visit https://-lsu.wd1.myworkdayjobs.com/LSU/job/0202-Life-Sciences-Building/Assistant-Professor_R00061786 Special Instructions: Please submit a cover letter, separate statements for research, teaching, and curation, and contact information for three references. Applicants should address their experience, expertise, and plans for improving diversity, equity, and inclusion in the context of one or more of their research, teaching, or curation statements. Review of applications will being on December 1, 2021.

Job Information: The Department of Biological Sciences and the Museum of Natural Science at Louisiana State University invite applications for a tenure-track faculty/curator position. The Department and Museum together house 60+ faculty spanning a range of disciplines, but with particular strengths in evolutionary biology, systematics, and ecology. We seek a biologist with a strong collections-based field program and expertise in the genetics of any group of vertebrates. Desirable disciplines include phylogenetics, comparative genomics, population genetics, molecular evolution, and related fields. The successful candidate will curate the Collection of Genetic Resources, one of the world's largest and most-used vertebrate tissue collections. We seek a curator who will manage its existing resources while also fostering its growth through traditional and innovative approaches. We are dedicated to building a culturally diverse and pluralistic faculty, and we strongly encourage applications from women, minorities, individuals with disabilities, veterans, and members of other groups underrepresented in science. We seek candidates whose research, teaching, curation, or service has prepared them to contribute to diversity and inclusion in higher education.

Job Duties: 50% Develop and maintain an independent and extramurally funded research program. 25% Teach undergraduate and/or graduate level courses in a biological sciences discipline, and direct/supervise graduate students. Participate in service activities pertaining to the mission of the Department, and the advancement of the profession. 25% Curate the Collection of Genetic Resources, including managing its use, maintenance,

and growth.

Minimum Qualifications: PhD in Biological Sciences or related field Successful track record of productive research and publication, and postdoctoral experience Strong background in building, managing, and using genetic resource collections is preferred

Thank you,

Abby Simpson Office of Human Resource Management Manager, Talent Acquisition 110 Thomas Boyd Hall | Baton Rouge, LA 70803 O: 225.578.7316 | F: 225.578.6571 Email: asimpson1@lsu.edu www.lsu.edu/-hrm LSU HRM: Employment Resources for Student Success

Connect With Us

Abby Simpson <asimpson1@lsu.edu>

LoyolaChicago LabTech MicrobialEvolution

A research position is available at Loyola University Chicago to conduct evolution experiments with bacteria and facilitate student research. Candidates should have a bachelor's degree in biology, microbiology, or a related field and experience with either microbiology or evolutionary biology research. Starting date is January 2022.

To apply and for more information: https://-www.careers.luc.edu/postings/17196 Questions should be directed to Caroline Turner, cturner9@luc.edu

"Turner, Caroline" <cturner9@luc.edu>

MarineBioLab ResAssist EvolutionAging

The Marine Biological Laboratory seeks a highly motivated individual to join the laboratory of Dr. Kristin Gribble in the position of Research Assistant I, II, or III. The successful applicant will contribute to our NIH and NSF funded research projects on the biology of aging, maternal effects, life history, evolution, and ecology using an aquatic invertebrate model system. The Gribble lab is housed within the Josephine Bay Paul Center, a collaborative research group addressing questions of microbial diversity, molecular evolution, and comparative genomics. Information about our research may be found at: http://mbl.edu/jbpc/gribble Detailed Description: The Marine Biological Laboratory seeks a highly motivated individual to join the laboratory of Dr. Kristin Gribble in the position of Research Assistant I, II, or III.The successful applicant will contribute to NIH and NSF funded research projects on the biology of aging, maternal effects, life history, evolution, and ecology using rotifers as a model system. Responsibilities may include, but are not limited to, culturing phytoplankton and zooplankton; DNA, RNA, and protein extractions; PCR; qPCR; RNAi; light and confocal microscopy; experiment design; data analysis; participation in writing research results for publication; training new lab members and interns; and laboratory maintenance and organization. Research Assistants will have opportunities to design and lead experiments, co-author publications, and train and supervise new interns. Individuals with more prior experience and who are hired at the RA II or RA III level may be considered for a Laboratory Manager position.

Basic Qualifications: Applicants should have a B.A., B.S., or M.S. in Biology, Cell/Molecular Biology, Biochemistry, or a related field.This position requires an independent, organized, and self-motivated individual with robust problem-solving skills.Excellent written, verbal, and interpersonal skills; attention to detail; and a strong work ethic are essential.Position level and salary will depend upon education and experience.

Preferred Qualifications: Previous laboratory experience beyond the classroom is preferred.Prior experience with plankton culture, molecular biology techniques, and/or biochemistry is beneficial.An understanding of basic molecular biology concepts is important.

Please apply on the MBL website and provide the following required documents:

Cover letter describing your interests, skills, prior research experience, and motivation for joining the lab;Curriculum vitae;The names and contact information for three references (Please do not send letters at this time; we will contact references directly). https://recruiting.ultipro.com/-MAR1033MBL/JobBoard/4c3007c3-6354-41de-a13f-d95be60d91e9/OpportunityDetail?opportunityId=-16ca133f-eeb6-4831-97de-d3cfa5066c77 Jennifer DeAlteris <jdealteris@mbl.edu>

MissouriStateU ConservationBiology

The Biology Department at Missouri State University invites applications for a tenure-track Assistant Professor with a commitment to inclusive teaching practices and increasing student diversity and retention. We seek a candidate who conducts field-based research that addresses population or community level questions including, but not limited to work with species of conservation concern, conservation genetics, invasion biology, or reintroduction biology. Requirements include a PhD in Biology or related area, peer-reviewed publications in conservation biology, and excellent communication skills. Primary duties include (1) conducting research in organismal biology with emphasis on conservation; (2) teaching courses in introductory biology and one or more of animal physiology, population or community biology, statistics, or invertebrate zoology, to total 9 contact hours per semester; (3) advising graduate (masters) and undergraduate students; and (4) substantial effort to obtain external funds for research. A letter of application, CV, names and contact information for 3 references, statements of teaching and research experience and interests, a statement of commitment to diversity, equity, and inclusion, and copies of all university transcripts should be submitted online at: https://jobs.missouristate.edu/postings/57614. The University is committed to building a diverse and culturally competent educational environment. Applicants should include in their materials how their background and experience will further this goal (see https://diversity.missouristate.edu/). We encourage applications from members of underrepresented groups. Direct questions to SPMaher@MissouriState.edu. Review of applications begins 1 November 2021. The starting date is 15 August 2022. Employment will require a criminal background check at University expense. EO/AA/M/F/Veterans/Disability/Sexual Orientation/Gender Identity

Sean P. Maher Associate Professor Department of Biology Missouri State University 417-836-6916 | 269 Temple Hall

"Maher, Sean P" <SPMaher@MissouriState.edu>

NationalSunYat-senU InsectEcologyEvolution

Faculty Position at the Department of Biological Sciences, National Sun Yat-sen University

1. The Department of Biological Sciences, National Sun Yat-sen University, Taiwan invites applications in the field of Insect Ecology and Evolution for a tenure-track position at the rank of Assistant Professor beginning on August 1, 2022.

2. Qualifications: Applicants should hold a Ph.D. degree and meet the following minimum requirements: (1) Experience with applying for and implementing research project(s) as the principal investigator. (2) At least 2 years of postdoctoral research experience or currently employed as an assistant professor. (3) Experience with teaching undergraduate level departmental course(s) in English. (4) At least 5 publications in SCI journals in the last five years with the applicant serving as the first author or the corresponding author, among which at least 3 publications are in top quartile journals in the field.

3. Applicants should prepare the following documents: (1) A curriculum vitae; (2) A copy of Ph.D. diploma and a copy of postdoctoral fellowship certificate (or Assistant Professor Certificate); (3) A complete publication list and a list of publications in the last five years (please indicate the 5-year impact factor for each journal and assign one representative publication among all publications in the last five years); (4) Reprints of no more than 5 representative publications in the last five years; (5) A statement of teaching and research interests; (6) Documents confirming competence in teaching undergraduate level departmental course(s) in English; (7) Other relevant documents and materials; (8) Two recommendation letters (please include the affiliation and contact information of the reference; the letters can be sent as hard copies either packaged with other documents or separately via registered mail, or the letters can be sent in PDF format directly by the references to Prof. Chiang, Yu-Chung [email: yuchung@mail.nsysu.edu.tw]).

4. Applicants should combine documents 3. (1)-(7) into one PDF file and submit by email with the subject title "Application for NSYSU assistant professor position" to Prof. Huang (sphuang0711@mail.nsysu.edu.tw).

5. Applicants should also send a package enclosing hard

copies of documents 3. (1)-(8) [or 3. (1)-(7) if the letters of recommendations are to be sent by email] and labeled "Application for NSYSU assistant professor position" via registered mail to the following address:

Professor Chiang, Yu-Chung Chairman of the Department of Biological Sciences, National Sun Yat-sen University 70, Lien Hai Rd., Kaohsiung 80424, TAIWAN +886-7-5252000 ext. 3601

All application processes must be completed by October 29, 2021. Incomplete applications will not be considered. Please note that only shortlisted applicants will be notified and that the documents submitted for application will not be returned.

6. Contact information Huang, Shu-Ping, Ph.D. Department of Biological Sciences, National Sun Yat-sen University Phone: +886-7-5252000 ext. 3613 Email: sphuang0711@mail.nsysu.edu.tw Department website: https://biology.nsysu.edu.tw/ <hanyifu@mail.nsysu.edu.tw>

NewZealand Museum InvertCollectionManager

Permanent position announced at the Museum of New Zealand Te Papa Tongarewa: https://jobs.tepapa.govt.nz/jobtools/jncustomsearch.viewFullSingle?in_organid=-17768&in_jnCounter=224858951 *Collection Manager - Invertebrates*

This is an exciting opportunity to join Te Papa as a Kaitiaki Taonga Collection Manager Natural History.

Te Papa's Natural History team develop, care for and research collections of plants and animals, documenting the biodiversity of New Zealand, understanding its evolutionary history, and providing the foundations for its protection. Through exhibitions, publications, public programmes and learning programmes, we strengthen public understanding of te taiao, the natural environment.

Underpinned by the principle of Mana Taonga, this position is part of a team responsible for the well-being of the Museum's natural history collections, so that their long-term preservation, access and use is ensured. The position holder will be responsible for making sure our natural history collections are stored and handled appropriately, managing and mitigating risks, documenting our collections, facilitating physical and digital access, and undertaking projects to improve the standards of collection care.

The position will have a focus on Te Papa's Invertebrate collections and be responsible for the day-to-day decision-making in relation to the effective functioning of this collection area.

To be successful in the role, you'll need:

*Education and experience *

- *Minimum:* A tertiary qualification in a relevant area of the biological sciences. - *Desired:* Specialisation in the study of an invertebrate phylum. Master's degree in a relevant field. - Previous experience in a collection management or registration role, with a sound working knowledge of collection management practices. - Previous experience working with a Collection Information Management System.

*Skills *

- Ability to handle heavy or awkward objects, specimens and materials. - Ability to handle, process and preserve invertebrate animals and fossils, including minute specimens that may require the use of a stereomicroscope. - Ability to spend significant time working in the collections, and remain motivated when undertaking repetitive tasks. - High level of personal initiative, motivation and common sense application, with the proven ability to work unsupervised. - Ability to work collectively, including in project teams. - Demonstrated ability to build and maintain robust working relationships with internal colleagues and external stakeholders. - Have a current full drivers licence - Willingness to acquire any compliance certification required to carry out the role.

Applicants must have the ability to obtain and maintain the legal right to work in New Zealand.

Offers will be made to the successful candidate within the range of $66,761 to $83,451, based on their skills and experience relative to those required of the role, and to other employees.

Applications close on 28 October 2021.

Prior to Te Papa confirming any offer of employment, pre-employment checks will be undertaken including criminal conviction history and reference checking as a minimum.

Rodrigo Salvador <salvador.rodrigo.b@gmail.com>

OldDominionU InvertebrateEvolution

Hi Evol-Dir, I'd like to advertise an open job search in my department here at ODU that might be of interest to folks. We are open to candidates who span a variety of marine/coastal/estuarine/wetland systems. Please feel free to reach out with any questions.

Invertebrate Biologist Assistant Professor at Old Dominion University

The Department of Biological Sciences at Old Dominion University invites applications for a full-time, nine-month tenure-track, Assistant Professor with expertise in Invertebrate Biology.

We seek candidates working in coastal, estuarine, and/or wetlands systems with a research focus in ecology, evolution, physiology, or organismal biology of invertebrates in these systems. Individual interests could span from local to global scales and across multiple levels of biological organization (population, community, ecosystem), and should be complementary to the expertise of current biology faculty and faculty in other ODU departments. Strong quantitative skills are also preferred. This person would join a growing research cluster in wetlands sciences in the department and the university-wide Institute for Coastal Adaptation and Resilience (https://oduadaptationandresilience.org/about-us/). They would also play a key role in the very popular Marine Biology Concentration Program for undergraduates. The area surrounding ODU borders the largest estuary in North America and provides numerous research opportunities within close proximity.

Qualifications: Candidates must have a doctorate (Ph.D.) in biology or related discipline. Candidates must have a strong scholarship record commensurate with experience, demonstrated potential to establish an externally funded active research program, evidence of excellence in teaching, and strong communication skills. Postdoctoral or equivalent experience is required. We are seeking candidates who share ODU's commitment to the principle that diversity and inclusion are critical to maintaining excellence.

Responsibilities: The successful candidate is expected to develop and maintain active research programs that are externally funded, teach undergraduate and graduate courses, and contribute to service in the department. Candidates who are prepared to engage in interdisciplinary research will be especially welcome. Potential teaching responsibilities include biometry, GIS, invertebrate zoology, and marine ecology.

ODU (www.odu.edu) is a minority-serving, state-supported, Carnegie doctoral high research activity institution enrolling approximately 25,000 students, including 6,000 graduate students. It is located in Norfolk, a historic waterfront city in southeastern Virginia offering outstanding quality of life (www.norfolk.gov). The department has strong graduate programs, including a M.S. in Biology and Ph.D. in Ecological Sciences (www.odu.edu/biosci). ODU and the College of Sciences are committed to inclusive excellence, recognizing that diversity enhances and enriches our educational mission, employment experience, and community engagement. We seek candidates whose research, teaching, and/or service experiences have prepared them to fulfill our commitment to inclusion. All qualified applicants will receive consideration for employment without regard to race, color, religion, gender, gender identity or expression, sexual orientation, national origin, genetics, disability, age, or veteran status.

Interested individuals should submit: a cover letter describing their qualifications for the position, a curriculum vitae, a statement of research achievements and research plans (2 page max), a teaching statement (1 page max), a diversity statement explaining your experience with and commitment to fostering diversity and inclusion (1 page max), and names and contact information for at least three references electronically through the job title posting at https://jobs.odu.edu/postings/14320. Incomplete applications will not be considered. For full consideration, please apply by November 1st , 2021. Questions about the position can be directed to Daniel Barshis, Search Committee Chair (dbarshis@odu.edu).

Old Dominion University is an equal opportunity, affirmative action institution. *Minorities, women, veterans, and*

*individuals** with disabilities are encouraged to apply.*

Best Regards, dan

– Daniel Barshis, Ph.D. Associate Professor Department of Biological Sciences Old Dominion University Mills Godwin Building 308 Norfolk, VA 23529 Office: 757-683-3614 Lab: 757-683-5755 Web: sites.wp.odu.edu/barshis-lab/ Pronouns: he/him/his - what's this? < https://-odu.edu/safespace/pronouns-and-why-they-matter >

— / —

mcmaster.ca/~brian/evoldir.html

OregonSateU EvolutionPlantDiseases

The Department of Botany & Plant Pathology (BPP) at Oregon State University is searching for atenure-track assistant professor positionin Ecology and Evolution of Infectious Plant Diseases. The successful candidate will be expected to establish a robust and extramurally funded research program that will address ecological and evolutionary processes that drive the dynamics of infectious plant diseases. The focus of the program can be on existing and/or emerging plant infectious diseases that are important to the sustainability of agricultural systems in Oregon and the Pacific Northwest. All research topics within the area of ecology and evolution of infectious plant diseases will be considered. We will give preference to highly qualified candidates who show potential to 1) collaborate effectively with researchers, stakeholders, and/or Extension personnel, 2) integrate biological studies with contemporary quantitative approaches, and 3) advance departmental goals in diversity, equity and inclusion. For more information and to apply visit

https://jobs.oregonstate.edu/postings/108984.

Kimberly A. Callahan, CAP Oregon State University Botany & Plant Pathology 2008 RWLB T: 541-737-5261 She or They

"Callahan, Kimberly" <kimberly.callahan@oregonstate.edu>

PotsdamU EvolutionaryGenomics

*Research Scientist position (TVL13) in Evolutionary Genomics at Potsdam University * A Research Scientist position (TVEL 13) is available at the Unit of Evolutionary Biology/Systematic Zoology at the University of Potsdam, starting February 1^st 2022. The position will be available for 3 years, with the possibility of prolongation for a total duration up to 6 years.

The Unit of Evolutionary Biology/Systematic Biology has a strong focus on population genetic and speciation research, involving various taxonomic groups and a suite of molecular, morphological, and behavioural approaches (see https://www.uni-potsdam.de/en/ibb-evolutionsbiologie/indexfor recent work). The unit runs a state-of-the-art molecular evolutionary laboratory and has access to a NGS facility.

The successful applicant is expected to run his/her own research program (including attraction of third-party funding) as well as to scientifically interact with other group members.

The position includes a teaching duty of 4 hours/week in zoology/evolutionary biology for undergraduates and graduates. Teaching can be generally performed in English, but the willingness to acquire German language skills for undergraduate teaching would be preferential.

Applicants must hold a university doctoral degree in biology or a related discipline. Familiarity with modern molecular genetic and genomics/transcriptomics techniques (including Next Generation Sequencing) as well as in genomic data analysis is strongly preferred.

The University of Potsdam is an equal opportunity employer. If equally qualified, disabled applicants will be preferably considered. The University of Potsdam aims at increasing the number of female researchers and encourages qualified females to apply.

Potsdam is a beautiful city in close vicinity to the German capital of Berlin. Potsdam University takes an effort to assist its members in family-related issues and has repeatedly been awarded the total e-quality award.

Please send your application by email (in a single pdf) before 25th of October 2021 to: Prof. Dr. Ralph Tiedemann, University of Potsdam, Institute of Biochemistry and Biology, Evolutionary Biology/Systematic Zoology, Karl-Liebknecht-Str. 24-25, Haus 26, D-14476 Potsdam, Germany, Email: tiedeman@uni-potsdam.de

"Prof. Dr. Ralph Tiedemann" <tiedeman@uni-potsdam.de>

PurdueU OriginsOfLife

Multiple Faculty Positions in "Origins of Life" in Purdue University's College of Science

The Departments of Biological Sciences, Chemistry, and Earth, Atmospheric, and Planetary Sciences at Purdue University invite applicants for up to three faculty positions at the rank of Assistant or Associate Profes-

sor, rank to be commensurate with experience, and departmental appointments to align with candidates' expertise and interests. Applications are welcomed from researchers in all areas with relevance to the Origins of Life, including but not limited to evolutionary biology, phylogenetics, computational biology, molecular biology, microbiology, synthetic biology, prebiotic chemistry, biocatalysis, astrochemistry, self replicating and evolutionary systems, astrobiology, biogeochemistry, physical processes related to abiogenesis, and planetary habitability. Experimental, computational, observational, and theoretical scientists are encouraged to apply. Applicants that work across multiple disciplines or work to develop interdisciplinary collaborations are especially encouraged to apply.

Broadly speaking, the Origins of Life search will consider fields of research and processes related to how life first evolved on earth, how life continues to evolve, and whether and where life exists elsewhere in the universe and how it informs the origins of life on earth.

Responsibilities: Establishing/maintaining an independent, externally funded research program, teaching undergraduate and graduate courses, and participating in departmental, college, and university service.

The Departments and Purdue University: The Departments of Biological Sciences < https://www.bio.purdue.edu/ >, Chemistry < https://www.chem.purdue.edu/ >, and Earth, Atmospheric, and Planetary Sciences < https://www.eaps.purdue.edu/ > are three Departments within the College of Science, which comprises the computing, physical, and life sciences at Purdue. The College of Science is the second-largest college at Purdue, with 353 faculty and more than 6000 students.

Purdue University's College of Science is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in a separate Diversity and Inclusion Statement, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion.

Qualifications: Applicants must have a PhD or similar doctoral level degree in the biological sciences or related disciplines.

Application materials and evaluation: Applicants should submit (1) a cover letter, (2) curriculum vita, (3) a description of proposed research (4-5 pages; this will be used to evaluate applicants' potential to develop a robust independent research program), (4) teaching statement (1-2 pages; this will be used to evaluate applicants' potential for effectively contributing to the departments' and College of Science teaching mission), and (5) a diversity, equity, and inclusion statement (1-2 pages).

Applicants should submit all application materials electronically at this site: https://careers.purdue.edu/job/West-Lafayette-AssistantAssociate-Professor-IN-47906/801114500/ .After an initial round of review, selected applicants will be asked to arrange for three letters of reference to be sent to the search committee.

Applications will be reviewed beginning November 1, 2021 and will continue until the position is filled. A background check will be required for employment.

Purdue University is an EOE/Affirmative Action employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.

christ99@purdue.edu

Smithsonian NHM MachineLearningEvolution

Hello EvolDir Members:

Hiring Now: NSF-funded sub-contract or Postdoctoral Fellow (1 year, with potential for extension), located in Washington, D.C., USA.

Project title: NSF Convergence Accelerator Track E: Innovative seafood traceability network for sustainable use, improved market access, and enhanced blue economy

Project Overview: This proposal will build a cross-cutting traceability network to accelerate the path towards accurate and inclusive monitoring and management of marine bioresources, whose sustainability is vital to feed the global population. Leveraging wide-ranging expertise in fisheries science, marine biology, environmental anthropology, computer science, trade policy, and the fisheries industry, we will develop a powerful tool to achieve long-lasting & transferable solutions. Addressing the global challenge of feeding the human population will require the ocean as a solution.

This NSF Convergence Accelerator project will:

1.Develop a prototype traceability tool that allows affordable identification of species and area of capture for wild octopus fisheries within the United States and abroad using our proposed machine learning (ML) model "SeaTraceBlueNet" trained on legacy data of environ-

mental metadata, species occurrence and images;

2.Develop a community-based citizen-science network (fishers, researchers, industry partners, students, etc.) to gather new data (images, metadata and environmental DNA (eDNA)), train on and test the portable eDNA kits and SeaTraceBlueNet dashboard prototype to build the collaborative capacity to establish a standardized traceability system; and,

3.Set a system in place to connect traceability, sustainability and legality to support the development of a blue economy around the octopus value chain, incorporating the best practices and existing standards from stakeholders.

Qualifications: Demonstrated expertise in Machine Learning (and Bioinformatics, preferably). Although a PhD is not required, professional work experience and a degree in a Machine Learning-related field is required.

Note: Applicants must be current residents of the United States. However, US citizenship is not required. Unfortunately, we cannot sponsor a visa at this time.

Experience sought:

Software: Agile software i.e., Jira, GitHub, Anaconda, pyCharm, Jupyter notebooks, OpenCV, BLAST

Languages: Python, SQL, bash scripting, linux command-line Optional: C++, R, Spark, Hive

Programming environments and infrastructure to be used: Cloud, HPC, Linux, Windows Desired: Familiar with Machine learning platform and libraries such as, TensorFlow, PyTorch, Caffe, Keras, Scikit-learn, scipy, etc. Implementing computer vision models such as ResNet, Deep learning models using Recurrent Neural Networks (CNNs, LSTMs, DNNs), using Support Vector Machines (SVMs) models, probabilistic and un/regression models, data processing and handling activities including data wrangling, computer vision.

Bonus skills/knowledge of: Using BERT NLP models, computer software like OpenVino, targeting GPUs, familiarity with GCP tools and applications, such as BigTable, cloudSQL, DataFlow, CloudML, DataProc, etc., dashboard development and implementation, Compiling and configuring HPC environments, developing applications using MPI, OpenMPI, pyMIC, using job schedulers such as PBS, Scrum, can use Linux, Qiime2

Job Physical Location: Smithsonian Institution's National Museum of Natural History, Laboratory of Analytical Biology (LAB), Washington, D.C. USA

Compensation: Salary includes health and dental benefits, computer provided for the duration of the position

Expected start date: October/November 2021 (up to 12 months depending on start date)

Application Deadline: Applications will be reviewed and interviews will take place on a rolling basis until the position is filled.

Application submission process: Please send the following documents via email to Demian A. Willette, Loyola Marymount University (demian.willette "at" lmu.edu)

1.Curriculum Vitae: Including all relevant professional and academic experience; any grants, publications (URLs provided), presentations, workshops; Machine Learning and bioinformatics skills and languages; Gitbub/bitbucket; experience analyzing molecular sequence data (if applicable)

2.Reference contacts: Names, affiliations and contact information (email, phone) for up to three professional references that we will contact in the event that your application leads to an interview. 3.Transcripts: Transcript showing date of completion of most recent relevant degree.

Inquiries: Demian A. Willette, Loyola Marymount University (demian.willette "at" lmu.edu)

Cheryl Ames <sheriru.ames@gmail.com>

Switzerland MolecularDiagnostics

Project Leader in Molecular Diagnostics / Plant Protection WSL Switzerland

You will be responsible for the identification of forest pests and pathogens (fungi, oomycetes, insects, nematodes, bacteria) using molecular biological methods (qPCR, DNA barcoding, metagenomics), develop new diagnostic methods and implement quality assurance in the diagnostic laboratory. You coordinate the routine diagnostics with a project team consisting of technical and scientific staff. You conduct applied research and work closely together with experts in the research unit. You publish the results of your work in national and international journals. The position is temporary for a two-year period, with an option for a long-term appointment.

You have a university degree with dissertation in natural sciences, broad knowledge in molecular diagnostics including quality assurance, experience in plant protection science and basic knowledge in bioinformatics. You have good time and project management skills and experience in scientific communication, especially in writing pub-

lications. You are an independent working personality and have a strong sense of quality.

It is essential you have very good language skills in German and English and ideally also in French complete your profile. In addition, you are team-oriented, enjoy supervising employees and students and you like to work at the interface between research and outreach.

WSL strives to increase the proportion of women in its employment, which is why qualified women are particularly called upon to apply for this position.

Please send your complete application to Michï¿½le Bucher, Human Resources WSL, by uploading the requested documents through our webpage. Applications via email will not be considered. Dr. Daniel Rigling, phone +41 44 739 2415 will be happy to answer any questions or offer further information. https://-apply.refline.ch/273855/1220/pub/2/index.html deborah.leigh@wsl.ch deborah.leigh@wsl.ch

TempleU EcologyEvolution

The Department of Biology at Temple University invites applications for tenure-track/tenured positions at the Assistant/Associate/Full Professor level in the areas of Ecology and Evolution. In particular, we seek candidates who combine experimental, theoretical, and computational approaches to address interdisciplinary questions that align with ongoing research in the Department and associated organizations: Institute for Genomics and Evolutionary Medicine https://igem.temple.edu/-, Center for Computational Genetics and Genomics https://ccgg.temple.edu/, and Center for Biodiversity http://www.biodiversitycenter.org/. Successful candidates are expected to establish an externally-funded research program and contribute to the teaching mission of the Department and College of Science and Technology, particularly in our two new majors: Genomic Medicine; and Ecology, Evolution, and Biodiversity. For additional information see the Department website https://bio.cst.temple.edu/ . A Ph.D. or equivalent degree is the minimum required criterion. It is anticipated that the successful candidates will demonstrate a track record of research excellence, originality, and productivity; the ability to secure funding for their work; experience and interest in teaching undergraduate and graduate students; as well as a dedication to public outreach and engagement. Applicants should submit their curriculum vitae, a brief summary of current and future research programs, a statement of teaching philosophy, and the names and contact information of three references as a single pdf file to biosearch@temple.edu. Review of applications will begin on October 18, 2021 and will continue until the positions are filled.

Temple University is an equal opportunity, equal access, affirmative action employer, with one of the most diverse undergraduate populations in the nation. Temple has pledged to enhance its efforts to recruit a more diverse faculty and staff, particularly in those areas with high minority availability but low representation (AA, EOE, m/f/d/v).

Matthew R. Helmus, Ph.D. Integrative Ecology Lab < http://www.iecolab.org/ > Center for Biodiversity < http://www.biodiversitycenter.org/ > Department of Biology Temple University Philadelphia, PA 19122

facebook < https://www.facebook.com/-IntegrativeEcology/ > twitter < https://twitter.com/-mrhelmus > instagram < https://www.instagram.com/-iecolab/ > Phone: 215 204-5989 <tel:2152045989> Email: mrhelmus@temple.edu Office: 538 SERC, Main Campus

Matthew Helmus <mrhelmus@temple.edu>

TexasAMU-CorpusChristi LabCoordinator EcoEvoGen

Join the Genomics Core Laboratory at Texas A&M University - Corpus Christi as a Lab Coordinator. We are dedicated to supporting the genomic needs of ecological, evolutionary, and conservation biologists, both laboratory and computational.

DESCRIPTION OF DUTIES: The Lab Coordinator will assist the Director and Lab Manager in (1) managing and completing customer orders, (2) maintaining the 2000+ ft^2 of lab space and state-of-the-art molecular biology equipment, (3) organizing and maintaining records/libraries of laboratory results, biological samples, and nucleotide sequences, and (4) training and managing student research assistants and volunteers.

NECESSARY LAB SKILLS: DNA isolation, paramagnetic bead clean-ups, gel electrophoresis, capillary electrophoresis, enzymatic digestion, sonication, PCR, qPCR, fluorescent and absorbance nucleotide quantification, etc...

INSTRUMENTATION: Single and multichannel (8, 12,

96) pipettors, fluid handling robots, centrifuges, nanodrop, fluor/abs plate reader, fragment analyzer, ABI Sequencer, thermocyclers (96-384 well, including real-time), pulsed field electrophoresis (BluePippin), sonicators (Covaris, Bioruptor)

DESIRABLE COMPUTER SKILLS: Computer skills are required to manage projects and evaluate/troubleshoot laboratory procedures, especially on a population genetic project that involves 100s-1000s of specimens. R, bash, linux, hpc, git(hub), excel, etc... (python, sql, ...)

PREFERRED QUALIFICATIONS: MS degree or higher, organized and independent problem solver that is also comfortable working in a team atmosphere, motivated to excel and achieve promotion

ABOUT US: The Genomics Core Lab (GCL) at TAMU-CC was founded in 2013 to assist my laboratory and others with the increasingly complicated laboratory protocols required in ecological, evolutionary, and conservation biology. The model we support is for researchers to outsource their laboratory and/or informatic work to the GCL so they can focus on addressing their biological questions in a timely fashion to meet granting agency deadlines. Within this model, we train students at TAMU-CC and visiting researchers in molecular laboratory techniques, and support graduate and undergraduate research assistants.

EXAMPLES OF SEQUENCING LIBRARY PROTOCOLS WE PERFORM: shotgun, RAD, epiRAD, bisulfite, Hi-C, transcriptome, exome, whole genome, capture, rapture, eDNA, metabarcoding, amplicon, historical, Sanger, PacBio, Illumina, MinIon Sequencing Libraries, or anything else we are asked to do and are capable of. We outsource all next gen sequencing and so we aren't locked into a particular technology.

EXAMPLES OF RESEARCH QUESTIONS BEHIND OUR CUSTOMER'S PROJECTS: Evolution of Philippine fishes over the past century, diets of palpigrades in Texas, various fishes in the Gulf of Mexico, and sharks in Georgia; larval dispersal and gene flow in marine invertebrates and fishes of Hawaii, detection of invasive species in streams in the Marianas Islands and Hawaii using eDNA, detection of genetic structure in Mekong River fishes in the face of hydro-electric dams, evolution of Pacific nudibranchs along the coast of North America, family structure in Caribbean gobies, genetic structure in an Australian intertidal fish, de novo genome assembly of marine invertebrates and fishes, MHC locus diversity in Texas wildcats, hybrid detection of endangered Mohave tui chub and nonnative Arroyo chub, population genomics in a wild Central American orchid, endangered plants in California, and rare alpine plants in New York.

APPLY: https://tamus.wd1.myworkdayjobs.com/-en-US/TAMUCC_External/job/Corpus-Christi-TAMUCC/Laboratory-Coordinator-I_R-043185 For more information, contact us at genomics@tamucc.edu Dr. Christopher E. Bird Associate Professor, Life Sciences Director, Genomics Core Laboratory Texas A&M University - Corpus Christi 361-443-5676

"Bird, Chris" <Chris.Bird@tamucc.edu>

Trondheim EvolutionaryEcolSocialBehaviour

PhD position on The Evolutionary Ecology of Social Behaviour, Centre for Biodiversity Dynamics (CBD), NTNU, Trondheim, Norway

General aim of the project: Predicting responses to a changing environment is currently one of the biggest challenges in biology. The realization that evolutionary change can rapidly affect ecological and demographic processes, and thus determine the ability of populations to cope with environmental change, has led to a rapid increase in the number of studies focusing on the feedbacks between ecology and evolution (eco-evolutionary dynamics). Surprisingly, even though competition, cooperation and sexual reproduction are key ecological processes determining phenotypic evolution and the size of populations, classic theory on the evolution of social behaviour has not been fully integrated within the eco-evolutionary dynamics paradigm. There is thus a huge gap in our understanding of eco-evolutionary dynamics, which hinders our ability to predict how populations will respond to the rapid environmental change currently faced by many organisms. This project will help build this missing bridge between social behaviour and eco-evolutionary dynamics research using a unified framework based on behavioural ecology theory on social traits, quantitative genetic models providing statistical descriptions of the responses to selection, and population projection models focusing on stochastic population dynamics. We will focus on a house sparrow meta-population on Norwegian islands that has been monitored since the early 90s. The project will involve analyses of existing data and fieldwork.

Accordingly, the main aims of the PhD position are 1) to quantify how social interactions affect the reproductive success of individuals; 2) to quantify the spatial and social structure of house sparrows in different island populations; and 3) to quantify how the patterns of social

interactions affect population dynamics and how population dynamics affect the patterns of social interactions. These aims will be achieved using an exceptional multi-year dataset from a house sparrow meta-population in Norway.

The position will suit a PhD candidate who is keen to learn advanced statistical methods, and apply them to understand patterns, causes and consequences of phenotypic variation arising in wild populations. It will provide complete doctoral education to obtain a doctoral degree, including primary research training, PhD-level credit courses, and appropriate teaching experience. Research training will include data management, statistical analyses including mixed models and capture-mark-recapture approaches, experience of field data collection, and experience of working within a collaborative research team.

Requirements: The successful candidate should have a quantitative methods background in evolutionary biology and behavioural ecology. The working environment is English.

Project group: The project is based on a recently funded proposal "Social dynamics and eco-evolutionary feedbacks in wild populations" by the Research Council of Norway. The PhD student will work in the Centre for Biodiversity Dynamics (CBD; https://www.ntnu.edu/-cbd) at the University of Science and Technology (NTNU; https://www.ntnu.edu/) in Trondheim, Norway. The main supervisors will be Yimen Araya-Ajoy and Jonathan Wright and the PhD-student will collaborate closely with Myranda Murray, Jane Reid, Bernt-Erik SÃther and Henrik Jensen. CBD is a leading center on evolutionary ecology research and is located on the beautiful Trondheim fjord. The city has a very socially progressive environment, full of students and with great access to nature. For more information about the project, please contact yimen.araya-ajoy@ntnu.no and for more information about working in our group please contact myranda.murray@ntnu.no.

Project duration and starting date The successful candidate will be offered a fully-funded three-year PhD-position starting 01.01.2022. There is a possible extension to 4 years if the student is also involved in teaching. Apply here https://www.jobbnorge.no/-en/available-jobs/job/213942/phd-opportunity-on-the-evolutionary-ecology-of-social-behaviour Yimen Araya-Ajoy <yimen.araya-ajoy@ntnu.no>

TulaneU EvolutionaryBiology

Hello,

The Tulane Ecology and Evolutionary Biology department is recruiting a colleague at the assistant professor level. We're looking for an evolutionary biologist who works on 'omics (e.g. genomics, transcriptomics, proteomics, etc.) to join our friendly department. Please see the following ad and feel free to reach out to me or another member of the search committee if you have questions.

https://apply.interfolio.com/95618 Cheers, Hannah

Hannah Frank, PhD Assistant Professor Dept. of Ecology and Evolutionary Biology, Tulane University hkfrank@tulane.edu <hkfrank@stanford.edu>

hkfrank@tulane.edu

UAlabama NaturalHistoryCollectionsManager

Natural History Collections Manager, Department of Museum Research and Collections, UA Museums, The University of Alabama

The Department of Museum Research and Collections (https://collections.museums.ua.edu/) at The University of Alabama seeks a Natural History Collections Manager. This is a full-time, staff-level position with benefits located on the campus of The University of Alabama in Tuscaloosa, Alabama. The position reports to the Director of Research and Collections.

The University of Alabama Museums (https://-museums.ua.edu/) includes five museums, two research departments and a PBS television program within the College of Arts and Sciences. These include the Alabama Museum of Natural History (oldest museum in Alabama), Mildred Westervelt Warner Transportation Museum, Gorgas House (oldest structure on The University of Alabama campus), Moundville Archaeological Park (185-acres on the former site of the political and ceremonial center of a vast Native American chiefdom), Paul W. Bryant Museum, Discovering Alabama (Emmy

Award-winning public television series), Office of Archaeological Research and the Department of Museum Research and Collections, which manages more than five million objects and specimens.

The Natural History Collections Manager will be responsible for managing the day-to-day operations of the diverse UA Museums collections housed in Mary Harmon Bryant Hall. These collections comprise entomology, geology, history, invertebrate zoology, mammalogy, ornithology, and paleontology. Duties of the position include: recruitment, training and supervision of personnel, both staff and volunteers, in assisting with collections operations; cloud-based and local database collections data entry and management; care for the preservation of collections and assisting with the proper use of exhibit display objects and their upkeep, all according to best museum practices and the UA Collections Management Policy.

The successful candidate will have strong organizational skills, an aptitude for detail-oriented work, and strong interpersonal and supervisory skills. They will be able to prioritize, problem-solve and effectively manage their time. Effective verbal and written skills are a must. Strong computational skills including fluency with Microsoft Office (including Excel and Access) as well as experience with database management software, ideally in the area of collections management (Arctos, FileMaker Pro, MySQL, or Specify), and the ability to quickly learn new and evolving programs are a must. A preference will be given to candidates who have experience in digitizing collections and/or possess relevant photographic and imaging skills (e.g. focus stacking). We are also looking for someone who enjoys engaging in educational outreach activities with visitors and students in the collections. Candidates should be willing to participate in monthly Arctos database working group meetings and become a member of SPNHC (Society for the Preservation of Natural History Collections).

An interest in and familiarity with taxonomy is strongly preferred. Additional desirable skills include experience with writing or assisting with collections related grant proposals, experience with the management of tissue collections, experience with live invertebrate husbandry and coding and/or scripting skills (e.g., BASH, Perl, Python, etc.).

The successful candidate must be able to lift up to 50 pounds and maneuver carts, rolling ladders, and some large objects in tight places. It is expected that this person will attend collections related meetings and conferences for continued professional development.

Preferred Qualifications: A Master's degree in a field such as Biology, Entomology, Geology, Paleontology, other sciences, or Museum Studies is preferred, with 3+ years of experience.

Questions about the position should be addressed to the chair of the search committee, Dr. John Abbott (jabbott1@ua.edu). To apply, go to https://tinyurl.com/-UAJobs514653 complete the online application, and upload: (1) a cover letter; (2) CV; (3) a list of three to five references (including contact information). The search committee will request letters of reference as needed. Consideration of applications will begin November 15, and will continue until the position is filled. There will be a preliminary Zoom screening of selected applicants, after which the top candidate(s) will be invited for an in-person interview The start date is negotiable, but ideally in January of 2022. Additional information about the UA Museums can be found on our website at https://museums.ua.edu/. The University of Alabama is an equal-opportunity employer (EOE), including an EOE of protected vets and individuals with disabilities.

Kevin M. Kocot he/him/his

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This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at http://life.biology.-mcmaster.ca/~brian/evoldir.html

UAlabama VertebrateFunctionalMorphology

The Department of Biological Sciences at The University of Alabama, Tuscaloosa, invites applications for a full-time (9 month), tenure-track Assistant Professor in Vertebrate Functional Morphology starting August 2022. The successful candidate will use modern analytical techniques to address fundamental questions in their area of expertise, establish an extramurally funded research program, demonstrate a commitment to teaching at both the undergraduate and graduate levels, and participate in departmental, college, and university service. This individual should be highly motivated with the ability to interact and collaborate with other faculty in Biological Sciences, The University of Alabama Museum of Natural History, and from other departments and/or colleges. Minimum qualifications include a Ph.D. in biology or a related discipline, post-doctoral or equivalent experience, and a strong record of publishing in peer-reviewed journals.

Questions about the position should be addressed to the chair of the search committee, Dr. Phillip Harris (pharris@ua.edu). To apply, go to https://-facultyjobs.ua.edu/postings/49388, complete the online application, and upload: (1) a cover letter; (2) CV; (3) statement describing past research achievements and future goals; (4) statement of teaching interests and philosophy; and (5) a list of three to five references with contact information. The search committee will request letters of reference as needed. Consideration of applications will begin December 1, 2021, and continue until the position is filled. There will be a preliminary Zoom conversation with selected applicants, after which top candidates will be informed whether their formal interviews will proceed virtually or in-person, depending on the present state of the coronavirus pandemic. Prior to hiring, the final candidate will be required to pass a pre-employment background investigation. Additional information about the Department of Biological Sciences and this position can be found on our website at http://bsc.ua.edu. We seek applications from candidates who would bring a diversity of backgrounds and experiences to the department. Women and members of traditionally underrepresented groups in the biological sciences are especially encouraged to apply. The University of Alabama is an Equal Opportunity/Equal Access Employer and actively seeks diversity among its employees.

Kevin M. Kocot he/him/his Associate Professor & Curator of Invertebrates Department of Biological Sciences & Alabama Museum of Natural History The University of Alabama 307 Mary Harmon Bryant Hall Box 870344 Tuscaloosa, AL 35487 phone205-348-4052 | fax 205-348-4039 kmkocot@ua.edu|www.kocotlab.com https://uasystem.zoom.us/j/3755490727 Kevin Kocot <kmkocot@ua.edu>

UArizona EvolutionaryMedicine

"The Department of Ecology & Evolutionary Biology at the University of Arizona invites applications for an Assistant Professor position (tenure track) to begin in August 2022. We seek a candidate in the broadly defined area of Evolutionary Medicine at the intersection of ecology and evolutionary biology and human health. Candidates whose research focuses on any aspect of the ecology and evolution of disease and health are encouraged to apply. A focus on any organism or system with implications for human health is welcome.

Founded in 1975, the Department of Ecology & Evolutionary Biology at the University of Arizona was the first department of its kind in the world, pioneering a model for the organization of biology that is now in use in many of the world???s leading universities. Our focus is broad, spanning levels of organization from molecular genetics and organismal function as they relate to evolution and ecology, from population and community ecology to biological diversity, phylogeny and macroevolution. Our program???s unique personality comes from our faculty members who combine theory and empirical work and take an integrative approach to blending disciplines in their research and teaching. Members of the department collaborate with life science faculty in the Colleges of Science, Medicine, Mel & Enid Zuckerman College of Public Health, Pharmacy, Veterinary Medicine, Agriculture & Life Sciences, and Social & Behavioral Sciences, the Cancer Center, and the BIO5 Institute. We are excited about building an inclusive and diverse environment for research, education, and service. Tucson is a fun, affordable, welcoming, and livable city located among the biologically diverse Madrean Sky Islands in the Sonoran Desert. The city is recognized internationally for its food culture and in 2015 was named the first UNESCO World City of Gastronomy in the United States. We have great weather and are surrounded by spectacular scenery, including numerous national parks and wilderness areas. The Tucson area has a surprising range of habitats, amazing subtropical biodiversity, and is only a few hours drive from numerous tropical habitats in Mexico.

Outstanding UA benefits include health, dental, and vision insurance plans; life insurance and disability programs; sick leave and holidays; UA/ASU/NAU tuition reduction for the employee and qualified family members; state and optional retirement plans; access to UA recreation and cultural activities; and more!

The University of Arizona has been recognized for our innovative work-life programs. For more information about working at the University of Arizona and relocations services, please click here http://-talent.arizona.edu/ All the Best,

Sarah Kortessis Program Coordinator Ecology and Evolutionary Biology

Sent from Mail for Windows

"Kortessis, Sarah M - (sarahkortessis)" <sarahkortessis@arizona.edu>

UEastAnglia ResTech Zebrafish

FACULTY OF SCIENCE SCHOOL OF BIOLOGICAL SCIENCES

Research Technician Ref: TC778

ï¿½19,612 to ï¿½21,814 per annum (pro rata for part-time)

We are looking for a research technician to join our expanding zebrafish facility at the School of Biological Sciences (BIO) at the University of East Anglia. The successful candidate will be in charge of managing the facility and of the maintenance and breeding of our zebrafish, as well as assisting with the diverse research projects running in the lab.

The successful candidate will be a full member of the PI's group (see our lab homepage for more information: https://simoneimmler.com/) and is expected to actively participate in group activities including lab meetings and journal clubs. The School of Biological Sciences at the UEA offers a vibrating research environment with a large number of research groups working on questions related to this project.

We are seeking an applicant with a degree in Evolutionary Biology, Ecology or Genetics and has experience in lab managing. Along with excellent interpersonal skills and the ability to use initiative, and apply creativity, to solve problems which are encountered in the daily routines, you will need to fulfil all the essential criteria of the job description.

This post is available from 1 January 2022 on a fixed-term basis until 3 Dec 2022, with the possible extension of a further 4 years. The post is perfectly suitable for part-time working hours (0.5fte) - however hours up to full-time will be considered.

Closing Date: 16 November 2021

To apply for this vacancy, please follow the online instructions at: https://myview.uea.ac.uk/webrecruitment/ The University is a Silver Institutional Athena Swan Award holder and aims to make its first submission to the Race Equality Charter in 2022.

"Myra Hendey (RRP - Staff)" <M.Hendey@uea.ac.uk>

UFlorida AssistantCuratorOrnithology

The University of Florida < https://www.ufl.edu/ >, the State of Florida's flagship university and ranked No. 5 among the nation's top public research universities by U.S News and World Report, is home to the Florida Museum of Natural History, < https://-www.floridamuseum.ufl.edu/ > the official state museum of Florida. The Florida Museum's mission includes stewardship of 40 million specimens and artifacts, award-winning exhibitions, diverse public programs, and emerging virtual and digital engagement. The research and collections programs of the Department of Natural History are world class and attract about $10 million annually in government and philanthropic support. Florida Museum is a national and international leader in biodiversity informatics, enhanced by its formative role in iDigBio < https://www.idigbio.org/ >, the national hub for digitization of natural history specimens.

The Florida Museum Division of Ornithology contains a world-class avian skeleton collection (~29,000 specimens of >3,200 species), ~26,000 bird skins representing ~2,600 species, and one of the world's leading sound collections with ~27,600 catalogued and fully digitized recordings representing ~3,000 bird species. More information on these resources is available through the databases on the webpage of the Division of Ornithology. < https://www.floridamuseum.ufl.edu/birds/ > The Florida Museum supports a rich research community studying vertebrates in neontological, paleontological, and anthropological contexts. In addition to collections at Florida Museum, this research is facilitated by UF resources for genetics and genomics, 3D-imaging, and research field stations.

The Florida Museum, a college-level unit within UF, is a vibrant community of about 300 employees, including 32 full-time faculty, UF undergraduate and graduate students, postdoctoral research associates, and museum collections, education, and administrative support staff. The Florida Museum enjoys cross-campus collaborations with many of the 16 UF colleges, including those of potential relevance to this new faculty position: Agricultural and Life Sciences (Institute of Food and Agricultural Sciences), Education, Engineering, Journalism and Communications, Libraries, and Liberal Arts and Sciences. Qualifications We seek to

hire a creative scholar whose research and teaching are specimen-based and focus on birds. We invite candidates who address questions in the broad field of Ecology and Evolution and that would make use of the Florida Museum Ornithology collections. An ideal candidate will contribute to the museum's goals of understanding, preserving, and interpreting biological diversity, and whose research offers opportunities for integrative collaborations with other faculty and divisions within Florida Museum. We especially encourage applications from candidates who contribute to the diversity, inclusivity, and excellence of the academic community and who have experience working with underserved and/or underrepresented students, scientists, and communities. Successful candidates should have a Ph.D. in Biology or a related field, conduct specimen-based research on birds, and have evidence of excellence in research. Salary is competitive and negotiable based on experience. Application Instructions Interested applicants must apply online at http://apply.interfolio.com/ < https://dossier.interfolio.com/apply/97193 > Applicants must submit (1) cover letter; (2) full curriculum vitae, including lists of peer-reviewed publications and grants received; (3) research statement describing the applicant's current and planned research; (4) statement providing the applicant's experience with museum collections and their vision for curating, using, and growing the Ornithology collection; (5) statement about the applicant's experience with teaching and outreach; (6) statement describing the applicant's contributions to diversity, equity, and inclusion through teaching, research, and/or service; and (7) list of the names and email addresses of a minimum of three professional references (do not send letters). Review of applications will begin on December 1, 2021, and will continue until the position is filled. The final candidate will be required to provide an official transcript to the hiring department upon hire. A transcript will not be considered official if a designation of "Issued to Student" is visible. Degrees earned from an educational institution outside of the United States must be evaluated by a professional credentialing service provider approved by the National Association of Credential Evaluation Services (NACES) < http://www.naces.org/ >.

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UGuam GeneticsLabManager

A lab manager position is available at the Marine Laboratory of the University of Guam (USA). We are looking for a highly organized and collegial individual to become our Genetics Lab Manager (Research Associate II) supporting our research mission. The selected candidate will ensure that lab operations run smoothly and without unnecessary interruptions by keeping an up-to-date inventory of supplies and ensuring timely orders to replenish stocks. They will participate in laboratory research on marine invertebrate (corals and non corals) population genomics, phylogenomics, transcriptomics and gene expression, in the context of adaptation to climate change. The Genetics Lab Manager will work under the direction of Dr. Sarah Lemer and Dr. David Combosch.

The position is financed by the National Science Foundation (NSF) as part of the "Guam Ecosystems Collaboratorium for Corals and Oceans" research project (2020 ?¿‘ 2025). The position will start as soon as possible and is renewable on a yearly basis. https://-guamepscor.uog.edu/about-guam-epscor/ Character of Duties: The Lab Manager will assist the PIs (Dr. Lemer and Dr. Combosch) and students with their projects. The responsibilities and primary functions of the position include: - Manage, keep an updated inventory, and order supplies and reagents - Maintain the 1000+ ft^2 of lab space and molecular biology equipment - Organize and maintain records of biological samples - Train and manage students, research assistants and volunteers. - Ensure adherence to regulatory requirements, budgets, and schedules; - Establish and improve standard operating procedures and protocols; - Conduct molecular lab work: sample preservation, DNA/RNA extractions, PCR and RT-qPCR.

Required skills and experience: - A MS degree or higher, in Biology, Chemistry, or related field from a U.S. regionally accredited institution or foreign equivalent; - One (1) year of experience in molecular genetics laboratory techniques; - Experience in DNA and RNA extraction, preparation of DNA libraries for sequencing, gel electrophoresis, PCR, RT-qPCR, magnetic bead clean- ups, DNA and RNA quantification, etc... - Experience with single and multichannel pipettors, fluid handling robots, centrifuges, BioAnalyzer, thermocyclers, etc - Demonstrated experience with lab management: reagent and

supplies stock management and placing orders - Attention to detail, strong problem-solving, training, and mentoring abilities; - Excellent written and verbal communication skills;

About us: We are a young and dynamic team and offer a friendly and motivating working environment. Through investments by the National Science Foundations Established Program to Stimulate Competitive Research (EPSCoR), the genetics laboratory at the Marine Laboratory of the University of Guam was modernized. The genetics laboratory is used by multiple faculty researchers, postdocs, and graduate students to conduct genetics and genomics research using mostly tropical marine organisms. The focus of these studies include biodiversity inventories, population connectivity, gene expression, and genome evolution. To support these research projects, the lab is equipped with an Illumina sequencer, qPCR and other thermocyclers, liquid handling robots, and facilities for cryo-preservation of tissues through the associated biorepository.

Check us out here: Lemer Invertebrate genomics Lab: https://www.uog.edu/ml/labs/lemer Island Evolution Lab: https://www.uog.edu/ml/labs/combosch Official and detailed job description: https://www.uog.edu/-rcuog/job-announcements.php Online application form: https://www.uog.edu/rcuog/employment-application Sarah

Sarah Lemer, Ph.D Assistant Professor of Marine Invertebrate Genomics University of Guam Marine Laboratory https://www.uog.edu/ml/labs/lemer sarah.lemer@gmail.com

UHouston EvolClimateChange

Faculty Position in Ecology and Evolution at the University of Houston

The Ecology and Evolution Division of the Department of Biology and Biochemistry at the University of Houston invites applications for a tenure-track faculty position at the rank of Assistant Professor. Applicants with research interests and a record of accomplishment in the ecological or evolutionary impacts of climate change are encouraged to apply. We welcome applicants using any approach to answer questions in these areas. Successful applicants will be prepared to contribute to teaching in undergraduate core courses in Evolution, Genetics, or Biostatistics.

The position requires a Ph.D. and significant relevant academic experience. Faculty members are expected to establish and maintain nationally competitive externally funded research programs and to participate in graduate and undergraduate teaching. The Department of Biology and Biochemistry has state-of-the-art laboratory space, well- equipped core facilities, high-performance computing resources, and a field station containing grassland and forest habitats. Broad opportunities exist for research collaborations within the University of Houston as well as at nearby institutions.

Interested applicants should submit the following materials to https://jobs.uh.edu (search under Faculty for FAC002002, then click 'Apply Online'): a curriculum vitae with names and contact information for three references, research plan, one-page statement of teaching interests, and a cover letter that includes a description of how their experiences and proposed activities will promote equity and inclusion in the context of research and instruction in a multicultural environment. Review of applications will begin by 11/15/2021and continue until the position is filled. The University of Houston, with one of the most diverse student bodies in the nation, seeks to recruit and retain a diverse community of scholars.

The University of Houston is an Affirmative Action/Equal Opportunity Employer. Women, persons excluded by ethnicity or race (PEERs), veterans, and persons with disabilities are encouraged to apply. The University of Houston is responsive to the needs of dual-career couples.

Richard Meisel (he/him/his) Associate Professor Department of Biology and Biochemistry University of Houston

3455 Cullen Blvd Suite 349 Houston, TX 77204-5001

Office: 421C SR2 Lab: 428/433 SR2

rpmeisel@uh.edu bchs.uh.edu/~rpmeisel 1-713-743-3607

"Meisel, Richard P" <rpmeisel@Central.UH.EDU>

UIllinois Urbana-Champaign InsectBiodiversity

The University of Illinois Urbana-Champaign is recruiting a tenure-track faculty member focused on insect biodiversity. Please see details below.

Description: FACULTY POSITION ANNOUNCE-

MENT Assistant Professor, Insect Biodiversity University of Illinois Urbana-Champaign

The Department of Entomology and the School of Integrative Biology at the University of Illinois Urbana-Champaign invite applications from biologists with a record of research in insect biodiversity for a full-time, 9-month, tenure-track faculty position at the assistant professor level, with the anticipated start date of August 16, 2022.

We are looking for individuals whose work can address biodiversity across any of a number of levels and can include large-scale phylogenomics, biogeography, phylogeography, and conservation genomics. Research relevant to insect responses to global change and ecological/evolutionary consequences is a high priority. The successful candidate will be expected to build an externally funded research program and collaborate with other faculty to develop research initiatives; this position provides an opportunity to be part of dynamic and well-established communities of integrative biologists with interests spanning a wide range of taxa in the School of Integrative Biology, as well as many interdisciplinary programs across the campus, including the Illinois Natural History Survey, housing one of the largest US insect collections (with more than 7 million prepared insect specimens). Responsibilities also include teaching and participation in both undergraduate and graduate training.

The successful candidate must have a Ph.D. in entomology, biology, zoology, genetics/genomics, conservation biology, or a related discipline. Candidates who have demonstrated a commitment to working with students or faculty from groups historically marginalized or underrepresented in the field through teaching, mentoring, or administration are especially encouraged to apply. Salary is commensurate with qualifications and experience.

The University of Illinois is an Equal Opportunity, Affirmative Action employer that recruits and hires qualified candidates without regard to race, color, religion, sex, sexual orientation, gender identity, age, national origin, disability, or veteran status. For more information, visit http://go.illinois.edu/EEO . The College of Liberal Arts and Sciences is a world leader in research, teaching, and public engagement. Faculty in the College create knowledge, address critical societal needs through the transfer and application of knowledge, and prepare students for lives of impact in the state, nation, and globally. To meet these objectives, the College embraces and values diversity and difference through hiring faculty candidates who can contribute through their research, teaching, and/or service to the diversity and excellence of the Illinois community.

To apply, create your candidate profile through https://go.illinois.edu/ENTAsstProf and submit application materials. Applicants must submit a letter of application, curriculum vitae, links to 3 representative publications, a statement of teaching philosophy and interests, a statement of research interests, a DEI statement, and contact information for three professional references. Letters of recommendation may be requested electronically at a later date. Only applications submitted through the University of Illinois Job Board will be considered. To ensure full consideration, applications should be received by October 29, 2021, but they will be accepted until the position is filled. Interviews may take place before the closing date; however, no hiring decision will be made until after that date.

Questions about the position or application procedures may be directed to Tina Lamb tinalamb@illinois.edu

The University of Illinois has an active and successful dual-career partner placement program and a strong commitment to work-life balance and family-friendly programs for faculty and staff (http://provost.illinois.edu/faculty-affairs/work-life-balance/). To find out more about the resources available at the university and Urbana-Champaign community please visit these sites: Dual Career Program Benefits Living in Champaign-Urbana

The University of Illinois Urbana-Champaign (www.illinois.edu) is located approximately 120 miles south of Chicago in a metropolitan area of approximately 232,000 people. The campus is home to internationally recognized facilities and interdisciplinary programs including the Carl R. Woese Institute for Genomic Biology (www.igb.illinois.edu), Beckman Institute (www.beckman.illinois.edu), Energy Biosciences Institute

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UKansas 2 Genomics

The KU Departments of Ecology and Evolutionary Biology and Molecular Biosciences are conducting two separate searches in genomics. The EEB department

is searching for Evolutionary Genomics with a focus on non-traditional model systems. The Molecular Biosciences search is for broadly defined Genome Biology. We invite applications for these faculty positions as a tenure-track assistant professor in these areas.

As a premier international research university, the University of Kansas is committed to an open, diverse and inclusive learning and working environment that nurtures growth and development. KU holds steadfast in the belief that an array of values, interests, experiences, and intellectual and cultural viewpoints enrich learning and our workplace. As such, applications from members of underrepresented groups in higher education are highly encouraged.

The University of Kansas is a member of the prestigious Association of American Universities. KU is a major educational and research institution located in Lawrence, a vibrant, thriving community of more than 90,000 close to Kansas City and the KU Medical Center. The faculty in both departments have comprehensive and diverse research efforts that enable innovative and cross-disciplinary approaches. As part of the University's commitment to advancing the biological sciences, these positions will be augmented by two additional new faculty positions (Immunology and Infectious Disease) available in the Department of Molecular Biosciences (https://molecularbiosciences.ku.edu/). Candidates will have access to resources associated with the KU Center for Genomics as well as several other core facilities.

Applicants must have a Ph.D. or equivalent degree in relevant field and post-doctoral research experience. Applicants should demonstrate the potential to establish an independent, externally-funded research program, as evidenced by research products including preprints and publications, and a statement outlining research successes and future goals. As excellence in inclusive education and mentoring is a priority for our academic scientists, applicants should convey approaches and interests in these areas.

For complete announcement and to apply online, go to: EEB: https://employment.ku.edu/academic/20324BR Molecular Biosciences: https://employment.ku.edu/-academic/20321BR . A complete online application includes the following materials: a) cover letter, b) curriculum vita, c) a statement of current and future research interests, d) a statement of teaching interests and philosophy, e) a statement describing why diversity, equity and inclusion are important to your research and efforts you have taken or will take to improve participation, inclusion and retention of individuals from underrepresented groups, and f) the names and contact information for at least three professional references. In addition to the materials above, learning about each applicant's contribution and engagement in areas of diversity is an important part of KU's mission. As such, applicants will be asked a to describe their views and efforts in diversity, equity, inclusion and belonging.

First Review of applications will begin November 8 (for EEB) and November 15 (for MB) and will continue until the position is filled. Position inquiries can be directed to: EEB: Paulyn Cartwright (pcart@ku.edu) Molecular Biosciences: Rob Unckless (unckless@ku.edu).

unckless@ku.edu

ULiverpool LabTech DrosophilaNutritionLifehistory

A Research Technician position is available at the University of Liverpool to work on an exciting research project about optimising male nutrition for healthy fertility and ageing. The project focuses on Drosophila fruit flies, and is a BBSRC funded research project led by Dr Stuart Wigby. Candidates should have an appropriate undergraduate degree, experience of large-scale laboratory experiments with Drosophila or similar systems, using molecular techniques, and be highly reliable and adaptable. The post is available from 1 February 2022 (or possibly earlier) for 3 years.

Application deadline 14th October 2021

Informal enquiries to s.wigby@liverpool.ac.uk

https://www.jobs.ac.uk/job/CJN260/senior-drosophila-laboratory-research-technician-grade-6
"Wigby, Stuart" <S.Wigby@liverpool.ac.uk>

UMaryland RiskAssessEnvProtection

Faculty Position Risk Assessment and Environmental Protection Assistant Professor - Tenure Track Application deadline: Dec 15, 2021 Apply here: ejobs.umd.edu/postings/88936

The University of Maryland, College Park seeks to build on its existing strengths in Integrated Pest Management, biotechnology, risk assessment, environmental protection

and species conservation by hiring a tenure-track faculty member in the Department of Entomology. We seek candidates working in areas complementary to pesticide safety and risk assessment, including but not restricted to traditional, organic, and genetically engineered pest controls, their ecological and evolutionary impacts, regulatory issues, human health and socio-economic effects, or related topics. Applicants from a diversity of disciplines and backgrounds, and who work on intersecting fields are strongly encouraged to apply. The appointee will demonstrate the creativity and passion needed to build a nationally-prominent, robustly-funded research program, the ability to establish collaborations, an interest in effective and inclusive teaching and mentoring, and the will to develop a strong extension program as the State of Maryland's Pesticide Safety Education Coordinator, all within a department whose culture aims to help them succeed. This 9-month position is at the Assistant Professor level. However, exceptional candidates at the Associate or Full Professor levels will be considered.

The Entomology Department makes use of cutting-edge approaches to address a range of basic to applied research questions, with internationally recognized strengths in ecology, genetics, genomics, evolutionary biology, conservation biology, restoration, climate change, pollinator science, and integrated pest management. The University of Maryland College Park is the Flagship and Land Grant campus and a diverse public research university with a broad array of programs that could be allied with the goals of this position, including public health, environmental sciences and policy, computational biology, and many more. Faculty collaborate extensively with NIH, the U.S. Department of Agriculture, the Smithsonian Institution, and other national, state, and local agencies that offer diverse opportunities for partnerships with governmental and non-profit organizations and research groups.

Applicants must have a Ph.D. and demonstrate scholastic excellence and productivity, including a robust publication record, contributions to teaching and mentoring, and extension and/or outreach experience.

We strive to recruit established or rising thought leaders, particularly those that increase the diversity of skill-sets, cultures, and backgrounds represented in our department. The University is within the culturally-rich Washington D.C. metropolitan area and close to forests, mountains, and beaches offering opportunities for a variety of interests. In particular, we encourage applications by all those who want to join us in building a climate of inclusiveness, where research, teaching and extension thrive.

Please contact the search committee chair - Dr. David Hawthorne (umdentomology@umd.edu) with questions.

Anahi Espindola <anahiesp@umd.edu>

UMassachusetts EvolutionaryPhysiology

TT Animal Physiology Position: https://-careers.umass.edu/amherst/en-us/job/510148/-assistant-professor-biology-animal-physiology Job Description

The Department of Biology at the University of Massachusetts Amherst (https://www.bio.umass.edu/-biology/) invites applicants for a full-time, tenure-track position in animal physiology.This is an academic year appointment at the level of Assistant Professor.

We seek to hire a Comparative, Environmental, or Ecological Animal Physiologist whose research focuses on the mechanistic basis for physiological processes, physiological responses to environmental change, the evolution of physiological systems, or related areas. We emphasize the importance of the use of physiological tools in conjunction with -omics level approaches to elucidate connections between genotype and phenotype. The successful candidate will be expected to establish a high caliber, externally funded research program, effectively teach and mentor both graduate and undergraduate students, and contribute to service in support of the department and college. Of particular importance, the successful candidate will have a demonstrated understanding of the strength that is brought to science through diversity, equity, inclusivity, and accessibility. This new faculty member would complement our existing and growing strength in organismal biology, where we have a strong collaborative research core with research in animal physiology, functional morphology, functional genomics, behavior, and evolution.

Lecturer Position: https://careers.umass.edu/amherst/-en-us/job/509765/lecturer-biology-departmentcns Job Description

The Department of Biology at the University of Massachusetts Amherst (https://www.bio.umass.edu/-biology/) invites applicants for a full-time (9-month academic year), non-tenure track lecturer for classroom instruction in introductory physiology.

Primary responsibilities will include classroom instruc-

tion in Introductory Physiology (Biol 288) that is one of the 'core' second year courses in the Biology Department, as well as teaching 1-2 other core courses in the undergraduate biology curriculum. This person will also perform service in support of the mission and goals of the Department and College.

Alexander R. Gerson, Ph.D. Associate Professor Biology Department University of Massachusetts, Amherst

Amherst, MA United States argerson@umass.edu alexandergerson.com 413-545-2782

Alexander Gerson <argerson@umass.edu>

UMichigan InsectCollectionManager

Posting Title: Research Museum Collection Manager - Insect Division

Posting salary range: $48,000 - $56,000

The Department of Ecology and Evolutionary Biology (EEB) is seeking a Collection Manager for the Museum of Zoology (UMMZ) Insect Division (https://-/lsa.umich.edu/ummz/insects.html), located at the new state of the art Research Museums Center (RMC) in Ann Arbor, Michigan. The UMMZ develops and maintains zoological collections explicitly for use in research and education, benefiting science, society, and the university at large. The scientific role of the UMMZ is to train students and engage in systematic biology and biodiversity studies. These broad and overlapping fields entail the discovery and study of the diversity of organisms, their evolutionary relationships, and the processes involved in the origin of biodiversity. EEB has a highly diverse and collaborative group of researchers in evolutionary biology and biodiversity science. We are looking for an outstanding individual to become the Insect Collection Manager and join the team of other curators and collection managers at the UMMZ (and Herbarium), as well as other researchers at the University of Michigan.

The UMMZ Insect Collection is worldwide in its geographic scope and one of the largest of its type, including more than 4.5 million prepared specimens. The collection is particularly strong in North, Central and South American diversity, with a taxonomic focus on Orthoptera that comprises the second largest holdings in the western hemisphere (second only to the Academy of Natural Sciences in Philadelphia), as well as the Acari, which is one of the largest collections of mites and ticks in the country. Historical collections date back to the early 20th Century and include irreplaceable samples from North and Central America. Other large collections, including synoptic holdings of taxa and/or geographic regions (e.g., the Odonata), are also represented.

We seek candidates with a strong commitment to a vision of the Insect Collection as a key resource for research and education within the University and to the entomological community nationally and internationally. The position offers exciting opportunities for mentoring, and career development, including research within the context of the Insect Division curatorial priorities in the biodiversity sciences.

Responsibilities: 1. Growth, Maintenance and Digitization (GMD) of the insect collections, including specimens and tissue/DNA samples, field notes, geographic and environmental data, and digital assets such as photography. Activities will include organizing and participating in field expeditions (possibly including international collecting), coordinating and contributing directly to digitization efforts (including imaging of specimens and participation on iNaturalist). These work activities involve routine maintenance and updating of the Specify database through which our holdings are made accessible to researchers across the world. These activities are performed in ongoing coordination with faculty curators and require regular attention to our electronic, searchable database. 2. Working with faculty curators and the Museums registrar to develop and implement policies, standards, and procedures. This involves standard operating procedures for acquisition, accessioning, processing interdepartmental and interinstitutional loans, databasing, archival and use of genomic, digital resources and other ancillary collections. Reviewing, updating, and enhancing the insect collections management plan. 3. Daily management of staff workers, work-study students, graduate curatorial assistants, and other personnel, as well as support for student and visiting researchers who are utilizing the research collections and/or enhancing collection resources, in coordination with faculty curators. This includes creating an inclusive work environment for training and supervision in all aspects of specimen preparation and collection maintenance tasks, database use, and geo- referencing and digital imaging of specimens as well as collections-based research practices when appropriate. 4. Participate in grant writing to secure funding for research projects that support and enhance collection resources such as collection- based grants. 5. Coordination of and participation in research visits and educational tours of the collections and other museum outreach activities.

Required Qualifications: An advanced degree (master's or doctoral) in biology, zoology, or related fields with

3-5 years of insect systematics experience is required. Demonstrable familiarity with research collections and expertise with insect diversity is required. Experience with database use and management is desirable, but not required.

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UNebraska DiseaseEvolution

The School of Biological Sciences at the University of Nebraska - Lincoln is seeking candidates for an academic-year, tenure-track, assistant professor position integrative approaches to study causes, processes, and prevention of diseases in the natural world. I appreciate your help to reach as many potential candidates as possible who might be interested in exploring this opportunity further.

The full position description is at https://-biosci.unl.edu/integrative-disease-biology . Audrey L. Atkin Associate Professor and Vice Director LIFE Program Coordinator University of Nebraska???Lincoln School of Biological Sciences 402-472-2810 Pronouns: she/her/hers

Audrey Atkin <aatkin@unl.edu>

UNorthCarolina Greensboro PollinatorEvolution

Plant and/or animal pollination biologist at UNCG

The Department of Biology (https://biology.uncg.edu/-about/the-department/) at University of North Carolina Greensboro (UNCG) seeks an innovative biologist in any biological subdiscipline at the Assistant/Associate/Full Professor rank who studies plant and/or pollinator biology. With nearly all flowering plants requiring pollinators, the pollination crisis is impacting both human and environmental health. Therefore, we are seeking an individual to take an intellectual leadership role in UNCG's plant and pollinator research including our state of the art Plant and Pollinator Center (PPC; https://-biology.uncg.edu/ppc/), integrate their work with our current strengths (e.g., honey bee microbiome, orphan crops, plant physiological and community ecology), and fit into the Department of Biology's highly collaborative environment. We are searching broadly for a candidate who works at any scale from molecules to landscapes, can integrate with other approaches to unlock the biology of plants, pollinators, and/or their interactions, and to contribute to solving the growing global problem of pollination and food security in the face of climate change. The Assistant Professor position will be tenure track and Associate and Full Professor rank will be tenured and provide leadership opportunities at the Plant and Pollinator Center and in developing priorities for UNCG's development campaign. Exceptional candidates will be considered for the Florence Shaeffer Distinguished Professorship in the Sciences.

UNCG is a minority-serving institution with an undergraduate population of 56% ethnic minority students and 67% female students. The Department of Biology seeks to attract an equally diverse applicant pool for this position. UNCG is an inclusive learning community with a campus-wide culture that embodies access, equity, diversity, excellence, and collaboration. UNCG is 1 of only 57 doctoral institutions recognized by the Carnegie Foundation for both higher research activity and community engagement. With an enrollment of more than 19,000 students, including 3,500 graduate students, and 2,800 faculty and staff, UNCG is one of the most diverse universities in the UNC system. UNCG is located in a metropolitan area of more than 1.6 million in the Piedmont region of North Carolina with 20 regional universities and community colleges, and one hour from the Raleigh, Durham, Research Triangle Park. UNCG is an EOE/Affirmative Action/M/F/D/V employer and is strongly committed to increasing faculty diversity.

Candidates must hold or anticipate a Doctorate in Biology or related discipline when starting the position on 8/1/22, but postdoctoral experience is preferred. Position is available August 2022 pending final budgetary approval. Inquiries should be sent to Dr. Sally Koerner (sekoerne@uncg.edu), chair of the search committee.

To apply, visit http://spartantalent.uncg.edu/ and click on "Faculty-Tenure Stream", scrolling to "Pollination Biologist" (Position #964). You will need: 1) Cover Letter; 2) Curriculum Vitae; 3) Statement of Research (max 2p); 4) Teaching and Mentoring Statement (max 2p);5) Diversity Statement; 6) optional: three re-prints/pre-prints that best showcase your research program; 7) Contact information for three reference letters. Review of applications will begin on November 15, 2021 and

continue until the position is filled.

All qualified applicants will receive consideration for employment without regard to race, color, national origin, religion, sex, gender identity, age, sexual orientation, genetic information, status as an individual with a disability, or status as a protected veteran. For individuals with disabilities requiring disability-related accommodations in the application and interview process, please email us at askeeo@uncg.edu. Final candidates are subject to criminal and sex offender background checks. UNCG participates in E-Verify. Federal law requires all employers to verify the identity and employment eligibility of all persons hired to work in the United States.

Sally Koerner <sekoerne@uncg.edu>

UNotreDame VectorEvolution

Open Rank, Tenure-Track Faculty Position in Vector Biology at Notre Dame

Description

The Department of Biological Sciences at the University of Notre Dame seeks to recruit tenure-track faculty?¿'at an academic rank of Assistant, Associate, or Full Professor??"whose research program focuses on the biology of arthropod vectors of human disease or vector-pathogen-host interactions. Individuals with expertise in any area of vector biology are welcome to apply, including vector ecology, evolution, behavior, physiology, immunity, and genomics.

Qualifications

The University of Notre Dame seeks to attract, develop, and retain faculty who are highly productive with an established, or strong potential to establish, a vigorous externally funded research program that complements and synergizes with others in the department and across the University. Research in the Department of Biological Sciences is organized around three pillars of (1) Cellular, Molecular and Regenerative Biology; (2) Infectious Disease and Global Health; and (3) Ecology, Evolution, and Environmental Change. Examples of research programs that fall within or span across these pillars include those focused on evolution, genomics, pathogenesis, physiology, disease ecology, epidemiology, and climate change.

The University of Notre Dame seeks to attract, develop, and retain the highest quality faculty, staff and administration. The University is an Equal Opportunity Employer, and is committed to building a culturally diverse workplace. We strongly encourage applications from female and minority candidates and those candidates attracted to a university with a Catholic identity. Moreover, Notre Dame prohibits discrimination against veterans or disabled qualified individuals, and requires affirmative action by covered contractors to employ and advance veterans and qualified individuals with disabilities in compliance with 41 CFR 60-741.5(a) and 41 CFR 60-300.5(a).

New faculty will be dedicated educators and will contribute to the undergraduate and graduate teaching mission of the Department of Biological Sciences, and join an integrative, collaborative, and inclusive research community with expertise that spans the breadth of the life sciences. Existing faculty in the Department and across the University have active research partnerships with international field sites in Africa, Latin America, Asia, and the South Pacific. Vector biologists at Notre Dame are supported by a variety of Centers and Institutes, such as the Eck Institute for Global Health, Environmental Change Initiative, Center for Rare and Neglected Diseases, Institute for Precision Health, Lucy Family Institute for Data and Society, and Center for Research Computing. Department faculty have access to state-of-the-art genomics, bioinformatics, insect rearing, computing, mass spectrometry, proteomics, and imaging cores, specialized BSL-3 containment laboratories, and an AAALAC-accredited animal facility. Information on department and college faculty and facilities can be found at http://biology.nd.edu and http://science.nd.edu, respectively.

For additional information about working at the University of Notre Dame and various benefits available to employees, please visit http://hr.nd.edu/why-nd. The University of Notre Dame supports the needs of dual career couples and has a Dual Career Assistance Program (http://hr.nd.edu/employment-opportunities/-dualcareer/) in place to assist relocating spouses and significant others with their job search.

Application Instructions

Review of applications will commence on November 1, 2021. Applicants should submit in PDF format: a cover letter; curriculum vitae; names and contact information of three professional references; 2-page statement of research interests and future research plans; 1-2-page statement of teaching and mentoring philosophy, approach, and experiences; and 1-page statement that addresses the following topics related to diversity, equity, inclusion, and belonging: knowledge and understanding,

track record of activities to date, and plans for contributing at Notre Dame. Applications should be submitted to http://apply.interfolio.com/94790. Interested individuals are welcome to contact the search chair, Alex Perkins, at taperkins@nd.edu.

Equal Employment Opportunity Statement

The University of Notre Dame seeks to attract, develop, and retain the highest quality faculty, staff and administration. The University is an Equal Opportunity Employer, and is committed to building a culturally diverse workplace. We strongly encourage applications from female and minority candidates and those candidates attracted to a university with a Catholic identity. Moreover, Notre Dame prohibits discrimination against

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This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at http://life.biology.mcmaster.ca/~brian/evoldir.html

UOklahoma EvolutionaryBehaviorGeneticist

Faculty position in Genetics

The University of Oklahoma College of Arts and Sciences is excited to announce an open faculty position at any rank in the Department of Biology. As part of our Biology of Behavior strategic initiative, the department continues to build an internationally recognized center of excellence in studying mechanisms of organismal behavior. We are searching for creative, collaborative thinkers to join us in taking an integrative and multifaceted approach to revealing the ultimate and proximate causes of behavior. The Department of Biology already has a strong focus on the study of animal behavior, including 16 complementary faculty research programs that investigate physiological, developmental, and evolutionary processes that underlie how animals behave.

We seek to enhance the collaborative momentum of this initiative by hiring a Geneticist who uses leading-edge molecular, genomic, transcriptomic, proteomic and/or related methods to understand the specification, regulation, and/or evolution of organismal behavior. We invite individuals with creative, innovative, and dynamic research programs who would like to be part of a strong group of researchers to apply for this faculty position.

The anticipated start date for this position is August 2022. For additional details, please visit https://www.ou.edu/cas/biology and http://www.ou.edu/cas/biology . QUALIFICATIONS

Candidates must have a Ph.D. degree and a record of outstanding achievement as evidenced by publications. Preferred candidates will have a promising (Assistant professor) or externally funded (Associate/Full professor) research program. The successful candidate will be expected to provide excellent training for graduate students and postdocs and mentor undergraduates in research and will contribute to undergraduate and graduate teaching (one course per semester) in areas such as genetics, genomics, behavioral genetics, and/or in their specific area of expertise.

APPLICATION INSTRUCTIONS

Applicants should submit a cover letter describing their interest in the position, a full curriculum vitae, research and teaching statements, a statement on contributions to diversity, equity, and inclusion, and up to five selected reprints/preprints as PDF files. Applications should be submitted online via Interfolio at https://apply.interfolio.com/94332 . Applicants at the rank of Assistant Professor should also arrange to have three signed letters of reference uploaded to their Interfolio application. Applicants at the rank of Associate Professor or Professor may submit names and contact information for three references in lieu of letters.

Screening of candidates will begin October 20 and will continue until the positions are filled.

EQUAL EMPLOYMENT OPPORTUNITY STATEMENT

The University of Oklahoma, in compliance with all applicable federal and state laws and regulations does not discriminate on the basis of race, color, national origin, sex, sexual orientation, genetic information, gender identity, gender expression, age, religion, disability, political beliefs, or status as a veteran in any of its policies, practices, or procedures. This includes, but is not limited to: admissions, employment, financial aid, housing, services in educational programs or activities, or health care services that the University operates or provides.

Laura Stein

Assistant Professor Department of Biology University of Oklahoma Pronouns: she/her

http://laurastein.weebly.com laura.stein@ou.edu

UParis Saclay EvolutionaryBiol

A “Professeur Junior” (Tenure Track) position will be available at Université Paris Saclay.

Note : as teaching will be in French, the following announcement is in French.

Chaire de professeur junior

Intitulé : Biologie des systèmes - Approches en génomique environnementale pour la modélisation du métabolisme de communautés microbiennes et l’étude de son évolution dans les écosystèmes

Nom du projet : ModelOmics Laboratoire d’accueil et direction : UMR 8030 CNRS-CEA-Univ Evry, ≪ Génomique Métobolique ≫, Directeur Patrick WINCKER

Mots-clés : modélisation, biologie computationnelle, biologie des systèmes, génomique environnementale, écoévolution du métabolisme microbien

Durée visée : 6 ans Thématique scientifique : métagénomique environnementale, métabolisme microbien dans les écosystèmes

L’UMR Génomique Métabolique a pour thèmes principaux l’exploration de la diversité du vivant par l’analyse des (méta)génomes, la compréhension fine du métabolisme microbien et la diversification de la chimie du vivant par biologie synthétique. L’unité développe des approches interdisciplinaires qui vont de la génomique à l’évolution ≪ supervisée ≫ des micro-organismes via la biologie moléculaire, l’ingénierie métabolique, la biochimie, la bioinformatique et la chimie analytique. Elle est impliquée dans plusieurs consortia internationaux tels que Tara Oceans (exploration métagénomique marine) et ERGA (catalogue génomique de la biodiversité Européenne) ce qui participe à son rayonnement. Dans ce contexte particulier de la génomique environnementale, il est apparu que la diversité d’un écosystème ne tient pas que du hasard et qu’elle contribue à son équilibre. Pour développer des stratégies innovantes d’exploration de données, un recrutement à l’interface de la génomique et de la recherche méthodologique permettrait la modélisation du métabolisme et l’exploration fonctionnelle de communautés microbiennes complexes, afin d’identifier des déterminants métaboliques d’intérêt majeur pour l’environnement mais aussi des activités enzymatiques pour des applications en biologie synthétique.

Les recherches viseront par des approches bioinformatiques combinant modélisation et intégration de données multi-omiques, à comprendre la structuration et l’adaptation de consortia de microorganismes (virus, bactéries, archées et eucaryotes) à leurs environnements, en déterminant leurs capacités fonctionnelles individuelles et collectives (interactions, symbioses/holobiontes). Il s’agira de développer des méthodes de modélisation des réseaux métaboliques à l’échelle des organismes et des communautés et d’exploiter les larges quantités de données disponibles notamment par des techniques d’exploration de réseaux multicouches et d’apprentissage supervisé ou non. Les attendus du projet sont de : i) déchiffrer les relations métaboliques au sein des communautés microbiennes et les associer avec les traits fonctionnels des organismes pour définir leurs rôles dans les cycles biogéochimiques, ii) identifier de nouvelles fonctions métaboliques et iii) étudier l’évolution des familles d’enzymes et voies métaboliques chez les bactéries et protistes. Ce poste en biologie computationnelle et des systèmes s’appuiera sur les compétences expérimentales en biochimie et en (méta)génomique de l’UMR, en relation avec les laboratoires de statistique et d’informatique de l’Université Paris-Saclay.

Pour plus de détails, voir https://-www.genoscope.cns.fr/tara/localdata/data/-ModelOmics_UMR8030.pdf Contacts : eric.pelletier@genoscope.fr

– Eric Pelletier

Note : Si j’envoie des courriels tard ou le week-end, je n’attends pas de réponse en dehors des heures de travail Note : If it suits me to answer and send emails late or during the week-ends, this does not mean I expect responses out of normal working hours.

Eric Pelletier <eric.pelletier@genoscope.cns.fr>

UParis Saclay MetabolicModelling

A “Professeur Junior” (Tenure Track) position will be available at Université Paris Saclay.

Note : as teaching will be in French, the following announcement is in French.

Chaire de professeur junior

Intitulé : Biologie des systèmes - Approches en génomique environnementale pour la modélisation du

métabolisme de communautés microbiennes et l'étude de son évolution dans les écosystèmes

Nom du projet : ModelOmics Laboratoire d'accueil et direction : UMR 8030 CNRS-CEA-Univ Evry, ≪ Génomique Métobolique ≫, Directeur Patrick WINCKER

Mots-clés : modélisation, biologie computationnelle, biologie des systèmes, génomique environnementale, écoévolution du métabolisme microbien

Durée visée : 6 ans Thématique scientifique : métagénomique environnementale, métabolisme microbien dans les écosystèmes

L'UMR Génomique Métabolique a pour thèmes principaux l'exploration de la diversité du vivant par l'analyse des (méta)génomes, la compréhension fine du métabolisme microbien et la diversification de la chimie du vivant par biologie synthétique. L'unité développe des approches interdisciplinaires qui vont de la génomique à l'évolution ≪ supervisée ≫ des micro-organismes via la biologie moléculaire, l'ingénierie métabolique, la biochimie, la bioinformatique et la chimie analytique. Elle est impliquée dans plusieurs consortia internationaux tels que Tara Oceans (exploration métagénomique marine) et ERGA (catalogue génomique de la biodiversité Européenne) ce qui participe à son rayonnement. Dans ce contexte particulier de la génomique environnementale, il est apparu que la diversité d'un écosystème ne tient pas que du hasard et qu'elle contribue à son équilibre. Pour développer des stratégies innovantes d'exploration de données, un recrutement à l'interface de la génomique et de la recherche méthodologique permettrait la modélisation du métabolisme et l'exploration fonctionnelle de communautés microbiennes complexes, afin d'identifier des déterminants métaboliques d'intérêt majeur pour l'environnement mais aussi des activités enzymatiques pour des applications en biologie synthétique.

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Pour plus de détails, voir https://-www.genoscope.cns.fr/tara/localdata/data/-ModelOmics_UMR8030.pdf Contacts : eric.pelletier@genoscope.fr

– Eric Pelletier

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Note : If it suits me to answer and send emails late or during the week-ends, this does not mean I expect responses out of normal working hours.

UPorto BiodiversityManager

Project Manager position

Applications are open for a project manager position (Reference: BIOPOLIS 2021-12) to be hosted by Associação BIOPOLIS/CIBIO -Research Center in Biodiversity and Genetic Resources, University of Porto (Portugal). The project manager position is to be contracted in the scope of the project "BIOPOLIS - Teaming to Upgrade to Excellence in Environmental Biology, Ecosystem Research and AgroBiodiversity".

The project BIOPOLIS aims to support the upgrade of CIBIO to a Center of Excellence in Environmental Biology, Ecosystem Research, and AgroBiodiversity through a teaming with a leading scientific institution, the University of Montpellier (France), and with the participation of a business partner, the Porto Business School (PBS - University of Porto, Portugal). Rooted on an ambitious Business Plan, the project envisions to establish BIOPOLIS as one of the best international Centers of Excellence in Environmental Biology, Ecosystem Research and AgroBiodiversity, with the capacity for spreading excellence towards innovation in the areas of Environment, Biodiversity and Agriculture, and thereby contributing to socioeconomic development at the regional and national levels.

Application deadline: October 22, 2021

For more information: https://cibio.up.pt/fotos/-editor2/Open_Positions/BIOPOLIS_2021_12.pdf

CIBIO-InBIO Divulgaçāo

USouthernCalifornia MarineEvolution

The Marine and Environmental Biology (MEB) section of the Department of Biological Sciences at the University of Southern California invites applications for a tenure-track Assistant Professor position in Marine Biology (broadly defined) focusing on interactions between marine organisms and their chemical and physical environments. To build on our existing strengths in this area, we aim to recruit an accomplished and innovative scientist whose work addresses these interactions and brings expertise in any of our core research areas, including ecology, evolution, biological oceanography, biogeochemistry, microbiology, genetics/genomics, or physiology. Candidates with a vision for developing an interdisciplinary research program bridging ecology, evolution, and oceanography are especially encouraged to apply. This search will prioritize candidates who will advance diversity, equity, and inclusion (DEI) in our department through their research, teaching, and/or service.

Applicants should have a Ph.D. (or equivalent) and demonstrated ability to conduct compelling independent research and are expected to establish an externally funded research program. The review of applications will begin on December 1, 2021. To apply, please submit a single pdf file containing a cover letter, curriculum vita, research vision, teaching statement, a description of your commitment to increasing DEI in the sciences, and contact information for three references. The university, college, and MEB section are committed to DEI in STEM, and applicants can find more information and links athttps://dornsife.usc.edu/meb/dei-information/-.In order to be considered for this position, applicants are required to submit an electronic USC application; follow this job link or paste in a browser:https://-usccareers.usc.edu/job/los-angeles/assistant-professor-in-marine-biology/1209/15254285984.For further inquiries, please contactmeb_search@usc.edu.

USC is an equal opportunity, affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, disability, or any other characteristic protected by law or USC policy. USC will consider for employment all qualified applicants with criminal histories in a manner consistent with the requirements of the Los Angeles Fair Chance Initiative for Hiring ordinance.

Suzanne Edmands <sedmands@usc.edu>

UVirginia EvoDevo

Assistant Professor ï¿½ Developmental Biology

The University of Virginia invites applications for a tenure-track Assistant Professor position in the highly interdisciplinary Department of Biology in the College of Arts & Sciences. We seek applicants whose research addresses fundamental problems in developmental biology, including regeneration and homeostasis, or bridges topics in developmental biology with other disciplines, potentially complementing existing strengths within the Department. Both traditional and non-traditional experimental models are welcome. The Department of Biology provides state of the art facilities in a collaborative environment, further enhanced by close ties to Schools of Medicine, Data Science, and Engineering. The successful applicant will be expected to establish a rigorous, independent, and externally funded research program and to teach at undergraduate and graduate levels. We seek to recruit faculty from diverse backgrounds and faculty who value diversity and are passionate about having a positive impact on society and the world. The position will begin in August, 2022.

Applicants must have a Ph.D. and post-doctoral research experience. A successful applicant will also have research accomplishments and plans of outstanding quality and significance, and a commitment to excellence in teaching and mentoring. Enthusiasm for participating in a diverse, collegial, interdisciplinary, and collaborative environment is strongly preferred.

TO APPLY: **Deadline for receipt of applications is December 3, 2021.*** Apply online at https://uva.wd1.myworkdayjobs.com/en-US/UVAJobs/job/Charlottesville-VA/Assistant-Professor-of- Biology_R0029822 , complete the application, and upload to the resume box a SINGLE PDF, containing the following components in order: 1. Cover letter that succinctly highlights your most significant research accomplishments, experiences, and qualifications. 2. CV that includes contact information

for three references. 3. A research statement that includes your vision for your research program at the university (â 3 pages). 4. A statement on teaching and scientific mentoring that details your experience and goals. 5. A statement that describes your demonstrated past experience working on issues of diversity, equity and inclusion and/or working with diverse populations and/or cultivating a diverse, equitable, and inclusive culture in your work (teaching, research, and service). **Applications that do not have all the required components will not receive full consideration.***

For questions regarding the position, please contact search chair David M. Parichy, Professor, at uva_devbiosearch@virginia.edu.

For questions about the application process, please contact Richard Haverstrom, Faculty Search Advisor, at atrkh6j@virginia.edu.

The University will perform background checks on all new faculty hires prior to making a final offer of employment. UVA assists faculty spouses and partners seeking employment in the Charlottesville area. To learn more please visit https://dualcareer.virginia.edu. For more information about UVA and the Charlottesville community please see http://www.virginia.edu/life/-charlottesville and https://embarkcva.com/.

COVID Vaccination Requirement The University of Virginia expects all current and new employees (UVA Health System and Academic), to be vaccinated against COVID-19. If hired to work within the University Health System, you will be required to provide proof of vaccination or be willing to receive the vaccination. Employees may request a medical or religious exemption from vaccination.

If hired to work on the Academic side of the University, excluding the School of Medicine, School of Nursing, UPG, and the Health Systems Library, you will be required to provide proof of vaccination or be willing to submit to mandatory, weekly prevalence testing. Employees that are working 100% remotely will not be subject to weekly prevalence testing; however, if the employee works on UVA Grounds (including the Medical Center) even intermittently, then they are required to be tested for COVID-19 once per week on an indefinite basis and follow masking mandates.

NOTE: Some medical and safety-sensitive positions require vaccination and are not eligible for an exemption. For more information on how the vaccination and testing requirements will apply to you at your work location, see the UVA New Hire Vaccination Requirements webpage.

The University of Virginia, including the UVA Health System which represents the UVA Medical Center, Schools of Medicine and Nursing, UVA Physician's Group and the Claude Moore Health Sciences Library, are fundamentally committed to the diversity of our faculty and staff. We

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UWarsaw LabManager AncientDNA

Lab manager position available at the Laboratory of Paleogenetics and Conservation Genetics at the University of Warsaw (Poland). The position is financed by the National Science Centre Poland as a part of "Paleogenomic analysis of small mammals in the reconstruction of species responses to climate change" research project.

The position predominantly involves logistic support of the Laboratory. In particular: - monitoring the Laboratory's reagent and equipment stock and procurement - organization of work in the laboratory and ensuring users' adherence to cleanliness and safety rules in the laboratory - participation in laboratory work, such as ancient DNA extraction or preparation of DNA libraries for high-throughput sequencing.

Requirements: - Master's or PhD degree in biology, biotechnology, or molecular biology or similar. - Good knowledge of molecular genetics, experience in laboratory work. Experience in DNA extraction, preparation of DNA libraries for sequencing and/or in ancient DNA oriented techniques highly welcomed. - Motivation to work - Knowledge of English at a level allowing to communicate freely and to read specialized literature with understanding

We offer: - a friendly and motivating working environment in young and dynamic team - participation in an exciting research project using the state-of-the- art research techniques

Start date January 2022. Contract duration: up to 48 months (including a 6-month probation period)

The official advertisement can be found here*: https://www.uw.edu.pl/wp-content/uploads/2021/-10/cent-46-2021_job-offer_sonata-bis-10-baca_-en.pdf
*(the position is called "technician" in the advertisement because a "laboratory manager" position type does not officially exist at the University)

Please contact Mateusz Baca (m.baca@cent.uw.edu.pl) if you are interested in the position.

Cheers, Mateusz https://cent.uw.edu.pl/-en/laboratories/laboratorium-paleogenetyki-i-genetyki-konserwatorskiej Martyna Molak <martyna.molak@gmail.com>

UWolverhampton UK AnimalEvolution

Deadline: 03/10/2021 [note that there is not long left to apply].

We are seeking to appoint a Lecturer in Animal Ecology to join our vibrant School as part of the Animal Behaviour and Wildlife Conservation team at University of Wolverhampton, UK. You will need to demonstrate a depth and strength of knowledge to develop and deliver innovative learning, teaching and fieldwork on our Animal Behaviour and Wildlife Conservation programmes, as well as contribute to research and knowledge exchange. You will contribute also to the development and delivery of new programmes and fieldwork provision in this area.

You must have a good first degree in a relevant subject or equivalent and have either completed a PhD or be able to demonstrate significant experience in the field, for example as a consultant. We would particularly welcome applicants with subject expertise in freshwater ecology and population genetics, however other specialists will be considered on the basis of how this would complement the existing team, either through taxon expertise or methodological approaches. You should have a recognised teaching qualification (e.g. FHEA or PGCert) or be willing to undertake such a qualification during your employment. Experience in delivering teaching in a blended learning environment would be a benefit.

You must evidence the delivery of research outcomes that will contribute to the REF or KEF (Research Excellence or Knowledge Exchange Framework respectively); evidence of independent research in an area that complements current activity, with the capability of attracting support, or demonstrate plans to engage with one or more of the successful research areas that form part of the School's research portfolio. Good communication and organisational skills are essential attributes.

See https://jobs.wlv.ac.uk/wd/plsql/-wd_portal.show_job?p_web_site_id=-3045&p_web_page_id=457801 for more details.

"Maddock, Simon" <S.Maddock@wlv.ac.uk>

ValdostaStateU Georgia PopulationGenetics

Valdosta State University is hiring a Tenure-Track Assistant Professor in Population Genetics this Fall with applications due November 19th, 2021.

As a comprehensive institution of the University System of Georgia, Valdosta State University (VSU) is a welcoming, aware, and vibrant community founded on and dedicated to serving our communities' rich and diverse heritages.VSU is proud to have a highly diverse student body and we are seeking to recruit and retain outstanding candidates who exhibit a clear commitment to diversity and inclusion and who will enhance the diversity of our faculty and staff.Through excellence in teaching, basic and applied research, and service, VSU provides rigorous programs and opportunities that enrich our students, our university, and our region. As such, the VSU mission consists of three interrelated parts that includes a student mission, university mission and regional mission. The university is equally dedicated to the core values of community, including a commitment to practice civility, integrity and citizenship. As members of this community and proud Blazers we strive to uphold these core values for the advancement of the University.

Job Summary

TheDepartment of Biologyin the College of Science and Mathematics seeks applicants for a tenure track faculty position beginning August 1, 2022. The selected candidate will be responsible for teaching courses in the candidate's area of expertise, maintaining scholarly productivity, and participating in service at the department, college, and university levels. For more information on the department visithttps://-www.valdosta.edu/biology/. For more information contact Dr. Robert Gannon, Department Head, via email-rlgannon@valdosta.edu.

Responsibilities

The primary teaching responsibility will be upper-level laboratory courses in genetics, ecology and evolution and other electives related to the discipline for biology majors. Secondary teaching responsibilities may include majors and/or non-majors introductory biology courses

with lab components. The applicant will be expected to include undergraduate and/or graduate (MS) students in their research program. Maintain scholarly productivity and provide service to the department, college, and university. Typical Allocation of Duties: Teaching and scholarship - 80% Teaches classes and conducts/presents research in the employee's academic discipline. Service - 20% Participates in service at the department, college, and university levels.

Required Qualifications

Ph.D. at time of appointment in population genetics or closely related discipline; Demonstrated commitment to excellence in teaching and learning, as well as scholarship; Commitment to diversity and inclusion.

Preferred Qualifications

A record of effective teaching appropriate to the applicant's career stage; Ability to work effectively in a collaborative setting; A record of mentoring students of diverse backgrounds.

Proposed Salary

Commensurate with experience

Conditions of Employment

Employment is contingent upon successful completion of a background check. Position May Require Credit Check (if using P-Card, working with Cash, etc.).

Position Requires completion of VSU's Annual Compliance Training course (such as State Business Transactions, Drug Free Workplace, Anti-Harassment Policy, Introduction to Information Security, Workers Compensation, Motor Vehicle Policy, USG Ethics Policy, Conflict of Interest/ Outside Activities Policy, Leave Procedures for Faculty and Staff, Georgia Open Records Act, Family Educational Rights and Privacy Act (FERPA), and Contracts 101. Supervisory positions require training in FMLA and Worker's Compensation.

Equal Employment Opportunity

Valdosta State University is an Equal Opportunity educational institution and has a strong institutional commitment to diversity and inclusion. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including, but not limited to minorities and individuals with disabilities. Valdosta State University has a non-discrimination policy that includes sex, race, color, sexual orientation, religion, age, marital status, national origin, disability, and veteran status.

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To read the entire message look it up at http://life.biology.mcmaster.ca/~brian/evoldir.html

Vienna MathBiology

The University of Vienna has advertised a position as

Tenure-Track Professorship for Mathematical Biology

We are looking for a scientist with a strong record in developing and applying mathematical methods for problems from biology and/or medicine. S/he has established collaborations with empirical research groups and a successful history of procuring third-party funding. Examples of desired research areas are population genetics, genomics (or other -omics), ecology, epidemiology, human behavior, or cancer biology.

The University of Vienna offers a dynamic research environment and attractive working conditions in a city with an outstanding quality of life. The Faculty of Mathematics belongs to the leading mathematics departments in Europe. Biomathematics is one of its focal research fields and a designated area of specialization in its Master program. Possibilities for interdisciplinary research and cooperation in quantitative biology, genomics, evolution and ecology, and related fields are abundant at the University of Vienna and at other research institutions, with highly active groups in particular at the IST Austria, the Gregor-Mendel Institute, and the Veterinary Medical University of Vienna (see also www.evolvienna.at, www.popgen-vienna.at).

We expect the position holder to conduct top-level research, to create an internationally visible group, and to be enthusiastic for excellent teaching and supervision at all levels. Details for the application process are available online

https://univis.univie.ac.at/ausschreibungstellensuche/-flow/bew_ausschreibung-flow?_flowExecutionKey=_c565471AF-9F2F-E132-D046-486BBDD2484F_kAA4655E4-63BE-1410-6CA2-90A4F46A91E1&tid=88329.28 The application deadline is Jan. 10th, 2022. Informal inquiries can also be directed to Dr. Joachim Hermisson (joachim.hermisson@univie.ac.at).

– Joachim Hermisson Professor for Mathematics and Biosciences University of Vienna Department for Mathematics Nordbergstr. 15, 1090 Vienna, Austria and Max F.Perutz Laboratories Dr.-Bohrgasse 9, 1030 Vi-

enna, Austria phone: +43 (0) 1 4277 50648 email: joachim.hermisson@univie.ac.at www.mabs.at Joachim Hermisson <joachim.hermisson@univie.ac.at>

WashingtonU StLouis Biodiversity

ENVIRONMENTAL JUSTICE CLUSTER - THREE ASSISTANT PROFESSOR POSITIONS Departments of Anthropology and Biology, School of Arts & Sciences and the College of Architecture, Sam Fox School of Design & Visual Arts at Washington University in St. Louis

The Race and Ethnicity Cluster Hire Initiative at Washington University in St. Louis aims to build a world-class research program on race and diversity scholarship. As part of this initiative, the Departments of Anthropology and Biology in the School of Arts & Sciences and the College of Architecture in the Sam Fox School of Design & Visual Arts seek colleagues to fill three tenure-track faculty positions at the Assistant Professor level as part of a multi-disciplinary cluster hire focused on environmental justice.

The Department of Biology is looking for a colleague working at the nexus of urban biology and environmental justice. A wide range of research topics, including food security, access to natural resources, maintaining biodiversity, urban eco-evolutionary dynamics, energy production and use, water and land use, water and air quality, environmental toxicology/genetics, and human health, would fit this opening. The College of Architecture seeks a colleague with expertise in ecological systems and interests at the nexus of landscape architecture, architecture, and urban design and how these factors affect urban ecology and landscapes. The Department of Anthropology seeks a scholar conducting research on the economic, legal, and societal drivers behind environmental racism and the experiences and responses of affected peoples. Our shared goal is to create a community of scholars spanning the multi-faceted challenge of understanding the legacy and contemporary dynamics of environmental racism and justice, while looking ahead to an inclusive and equitable future.

Applicants should have a Ph.D. degree or terminal degree(s) in the appropriate area of study, significant scholarly accomplishments, and a dedication to excellence in graduate and undergraduate education. Diversity and inclusion are core values at Washington University, and the successful candidate will demonstrate the ability to create inclusive classrooms and environments in which a diverse array of students can learn and thrive. Successful candidates will develop an externally funded and internationally recognized research program and contribute significantly to both undergraduate and graduate curricula through teaching and mentoring students and to participate fully in Departmental, College, and University activities.

Deadline for full consideration of applications is 1 November 2021. Please clearly indicate which academic unit you are applying to, provide a cover letter, curriculum vita, research and teaching statements, diversity statement, three examples of scholarship, and names and contact information of three references to be submitted through Interfolio to the appropriate unit: Biology, https://apply.interfolio.com/92367; Anthropology, https://apply.interfolio.com/92350; and Architecture, https://apply.interfolio.com/92352 . Washington University in St. Louis is committed to the principles and practices of equal employment opportunity. It is the University's policy to recruit, hire, train, and promote persons in all job titles without regard to race, color, age, religion, sex, sexual orientation, gender identity or expression, national origin, protected veteran status, disability, or genetic information.

Each year Washington University publishes a Safety and Security brochure that details what to do and whom to contact in an emergency. This report also publishes the federally required annual security and fire safety reports, containing campus crime and fire statistics as well as key university policies and procedures. You may access the Safety and Security brochure at—https://-police.wustl.edu/clery-reports-logs/ "Ismail, Amanda" <a.ismail@wustl.edu>

WSL Birmensdorf ConservationGenomics

See job posting online and find link for uploading your application: https://apply.refline.ch/273855/-1228/pub/2/index.html The Swiss Federal Institute for Forest, Snow and Landscape Research WSL is part of the ETH Domain. Approximately 600 people work on the sustainable use and protection of the environment and on the handling of natural hazards.

The Research Unit Biodiversity and Conservation Biology studies the diversity of life, from genetic diversity to species and habitat diversity, as well as their inter-

actions. To strengthen our group Ecological Genetics, we are looking per April 2022 or by arrangement for a (f/m/d)

SCIENTIFIC COLLABORATOR IN CONSERVATION GENOMICS (80-100%)

You are responsible for the acquisition, implementation and publication of practice-oriented research projects in the field of conservation genetics, in particular with the application of genomic methods. You are the contact person for the federal government and cantons as well as other stakeholders in aspects relat-ed to applied conservation genetics, and communicate research results in various implementation products. In addition, you will be involved in teaching at university level and will supervise students' work in the field of conservation genetics. For this tenure-track position, we seek a person with interest for long-term employment. You have a doctoral degree in biology or environmental sciences, are experienced in the analysis of genomic data and spatial-genetic statistics, and have a good knowledge of the basics in conservation biology. You are interested in application-related questions and feel comfortable collaborating and interacting with stakeholders. You have a very good command of German and English, preferably also French and are adept at writing scientific and implementation publications. Working on your own responsibility, conceptually, and accurately as well as showing flexibility and motivation are your strengths, as is teamwork and the capability for communication.

Please send your complete application no later than end of November, 2021, to Michï¿½le Bucher, Human Resources WSL, by uploading the requested documents through our webpage. Applications via email will not be considered. Dr. Felix Gugerli, phone +41 (0)44 739 25 90, felix.gugerli(at)wsl.ch, will be happy to answer any questions or offer further information. The WSL strives to increase the proportion of women in its employment, which is why qualified women are particularly called upon to apply for this position.

Felix Gugerli Kuenzle, PhD Senior Scientist / Head "Ecological Genetics" Swiss Federal Research Institute WSL Research Unit Biodiversity & Conservation Biology Zuercherstrasse 111 CH-8903 Birmensdorf

SWITZERLAND

phone: +41-(0)44-739-2590 fax: +41-(0)44-739-2215 http://www.wsl.ch/info/mitarbeitende/gugerli/-index_EN felix.gugerli@wsl.ch felix.gugerli@wsl.ch

YorkU PollinationEvolution

Position Rank: Full Time Professorial Stream - Assistant Professor Discipline/Field: Pollination Ecology Home Faculty: Science Home Department/Area/Division: Biology Affiliation/Union: YUFA Position Start Date: July 1, 2022

Pollination Ecology, Department of Biology, Faculty of Science, York University

The Department of Biology, Faculty of Science, York University invites highly qualified candidates to apply for a professorial stream tenure-track appointment in Pollination Ecology at the Assistant Professor level, to commence July 1, 2022. Salary will be commensurate with qualifications and experience. All York University positions are subject to budgetary approval.

A PhD in Biology and relevant postdoctoral experience is required, with a promise of excellence in research and in teaching. Applicants should have a clearly articulated program of research and specialize in pollination systems where bees are the principal pollinators. Candidates should have research expertise in pollination ecology that complements and is synergistic with those carried out by York University's Centre for Bee, Ecology, Evolution and Conservation researchers (BEEc, https:/-/www.yorku.ca/bees/). Research by BEEc currently spans bee taxonomy and systematics, behavioural ecology, evolution, genetics and genomics and conservation.

The successful candidate will be expected to engage in outstanding, innovative, and externally funded research at the highest level. Candidates must provide evidence of research excellence or promise of research excellence of a recognized international caliber as demonstrated in their research statement; a record of publications (or forthcoming publications) with significant journals in the field; presentations at major conferences; awards and accolades, and strong letters of reference.

The position will involve graduate teaching and supervision, as well as undergraduate teaching, and be eligible for prompt appointment to the Faculty of Graduate Studies. Candidates must show evidence of or the potential for superior teaching and mentoring of undergraduate and graduate students, as demonstrated though a teaching statement, teaching accomplishments and pedagogical innovations including in high priority areas such as experiential education and technology enhanced

learning; teaching evaluations; and strong letters of reference.

York is a leading international teaching and research university, and a driving force for positive change. Empowered by a welcoming and diverse community with a uniquely global perspective, we are preparing our students for their long-term careers and personal success. Together, we can make things right for our communities, our planet and our future.

York University has a policy on Accommodation in Employment for Persons with Disabilities and is committed to working towards a barrier-free workplace and to expanding the accessibility of the workplace to persons with disabilities. Candidates who require accommodation during the selection process are invited to contact Professor Amro Zayed, Chair of the Search Committee at biojobs@yorku.ca .

York University is an Affirmative Action (AA) employer and strongly values diversity, including gender and sexual diversity, within its community. The AA Program, which applies to women, members of visible minorities (racialized groups), Aboriginal (Indigenous) people and persons with disabilities, can be found at http://acadjobs.info.yorku.ca/ or by calling the AA line at 416-736-5713. Applicants wishing to self-identify as part of York University's Affirmative Action program can do so by downloading, completing and submitting the form found at: http://acadjobs.info.yorku.ca/affirmative-action/self-identification-form/ .All qualified candidates are encouraged to apply; however, Canadian citizens, permanent residents and Indigenous peoples in Canada will be given priority. No application will be considered without a completed mandatory Work Status Declaration form which can be found at http://acadjobs.info.yorku.ca/affirmative-action/work-authorization-form . The deadline for receipt of completed applications is November 19, 2021. A letter of application with an up-to-date curriculum vitae, a statement of research and teaching interests a statement of how your research complements and synergizes with BEEc faculty, three reprints, and names and contact information for three referees should be sent to: Professor Amro Zayed, Chair of the Search Committee, Faculty of Science, York University, 4700 Keele Street, Toronto, Ontario M3J 1P3, biojobs@yorku.ca.

Posting End Date: November 19, 2021

Ida Conflitti, PhD

Research Project Manager

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This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at http://life.biology.mcmaster.ca/~brian/evoldir.html

Other

AcousticAdaptation UnpublishedData

Dear all,

We are currently conducting a meta-analysis on the acoustic adaptation hypothesis across animals. We aim to test whether habitat structure predicts animal vocalisations (within and across species) and specifically, if species inhabiting dense vegetation are prone to vocalise at lower frequencies, narrower frequency ranges, and have longer inter-element intervals compared to species living in open areas.

As meta-analyses are affected by publication bias, we are looking for unpublished datasets that quantified acoustic variables across different types of habitat, within and/or across species. Preferably, the dataset should include sample size and mean estimate for each variable.

In case you have, or know of such unpublished data sets, please let's get in touch - we would be really happy to hear about it from you! Moreover, we would be very grateful if you could point us to published works that provide this type of information but may go unnoticed in database searches applying search terms like 'acoustic adaptation', 'song', 'acoustic', 'habitat' and 'vegetation'.

For any suggestions or questions please email: barbara.freitas@mncn.csic.es

Thank you very much in advance!

Bárbara Freitas (MNCN-CSIC, Madrid and EDB, Toulouse)

with

Tim Janicke (CEFE-CNRS, Montpellier) Borja Milá (MNCN-CSIC, Madrid) Christophe Thébaud (EDB, Toulouse)

Bárbara Freitas PhD Student Museo Nacional de Ciencias Naturales (MNCN) Consejo Superior de Investigaciones Científicas (CSIC) Calle José Gutiérrez Abascal 2 Madrid 28006, Spain & Laboratoire Ãvolution et Diversité Biologique (EDB) Université Toulouse III Paul Sabatier 118, route de Narbonne 31062 Toulouse cedex 9, France

barbara.freitas@mncn.csic.es +351 965259456

Bárbara Freitas <barbara.freitas@mncn.csic.es>

Biodiversity collaboration

Dear colleagues, I hope this email finds you well!

As the new Tiputini Biodiversity Station Director, it is an honor for me to invite you collaborate with us in this new project.

Under my Direction, we will seek to transform the Tiputini Biodiversity Station in a beacon for scientific knowledge, an observatory for the conservation of the region, and a more active academic site.

I really hope you will join us and choose to do your research in this unique tropical site. It is unique because it is located within the world's greatest biodiversity hotspot, the hyperdiverse Yasuní Biosphere Reserve; and also, because our forest is still unharmed by direct human activities (if pristine forests exist, we are there!). Additionally, we have amazing facilities such as a canopy tower and a network of easy-access and well-marked trails, that allow reaching our fantastic forest and all the biodiversity within it.

In order to host you and make your scientific life easier, we are launching new services for our researchers, such as: year-round field assistants, private labs, umbrella research/genetic permits (we do all the paperwork related to permits for you!), samples exportation, updated and historic climatic data, yearly/long-term research memberships, and full logistic support. We also host academic programs if you are interested in that matter too.

Besides, we have new and very affordable fees, that are all-inclusive and perfect to do long-term projects for you or your lab members (graduate and undergraduate students included). Please feel free to send me an email (cc'ing our Research Coordinator Diego Mosquera dmosquera@usfq.edu.ec and our Field Supervisor culloae@usfq.edu.ec), if you have any question and want to visit us soon.

Please share this email widely with your contacts, especially to those in associations, networks, journals, institutes, academic departments, and such, and ask them to distribute it accordingly as well. Sorry about cross-posting, as I'm sending this email to hundreds of colleagues.

We are very much looking forward reaching all the scientists as possible and to hear from you soon!

Greetings and thanks in advance!! #Tiputini #ThisIsLife!

–

Gonzalo Rivas-Torres, PhD

Tiputini Biodiversity Station, Director

Profesor e Investigador Titular-Tiempo Completo

Associate Professor and Researcher

Universidad San Francisco de Quito-USFQ

Colegio de Ciencias Biológicas y Ambientales-COCIBA

& Galapagos Institute for the Arts and Sciences-GAIAS

ecologyecuador.com(lab web page)

Rivasecologyecu (Twitter) Adjunct Faculty, University of North Carolina-Chapel Hill. Geography Department. Courtesy Faculty, University of Florida. Wildlife Ecology and Conservation Department.

Gonzalo Francisco Rivas Torres, Ph.D. Profesor de Ecología Colegio de Ciencias Biológicas y Ambientales, COCIBA Director Tiputini Biodiversity Station Universidad San Francisco de Quito T: (+593) 2 297-1700 ext. 2217 Correo: grivast@usfq.edu.ec Diego de Robles y Vía Interoceánica, Quito, Ecuador

http://www.usfq.edu.ec

Gonzalo Francisco Rivas Torres <grivast@usfq.edu.ec>

EECGAward DeadlineDec14

The 2022 Evolutionary, Ecological, and Conservation Genomics (EECG) Research Awards round is open! Deadline for receipt of application materials: Midnight PST, Tuesday, 14 December 2021

The American Genetic Association grants EECG Research Awards to graduate and post-doctoral researchers who are at a critical point in their research, where additional funds would allow them to conclude their research project and prepare it for publication.

Application materials are available on the AGA website. Learn more at https://www.theaga.org/eecg-awards.php Anjanette Baker <theaga@theaga.org>

theaga@theaga.org

ESEB CallJohnMaynardSmithPrize

John Maynard Smith Prize 2022: Call for Nominations

Each year the European Society for Evolutionary Biology (ESEB) distinguishes an outstanding young evolutionary biologist with a prize named after John Maynard Smith (1920 - 2004), eminent scientist, great mentor, author of many books on evolution, and a former President of ESEB.

Nomination

The prize is open to any field of evolutionary biology. The candidates for the 2022 prize normally must have begun their PhD study after JANUARY 1, 2015. In addition, nomineesmore than 7 years from the start of their PhD will be considered, if they have had career breakstaken for family, caring or health reasons; the nature of the reason must be given. The nomination of the candidate may be by a colleague or by self-nomination. Nominations should be sent as a single PDF file to Ute Moniatte at the ESEB office (office@eseb.org). The nomination should include a brief justification, the candidate's CV and list of publications (indicating three most significant papers), a short description of future research plans (about 1-2 pages), and a letter from the candidate approving the nomination. A letter of reference from another colleague (or, in case of self-nomination, two letters) should be sent directly to Ute Moniatte.

Nominations and letters of support should arrive no later than FRIDAY,**JANUARY 14, 2022. Please take care to limit the size of attachments (total < 10 MB) in any one email.

The nomination committee, chaired by the ESEB Vice President Andrea Betancourt, will evaluate the nominations and inform the winner approximately by the end of February 2022.

The prize winner is expected to attend the ESEB congress in August 2022 in Prague, Czech Republic, where he or she will deliver the 2022 John Maynard Smith Lecture. The Society will cover registration, accommodation, and travel expenses (economy fare). The JMS Prize comes with a monetary prize of 2500 euro , the invitation to write a review for the Journal of Evolutionary Biology, and the possibility of a Junior Fellowship of 6 months at the Institute of Advanced Study in Berlin, Germany. For more information on the Institute of Advanced Study see www.wiko-berlin.de/-

en/ . Previous winners of the JMS Prize are listed on the ESEB web site: www.eseb.org Sincerely, Andrea Betancourt ESEB Vice-President – ESEB Office Email: office@eseb.org European Society of Evolutionary Biology - eseb.org

ESEB <office@eseb.org>

ESEB ProgressMeetings Proposals Dec17

PROGRESS MEETINGS IN EVOLUTIONARY BIOLOGY

We are excited to announce the next round of this initiative by the European Society of Evolutionary Biology (ESEB), in partnership with the Journal of Evolutionary Biology (/JEB/).

We invite applications for funding to support focussed conference or workshops on a topical issue where rapid progress is currently being made in understanding Evolutionary Biology. ESEB will supply funds up to euro 15,000 to assist with workshop planning (venue, travel or attendance support). We encourage proposals on any topic.

We expect these meetings to bring together a range of researchers focussed around a topic for a "state of the art" conference, ideally proposing a new synthesis, viewpoint or technical or analytical breakthrough facilitating new avenues of research. Attendees would represent researchers from all career stages and must accord with our Equal Opportunities guidelines. Attendance should be open to all, but ESEB members should be prioritised. Typically, meetings would last 2-3 days.

An important condition of the funding is that the meeting has a clear objective to produce either a Special Issue or Target Review for /JEB/. Organisers should aim to have the manuscript(s) produced within 4 months of the end of the meeting, and should detail how this will be done in their applications. In the case of a Special Issue, the organisers of the meeting or appropriate nominees may serve as Guest Editors (where appropriate), handling the peer review process for manuscripts arising from the meeting with assistance from /JEB/ editors.

There will be one call for applications per year, with this year's deadline being DECEMBER 17, 2021. Applicants should be members of ESEB or our sister society, the Society for the Study of Evolution.

There is no official application form. The application document should include

- The title of the conference and why this is suitable for a Progress Meeting. - Names and addresses of the organisers, with short (1 page each) CVs - List of keynote speakers, with justification (potentially key recent references). They should have agreed in principle to participate - A 2-page description of the aims and potential scope of the conference - Conference venue details - Methods of selecting participants - Publication plans

Queries and applications should be submitted to the ESEB Office (office@eseb.org) by the deadline. The successful application will be chosen by an ESEB committee.

Luke Holman (chair), Reviews Editor, /JEB/ Max Reuter, Editor in Chief, /JEB /Mike Ritchie, former Editor in Chief, /JEB/ Tanja Schwander, Deciding Editor and former Special Issue Editor, /JEB/

European Society for Evolutionary Biology Email: office@eseb.org Website: eseb.org

ESEB <office@eseb.org>

EvolCompGen webinar phylo networks Nov2

ISCB EvolCompGen and SMBE are hosting a webinar on phylogenetic network inference next week!

Date: Tuesday, Nov 2nd from 11am-12pm ET

Speaker: Dr. Claudia Solis-Lemus, University of Wisconsin-Madison

Talk Title: Scalable Inference of Phylogenetic Networks

Talk Abstract: Phylogenetic network inference plays an important role in the reconstruction of the tree of life, given the widespread gene flow among different organisms. However, there are many challenges in the inference of reticulate evolution such as network reconstruction and interpretation, and difficulties to summarize network uncertainty. In this talk, I will explain the current difficulties in network statistical inference and present a new scalable method based on pseudolikelihood theory. I will also present extensions of standard trait evolution tools to networks, such as phylogenetic regression or ANOVA, ancestral trait reconstruction, and Pagel's lambda test of phylogenetic signal. All the new tools are implemented in the open-source Julia

package PhyloNetworks.

Registration Link: https://www.iscb.org/iscbacademy-upcoming#solis-lemus Registration is free for ISCB and/or SMBE members. SMBE members should enter their email in the top box and click the "continue new registration" button to reveal the SMBE member option.

Contact: Erin Molloy, University of Maryland, College Park (ekmolloy 'at' umd.edu)

"ekmolloy@umd.edu" <ekmolloy@umd.edu>

Kalahari VolResAssist MoleRatProject

Volunteer Research Assistant position at the Kalahari Mole-rat Project The Research

We are looking for several volunteer research assistants to collect long-term data and carry out experiments on a captive population of cooperatively breeding Damaraland mole-rats at the Kuruman River Reserve in the South African Kalahari Desert. The aim of this project is to investigate the evolution of social behaviour in mammals. Our research examines the influence of genes, hormones, breeding and social factors on individual developmental, growth, behaviours and ageing. See https://kalahariresearchcentre.org for more details

What you can gain from this role? This position is particularly suited, but not exclusively, for people aiming to carry on their academic education or hold a management position in a research project. Successful applicants will gain experience in animal handling and the collection of observational and physiological data. There is also the opportunity to gain database skills (MySQL) and work on a personal analysis project. This project provides a unique opportunity to work at a vibrant, multinational field site which houses several other research projects. Costs of food and accommodation while at the project will be covered. A contribution towards travel costs will be made (300 Euros/Year)

Candidate requirements

Applicants should be available for a period of 6 to 12 months, with a start date to be discussed during interview. They should be hardworking, enthusiastic, physically fit, and prepared for long hours in the laboratory. A background in behavioural ecology or evolutionary biology is desired but not essential. Successful applicants will be responsible for data collection (behavioural observations, collection of biological samples), animal handling and be involved in conducting experiments.

If you are interested in this position, send your CV and cover letter stating your availability to molerat.volunteer@gmail.com. Shortlisted applicants will be invited for a Skype or Zoom interview.

Deadline: 22th October 2021 (applications will be considered as they come in)

Dave Seager <daveseager4001@gmail.com>

NSF BiodiversityGrants

NEW BIODIVERSITY ON A CHANGING PLANET (BoCP)SOLICITATION(NSF 22-508)

US National Science Foundation

TheBiodiversity on a Changing Planetprogramis a newcross-directorate and international program led by NSF that invites submission of interdisciplinary proposals addressing grand challenges in biodiversity science within the context of unprecedented environmental change.The program supports a comprehensive and integrative approach to understanding planetary biodiversity from a functional perspective, and it encourages the use of new technology and team science approaches. Research supported by this program will improve modeling and forecasting of the consequences of functional change in biodiversity in response to environmental change.BoCPbuilds on and expands the former Dimensions of Biodiversity program and incorporates elements of the Bridging Ecology and Evolution (BEE) track in the Division of Environmental Biology.

There are two proposal tracks covered by thissolicitation(NSF 22-508):Design and Implementation.Design proposals are aimed at building new teams with no prior collaborative track record to develop creative research and technical approaches to address the functional axes of biodiversity.Implementation proposals are suitable for collaborative teams at a more developed research stage, ready to implement a large-scale project addressing functional biodiversity on a changing planet.

SuccessfulBoCPproposals will test hypotheses about functional biodiversity on a changing planet by integrating cellular, organismal, ecological, evolutionary, geological, and/or paleontological perspectives.

The program supports both US-only collaborative pro-

posals and proposals with international partnerships with the National Natural Science Foundation of China (NSFC), the Sāo Paulo Research Foundation (FAPESP) of Brazil, and the National Research Foundation (NRF) of South Africa. These agreements do not preclude other international collaborations.

The proposal deadlineis March 25, 2022.â€

For more informationandanswers to questions about the program,pleaseregisterfor the upcoming Virtual Office Hour on Monday, November 8 from 1:00 PM to 2:00 PM Eastern time.

For further inquiries, pleasecontact members of the-BoCPworking group:biodiversity@nsf.gov

Diana Pilson Program Officer, Evolutionary Processes Cluster Division of Environmental Biology National Science Foundation 2415 Eisenhower Avenue, Suite W12189 Alexandria, VA 22314 Phone: 703-292-2592 Fax: 703-292-9461 Email: dpilson@nsf.gov

Check out the DEB Blog at: http://-nsfdeb.wordpress.com/ “Pilson, Diana” <dpilson@nsf.gov> “Pilson, Diana” <dpilson@nsf.gov>

Online STEMGradSchool Workshop Oct23

Dear Colleagues,

The University of Kansas Department of Ecology and Evolutionary Biology, along with Departments of Molecular Biosciences, Geology and Physics & Astronomy, will be running an online workshop on Oct 23 for students that might be interested in applying to graduate school in one of these STEM fields. The workshop is targeted towards those who identify as being from a group historically underrepresented in the sciences. It is also not targeted specifically at students interested in applying to KU, but more broadly.

Workshop participants will learn about graduate school, career opportunities and will receive help on writing personal statements and CVs.

A short application is due by Friday October 15. Details and schedule can be found here:

https://dnsku.weebly.com/ Please feel free to let anyone know that you think might be interested! Attendees last year found it very helpful!

Best,

Justin Blumenstiel

Justin Blumenstiel (he/him) Associate Professor Chair, Graduate Admissions Committee Department of Ecology and Evolutionary Biology University of Kansas Lawrence, KS 66045

jblumens@ku.edu

“No Drosophila female could conceivably lay two billion eggs in her lifetime”. Lewontin and Hubby. 1966.

“Blumenstiel, Justin P” <jblumens@ku.edu>

PCI Genomics SeekingManagingEditors

PCI Genomics is seeking to recruit several members to join the board of Managing Editors.

About PCI Genomics. PCI Genomics is a community of the parent project Peer Community In. In brief, we are a community of recommenders, playing the role of associate editors, who recommend unpublished articles based on peer reviews to make them complete, reliable and citable articles, without the need for publication in ’traditional’ journals in a plea to give back the control of the recommendation process to the scientific community. Evaluation and recommendation by PCI Genomics are free of charge. The scope of PCI Genomics encompasses all aspects of genomics (structural genomics, functional genomics, epigenomics, evolutionary genomics, population genomics, proteomics, bioinformatics) dealing with every type of organism (viruses, bacteria, fungi, plants, animals,...) as well as metagenomes. Currently, the Managing Board of PCI Genomics is formed by four members (Pierre Capy, University Paris-Saclay, France; Rosa Fernández, Institute of Evolutionary Biology (CSpanish Research Council-University Pompeu Fabra), Spain; Jean-François Flot, Evolutionary Biology & Ecology, Université Libre de Bruxelles, Belgium; and Denis Tagu, INRAE, France).

The role. We are seeking to recruit several Managing Editors in order to respond to the increasing submission rate and expand our expertise to better assess a broader diversity of scientific topics in the field of genomics. We are particularly interested in the recruitment of scientists with expertise in human and paleogenomics and genomics of non-animal organisms (eg, plants, fungi, microeukaryotes, etc). We are committed to increase the

diversity of the board, and we particularly encourage applications from non-European and underrepresented communities.

As a member of the Managing Role, your duties will consist of:

-

Discussing updates on every submission in weekly or bi-weekly meetings, including relevance and progress in the peer review process, as well as taking final decisions together with the recommenders about recommendations. -

Promoting PCI Genomics at scientific conferences and gatherings. -

Helping recruiting recommenders. -

Participating in the decision making related to the functioning and governance of PCI in general and PCI Genomics in particular.

How to apply. If you are interested in joining us in the board of Managing Editors, please send a one-page CV and a motivation letter to contact@genomics.peercommunityin.org. Deadline for applications is 30th of November 2021. Please feel free to contact us directly to discuss any questions you may have.

Rosa Fernández <rmfernandezgarcia00@gmail.com>

Philippines TexasAMUCC-OldDominionU InternatREU EvolConGen

PAID UNDERGRADUATE RESEARCH OPPORTUNITY FOR U.S. UNDERGRADUATES, SUMMER 2022

Philippines International Research Experience for Students (Ph-IRES)

Conduct independent research with US and Filipin(o/a) mentors from Silliman University, Republic of the Philippines. Projects will explore conservation biology and molecular ecology of aquatic and terrestrial species. Potential project subjects include:

* genetic barcoding to document fish diversity * life history studies to examine how fishing pressure influences how fish grow and reproduce * genetic studies to see how fish populations connect with one another * study of how pollutants may affect reef fishes * conservation genetics of freshwater or threatened terrestrial animals

Depending on the worldwide COVID-19 situation, students will work in either Dumaguete, Philippines, or at Old Dominion University and Texas A&M University - Corpus Christi.

Ph-IRES participants receive a stipend, travel, housing, and a trip to the National Diversity in STEM Conference.

MORE INFO: https://sites.wp.odu.edu/phires/ APPLY: https://sites.wp.odu.edu/phires/application-materials/ For more information, contact us at philippines.phires@gmail.com Dr. Chris Bird, Texas A&M University - Corpus Christi Dr. David Gauthier, Old Dominion University

NSF Award # 100863-010: Collaborative Research: IRES Track I: PH-IRES Philippines International Research (Gauthier, Bird, PIs)

"Bird, Chris" <Chris.Bird@tamucc.edu>

Postglacial Range Expansion Southward

Dear colleagues,

we are looking for examples of terrestrial animal or plant species from the northern temperate region, which probably expanded their ranges southwards into areas that hold the glacial refugia for related taxa (and/or taxa with similar ecological requirements). The evidence for such expansion may be in (sub)fossil record or phylogeograpic patterns. We are primarily interested in the Balkans and surrounding areas in Europe, but examples from elsewhere would also be helpful.

If you know of any such example, please, send email to petrusek@natur.cuni.cz and/or ondrej.korabek@gmail.com.

Thanks in advance!

Adam Petrusek Department of Ecology Charles University Vinicna 7 CZ-12844 Prague 2 Czech Republic

e-mail: petrusek@natur.cuni.cz

Adam Petrusek <petrusek@cesnet.cz>

SMBE SatelliteMeetings CallProposals

SMBE SATELLITE, INTERDISCIPLINARY AND REGIONAL MEETINGS - Call for Proposals

Each year, SMBE provides funds in aid for SMBE SATELLITE, INTERDISCIPLINARY AND REGIONAL MEETINGS.These meetings are organized and held independent of the SMBE annual meeting.

SMBE is now calling for proposals for meetings and actions to be held between Jan 2022 and Dec 31st 2022. Funds will be awarded on a competitive basis to members of the molecular evolution research community to run workshops/meetings on an important, focused, and timely topic of their choice.The number of awards will depend on the quality of proposals and total cost. However, given the paucity of meetings for some time, we may fund more proposals this year.

The deadline for submission of proposals is October 31st 2021.

SMBE SATELLITE MEETINGS

These are workshops or small, topically focused meetings with fewer than 100 participants that are organized and held independent of the SMBE annual meeting. In the past five years, SMBE has supported multiple satellite meetings on diverse topics, a sample of our most recent Satellite meetings include:

- "Mitochondrial Genomics and Evolution" 2017

- "Evolution of microbes in natural and experimental populations - synthesis and synergies" 2017

- "Molecular evolution and medicine" 2017

- "Evolution of genome architecture" 2017

- "Molecular evolution and the cell" 2018

- "Genome Evolution in Pathogen Transmission and Disease" 2018

- "Modern Methods for the study of ancient DNA" 2018

- "Molecular Biology and Evolution of Cancer" 2019

- "Towards an integrated concept of adaptation: uniting molecular population genetics and quantitative genetics" 2019

Satellite meetings awarded and postponed until further notice due to COVID crisis:

- "Evolution of Reproduction", Portugal.

- "Evolution of Meiosis", USA.

- "Mechanisms of Cellular Evolution", USA.

Please consult our archive for further information on previous satellite, regional and interdisciplinary meetings: https://www.smbe.org/smbe/MEETINGS/-MeetingsArchive.aspx SMBE INTERDISCIPLINARY AND REGIONAL MEETINGS.

SMBE will promote interdisciplinary research and extend its actions worldwide by sponsoring (1) joint meetings with meetings of other societies; symposia or plenary lectures on molecular biology and evolution at meetings whose primary focus is not molecular evolution; (2) regional meetings outside the US, Europe, and Japan; (3) small regional meetings in the US, Europe, or Japan targeted towards PhD students and postdocs with the purpose of helping them develop their presentation skills and facilitate networking. This year, given the various international COVID travel restrictions, we are particularly interested in receiving applications for regional meetings on any topic that falls within the research scope represented by our society.

Most recent SMBE Regional and Interdisciplinary meetings were:

- "Israeli Society of Evolutionary Biology inaugural meeting", Israel, December 2019.

- "Evolutionary genomics at the human-environment interface", Malawi, September 2019 (regional) < https://-/smbe-malawi.org/ >

- "Population Genomics of Mobile DNA", USA, 2019 (interdisciplinary)

- "Regional workshop on Computational Biology", Mexico, 2019

- "Satellite workshop on Genome Evolution in Pathogen Transmission and Disease", Japan, 2018

Guidelines for satellite, interdisciplinary and regional meetings

- SMBE will provide financial support for up to 80% of the cost of each satellite meeting, up to a maximum of $40,000 USD per meeting (most meetings are funded at $20,000-$30,000 each). SMBE will cover the cost of plenary lectures, up to a maximum of $3,000 USD per lecture. A model of no more than 3 plenary lectures per satellite meeting is expected. A proposal containing more than 3 plenary lectures per meeting would require specific justification.

- SMBE will provide financial support for up to 100% of the cost for the regional and interdisciplinary meetings,

up to a maximum of $25,000 USD per meeting outside N. America, Europe and Japan and up to $10,000 USD for meetings in North America, Europe, or Japan. In addition, SMBE will cover the cost of plenary lectures, up to a maximum of $3,000 USD per lecture and a maximum of 2 plenary lectures per meeting.

- A detailed projected budget, including the expected number of participants, travel/food/lodging costs, and registration fees must be submitted with the application. Please note that SMBE funds cannot be used for indirect costs or overhead costs.

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Software The RAxML Grove

Dear Community,

The RAxML Grove, a database containing 60,000 anonymized empirical ML tree topologies, their estimated model parameters, the patterns of missing data, and their MSA and partition dimensions obtained from the RAxML web-servers is now available for general data exploration and building realistic simulated data experiments:

https://biorxiv.org/cgi/content/short/2021.10.05.463179v1 Alexis

– Alexandros (Alexis) Stamatakis

Research Group Leader, Heidelberg Institute for Theoretical Studies Full Professor, Dept. of Informatics, Karlsruhe Institute of Technology Affiliated Scientist, Evolutionary Genetics and Paleogenomics (EGP) lab, Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology Hellas

www.exelixis-lab.org Alexandros Stamatakis <alexandros.stamatakis@gmail.com>

SouthernGabon VolFieldAssist Mandrillus

Role description

The Projet Mandrillus aims at longitudinally studying wild mandrills in Southern Gabon. We are currently recruiting a Volunteer Field Assistant for our 2022 field season. These positions combine practical research with training and are entirely field-based. The volunteers are trained by and work alongside local field assistants, field managers, students and researchers, contributing to the research activities of the Projet Mandrillus. Following established protocols, the fieldwork will primarily involve daily follows of a natural population of mandrills on foot, collecting data on the behavior of individually recognizable animals, together with the collection of non-invasive measurements and samples. Please visit the website of the project to get an idea of the scientific programs that are currently running (http://www.projetmandrillus.com/research-and-conservation.html).

Positions available

One Volunteer Field Assistant position is currently available running for 12 months, starting on February 2022.

What we cover

Once the volunteers arrive in the field site, the Projet Mandrillus covers all their work-related costs, including accommodation (private equipped room with air-con and private bathroom, shared kitchen) and a stipend for meals (about 200 euro /month).

Volunteers need to take at their own charge, a repatriation and health insurance for their entire stay (we will ask for a proof).

Who are we looking for?

This position is open to all with an interest in animal behavior and ecology. We are particularly keen to hear from applicants who:

- Are friendly, easy-going people, happy to live in small team at a remote field site

- Are strongly motivated, reliable, honest and committed

- Have good levels of physical fitness and stamina - you will be following the mandrills on foot 12 hours a day, 4-5 days per week, over mountainous terrain, in heat

- Show good initiative, with a willingness to learn and show attention to detail

- A good level in French is a plus

What do volunteers get out of it?

- An amazing opportunity to share the lives of wild mandrills in an equatorial forest landscape

- An opportunity to learn new skills and gain experience, especially those relevant to research in behaviour and ecology

- An opportunity to be involved in a long-term project on African wildlife, hosted by an international research institution

- An opportunity to use this field experience with the as a stepping stone on to future Masters and PhD degree courses

- Experience a new culture and share knowledge with local assistants

How to apply

If you would like to apply, please prepare a CV and a detailed covering letter that should explain why you would like to work on the project. The CV should include the names of two referees with e-mail contact details.

Applications must be sent at projetmandrillus@gmail.com as soon as possible. The deadline for applications is the 14th of November. We will notify successfully shortlisted candidates few days after this deadline, and interviews will be held by skype the following week.

The Study Site

Weather

Gabon has an Equatorial climate with little seasonality. Precipitations are important, almost every day from October to May, and days may be hot (up to 30Â°C), although the Parc de la Lékédi benefits from a cooler weather because of its altitude (600m). The long dry season, from June to September, is characterized by cool weather (temperatures can fall below 18Â°C) with no precipitation.

Landscape

The Parc de la Lékédi (http://www.parcdelalekedi.com/-) is characterized by a mix of savannas and gallery forests interspersed with rivers and riverbeds. Equatorial Marantaceae forests are found in the area.

Wildlife

The Parc de la Lékédi is home to a variety of wildlife including forest buffalos, several apes (chimpazees, gorillas) and other primates (cephus, nictitans) and, of course, mandrills! Predators include, occasionally, leopards (but don't expect any encounter with them!). Birds and reptiles also abound. As well as plenty of butterflies!

Location

The Parc de la Lékédi is located in Southern Gabon. It is only a 1 hour drive from Moanda, the nearest town that comprises hotels, petrol stations, banks, basic shops and markets.

https://g.page/parc-de-la-lekedi?share Working Conditions

Data collection requires full-day follows of the study group. This ensures that the location of the sleeping sites used by the mandrills each night is known, which in turn facilitates their pick-up by observers early the next morning. If the day begins late, or ends early, the mandrills can be lost and may take several days to relocate. Each day, seven days a week, a team of at least two persons goes in the field from

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This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at http://life.biology.-mcmaster.ca/~brian/evoldir.html

UHolar Iceland FishCognitionIntership

Hello everyone,

The Department of Aquaculture and Fish Biology, Hólar University, Iceland, is looking for a Masters student for a project about Arctic charr spatial cognition. See advert below:

Title : Internship position in fish behavior and cognition

Hosting structure : Department of Aquaculture & fish Biology, Hólar University - Iceland

Dates : from January 2022 to June 2022, but discussable

Context of the study: Comparative studies might give an insight on how cognition has evolved across taxa. The evolution of spatial cognition is of particular interest because all animals depend on navigational skills to find food or mates, retrieve the nest and escape predators. Hence, spatial cognitive abilities have an impact on individuals' fitness and are consequently subject to natural selection. In that sense, spatial cognitive

abilities in each population should be locally adapted to its particular ecological conditions. The Icelandic Arctic charr (Salvelinus alpinus, AC) is found as several sympatric morphs thriving in very different types of habitats, from anadromous to benthic and pelagic lake-resident morphs, and ranging along an evolutionary gradient of divergence. We hypothesize cognitive abilities to be shaped according to both evolutionary history and current ecological factors. The project is led by Prof. David Benhaïm (lead PI, Hólar Univ., Iceland) in collaboration across Hólar Univ. (Prof. Bjarni K. Kristjánsson, Dr. Camille Leblanc), University of Caen, France (Dr. Christelle Jozet), IFREMER, France (Dr. Marie-Laure Bégout, Dr. Benjamin Geffroy), INRA, France (Dr. Xavier Cousin) and University of Iceland (Prof. Zophonías O. Jónsson).

Student project: The student will specifically be involved in identifying cognitive ability differences between morphs and environments, by monitoring learning abilities in offspring of wild-caught AC morphs along a degree of divergence and raised under complex vs. plain conditions. To do so, the student will be working in close collaboration with a PhD student to train AC individuals to solve spatial cognitive tasks in a maze, and then highlight behavioral differences using an automated behavioral tracking software s/he will be introduced to.

Requirements: The candidates must be enrolled in a degree in the fields of ethology, evolutionary or behavioral ecology, or relevant equivalent fields. The ideal candidate has a strong interest in pluridisciplinary research with an emphasis on cognition. S/he enjoys working in a dynamic group but should be able to work independently as well. Statistical skills will be a plus. A valid driving license is a requirement.

Organizational details: Working language is English. The student will be provided with a discount on University accommodation as a lab member, and commuting between the lab and the accommodation place will be at the lab's charge. The student will also have free access to the University gym, pool, hot pot and cold pot. Aside, remuneration is not available for this project, but Iceland is eligible for Erasmus+ grants.

Application: Applicants should send an application letter, with a statement of research interests and relevant experience and curriculum vitae as a single pdf to both Pr. David Benhaïm, benhaim@holar.is and Dr. Marion Dellinger, marion@holar.is. For further information contact Pr. David Benhaïm (Dept. of Aquaculture and Fish Biology, Hólar University, benhaim@holar.is). Applications open until October 15th, 2021.

All the best,

Marion DELLINGER PhD Student - Dept. of Aquaculture & Fish Biology - Hólar University & University of Iceland, Iceland Doctor of Veterinary Medicine - National Vet School of Nantes - ONIRIS Chantrerie, France Master's degree - Biodiversity Ecology Evolution - Functional, Behavioral and Evolutionary Ecology - University of Rennes 1, France Háeyri 1, 550 SauÃºárkrókur, Iceland. marion@holar.is +336.26.10.39.36

Marion Dellinger - HOL <marion@holar.is>

UIowa REU Evolution

Please share with your undergraduate students!!

The University of Iowa is offering ten NSF-funded Research Experiences for Undergraduates (REU) opportunities during the summer of 2022. Research projects span a range of topics, including evolution of behavior, origin of species, cancer evolution, evolution of sex, evo-devo, evolution of pathogens, and paleontology. REU students work on one project, but through interactions with their cohort ultimately receive a broad exposure to evolutionary science. Students in the program: receive training in research best practices, participate in career workshops, create a digital exhibit based on their research for the University of Iowa Natural History Museum, and make formal research presentations based on their work. Free housing, a meal allowance, a $6000 stipend, and a travel allowance will be provided to all participants. Students from groups historically excluded from science because of their ethnicity or race and/or who have limited research opportunities at their home institution are especially encouraged to apply.

The REU program website and application form can be found here: https://biology.uiowa.edu/reu Questions? Contact Andrew Forbes (andrew-forbes@uiowa.edu) or Maurine Neiman (maurine-neiman@uiowa.edu). Application Deadline: February 1, 2022.

Andrew Forbes Associate Professor, Department of Biology Program Director, UI Environmental Sciences Program The University of Iowa 434A Biology Building Iowa City, IA 52242 Tel: (319) 335-3006 andrew-forbes@uiowa.edu https://forbes.lab.uiowa.edu/

andrew-forbes@uiowa.edu

USouthCarolina McCauslandVisitingScholars

The evolutionary biologists of the Department of Biological Sciences at the University of South Carolina invite expressions of interest from evolutionary biology faculty at other institutions who are interested in being nominated to be a McCausland Visiting Scholar in the UofSC College of Arts and Sciences (CAS) during the 2022-2023 academic year.

McCausland Visiting Scholars are expected to catalyze the teaching, research, and creative activities of CAS faculty and students by engaging fully in research projects and curriculum-oriented materials and by sharing their expertise in courses, seminars, and other academic programs. Scholars augment current course offerings by teaching and conducting undergraduate seminars, mentoring students, and involving students in research.

Appointments are for a minimum of one week, but are normally longer, e.g. a semester during a sabbatical from the scholar's home institution. Visiting scholars receive compensation of up to $20,000 (based on qualifications and term of appointment), and up to $7500 in reimbursements for housing, travel, or supplies. Visiting scholars are provided with an office for the duration of the appointment, and have a faculty sponsor to serve as an academic liaison during the scholar's stay. The CAS intends to notify departments of whether their nominees were selected in early February, 2022. Visiting scholars hold temporary appointments in the College of Arts & Sciences, and are subject to University policies and procedures. An invitation or appointment as a visiting scholar does not constitute an offer of permanent employment.

To be eligible for nomination, an individual must hold a Ph.D. or comparable terminal degree and should be an established scholar with a distinguished record of accomplishment in research and teaching. There are no citizenship or residency restrictions.

Individuals interested in being nominated should contact one of our evolutionary biologists to discuss a potential nomination by December 6, 2021:

Carol Boggs (boggscl@mailbox.sc.edu), https://boggslab.wordpress.com/ Jeff Dudycha (dudycha@biol.sc.edu), https://www.tangledbank.org/ Jerry Hilbish (hilbish@biol.sc.edu) Brian Hollis (brian.hollis@sc.edu), https://experimentalevolution.org/ Tim Mousseau (mousseau@sc.edu), http://research.cas.sc.edu/mousseau/ Joe Quattro (quattro@biol.sc.edu) Nate Senner (senner@mailbox.sc.edu), http://www.sennerlab.com/ Dan Speiser (speiser@mailbox.sc.edu), https://www.speiserlab.com/ Ward Watt (wattw@mailbox.sc.edu) Carrie Wessinger (wessinc@mailbox.sc.edu), https://wessingerlab.github.io/index.html General questions about the program can be directed to the Head of the Ecology & Evolutionary Biology Group, Dr. Jeff Dudycha (dudycha@biol.sc.edu).

Jeffry L. Dudycha Professor Dept. of Biological Sciences University of South Carolina Columbia, SC 29208 dudycha [at] biol.sc.edu http://www.tangledbank.org tw: @JLDudycha

dudycha@biol.sc.edu

PostDocs

AarhusU Denmark StatisticalGenetics

Center for Quantitative Genetics, QGG at Aarhus University is recruiting two 2-year postdocs in statistical genetics. The candidates will be developing statistical modeling approaches used in genomic informed drug target identification.

The overall goal of the project is to obtain a better understanding of the biological basis of common multifactorial diseases such as Type 2 diabetes mellitus using information from a range of human genetics and functional genomics datasets. A better understanding of the underlying disease biology will enable a more precise and accurate identification of potential drug targets and a more precise identification of patients in the selection and development of clinical trials. The primary tasks will be 1) development of novel multiple trait statistical approaches for fine-mapping of genetic variants and estimation of genomic parameters (e.g. heritability and genetic correlation), 2) use these novel statistical approaches to integrate association genetics signals for a range of traits with functional annotations to identify and characterize potential drug targets for further therapeutic development. The project is a joint collaboration between Center for Quantitative Genetics and

Genomics (QGG) and Steno Diabetes Centre Aarhus (SDCA), Aarhus University, Denmark. The project is funded through an externally financed research grant and employment follows the project grant.

Doug Speed <doug@qgg.au.dk>

AMNH NewYork Systematics

We are pleased to announce that we are accepting applications for our Postdoctoral Research Fellowships Program at the Richard Gilder Graduate School at the American Museum of Natural History.ï¿½ Deadline: November 15, 2021.

he Postdoctoral Research Fellowship Programs of the AMNH are designed to advance the training of each participant by having them pursue a specific, time-limited project in association with Museum professionals in the Museum setting. The applicant's project must fit into one or more of the main research areas of interest in the Museum's Scientific Divisions: Anthropology, Invertebrate Zoology, Paleontology, Physical Sciences (Astrophysics and Earth & Planetary Sciences), or Vertebrate Zoology.

Postdoctoral Fellows are expected to conduct their work at the Museum. Applicants are encouraged to contact potential curatorial sponsor(s) prior to applying. Appointments are typically made for two years. In addition to a competitive salary and benefits, limited relocation, research and publication support is provided. Newly graduated or soon-to-graduate PhDs may apply.ï¿½Fellows must have received their degrees or deposited their dissertations before they can begin their appointments. There are no citizenship or geographic requirements to apply.

Details about the Postdoctoral Research Fellowships Program can be found on https://www.amnh.org/-research/richard-gilder-graduate-school/academics-and-research/fellowship-and-grant-opportunities/-postdoctoral-research-fellowship-program . Please contact us (mailto:info-rggs@amnh.org) if you need any further information. ï¿½ Richard Gilder Graduate School American Museum of Natural History https://www.amnh.org/research/richard-gilder-graduate-school

Anna Manuel <amanuel@amnh.org>

AMUPoznan EvolutionaryImmunogenetics

Postdoc:AMUPoznan_EvolutionaryImmunogenetics

Post-Doc in an NCN-funded project aiming to investigate coevolution at the level of genes between Lime disease agent, Borrelia afzelli, and its rodent host, is offered by Radwan lab at AMU (https://-evobio.home.amu.edu.pl/). The candidate should hold PhD degree in biological sciences or bioinformatics and should have significant publication record in the area of evolutionary biology, molecular genetics or bioinformatics. The employment is offered for three years, starting ideally in January 2021, but it is negotiable.

Interested candidates should send their cv via email to the project leader Jacek Radwan (jradwan@amu.edu.pl), who will provide further information about the project and application procedure. Please apply before 30 November 2020.

Brief summary of the project: Hosts are under evolutionary pressure to be able to fight infections, whereas infectious organisms are under selection to evade host immune system. This paradigm predicts co-evolution of host immune systems and their targets in pathogens, with both parties in a need for continuous adaptation in order to keep up with the opponent - a dynamics described as a Red Queen process. Such co-evolution may have important consequences for several crucial evolutionary processes the maintenance of sex, sexual selection, speciation and evolution of virulence. Yet, demonstrating that co-evolution is actually occurring requires knowledge of interacting genes in both hosts and parasites. This condition is fulfilled for Lime-disease agent, the spirochete Borrelia and its mammalian hosts. The project will test predictions of Red Queen hypothesis, and will investigate its consequences for speciation and epidemiology.

Prof. Jacek Radwan Faculty of Biology Adam Mickiewicz University ul. Uniwersytetu Poznañskiego 6 61-614 Poznañ tel. 61 829 5853 http://evobio.home.amu.edu.pl/ email: jacek.radwan@amu.edu.pl

Jacek Radwan <jacek.radwan@amu.edu.pl>

<eduardo.amorim@csun.edu>

CaliforniaStateNorthridge AncientDNA

Position: Postdoctoral Fellow Location: California State University Northridge Key words: Ancient DNA; Natural Selection, Population Genetics

https://careers.pageuppeople.com/873/nr/en-us/job/505573/postdoctoral-research-assistant Description: Under general supervision, the Postdoctoral Scholar will perform research activities associated with project "Characterizing Human-Pathogen Interactions and Natural Selection with Ancient DNA," funded by an R35 NIH grant (R35GM142939). The incumbent will perform computational and statistical analyses with genomic data, write reports and manuscripts for publication, attend professional meetings, and mentor students in the Amorim Lab.

Qualifications: - Applicants must have a PhD in Genetics, Biological Anthropology, Computer Sciences, Statistics, Mathematics, or a closely related discipline at time of appointment. - Must be proficient in at least one programming language (e.g., Python, C++, Perl, etc.) - Must be familiar with genomic data analysis and/or population genetics. - Experience with ancient DNA (aDNA) is desirable but not required.

The university offers an excellent benefits package, including but not limited to medical, dental, vision, retirement & savings, tuition waiver and more. Salary range: NIH scale (starting at $4,583/month). Funding is guaranteed for 5 years on a yearly contract renewed upon satisfactory performance.

Applications received through October 26, 2021 will be considered in the initial review and review of applications will continue until position is filled. Start date: flexible. As soon as possible.

Application package consists of a cover letter that briefly summarizes your qualifications and interest in the position, a CV, and contact information of 2 references. The hiring unit will request confidential letters from the references of those applicants who are under serious consideration.

C. Eduardo Guerra Amorim Assistant Professor Department of Biology California State University Northridge eduardo.amorim@csun.edu

"Guerra Amorim, Carlos Eduardo"

CarnegieStanford 2 PopGenetics MolEcol

Postdoc Position: Population Genetics in Space or Evolve & Resequence Experiments

Summary

Moi Exposito-Alonso Lab - www.moisesexpositoalonso.org Carnegie Institution for Science & Stanford University, 260 Panama st., California 94305, USA Annual salary $65,568 2 years with potential extensions up to 5 years Earliest starting date: immediately available, flexible Closing date: accepting applications until filled

Description

We aim to recruit highly motivated and creative researchers with strong training in statistical or population genetics. Our group seeks to understand the genetic basis of rapid adaptation in different climates and the spatial dynamics of species extinction.

Projects include developing population genetics theories and conducting analyses with whole-genome sequence data from evolution experiments with Arabidopsis thaliana. These experiments are being conducted in ~50 locations around the world and populations are re-sequenced for 4+ consecutive years (GrENE-net.org) (following work from: http://dx.doi.org/10.1038/s41586-019-1520-9). With these data, some questions we aim to address are: How strong, polygenic, and repeatable is natural selection in realistic environments? Can we predict it? How does selection vary across dense climate gradients? Did evolutionary rescue occur and what were the genetic signals preceding it?

Other projects include analyzing genomes of non-model species with geographic data, including threatened species, to understand how genetic diversity is distributed in space (following https://doi.org/10.1101/2021.10.13.464000). Some questions addressed: how are neutral and adaptive genetic diversity spatially structured? How do different spatial patterns of extinction lead to differential erosion of species diversity and adaptive capacity? Can we track "genetic health" of ecosystems as they transform using geo-tagged genomes and real-time satellite information? The position requires leading independent research using large genomic and experimental datasets, participating in collaborative

projects, preparing publications, and presenting research in scientific meetings.

Equal opportunity employer

Carnegie is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, sexual orientation, gender identity, age, veteran status, disability or any other protected status in accordance with applicable laws. We aim to have a vibrantly diverse lab, which is essential to tackle scientific questions from different creative angles. The main requirement for these positions is that you are passionate about the topics above, so please apply!

Requirements

Required qualifications for these positions are a doctoral degree in any of the following areas: molecular biology, computational biology, population genetics, evolutionary biology, ecology, bioinformatics, computer sciences, or statistics A track record of research productivity and independence Willingness to work closely with collaborators and lab members.

Additional information

The Department of Plant Biology of the Carnegie Institution for Science (formerly known as the Carnegie Institution of Washington) is a private endowment U.S.-based non-profit, located on the campus of Stanford University since 1928. Andrew Carnegie founded the Carnegie Institution of Washington in 1902 as an organization for scientific discovery to serve as a home to exceptional individuals ' men and women ' with imagination and extraordinary dedication capable of working at the cutting edge of their fields. Today, Carnegie scientists work in six scientific departments on the west and east coasts and at the Las Campanas Observatory in Chile. Carnegie investigators have made key discoveries in plant biology, including early experiments of local adaptation (Clausen, Keck, Hiesey), the discovery of transposable elements (McClintock), plant ecophysiology at global scales (Berry, Field), the discovery of key photosynthesis and phototropism genes (Grossman, Briggs), or The Arabidopsis Information Resource TAIR (Rhee, Somerville). The Department of Plant Biology (https://dpb.carnegiescience.edu) and Global Ecology (https://dge.carnegiescience.edu) have state-of-the-art facilities for molecular genetic studies of plants, greenhouses and field sites, and computer resources. The lab is co-affiliated with the Department of Biology at Stanford University (https://biology.stanford.edu) and with the center of Computational Evolutionary and Human Genetics (http://cehg.stanford.edu).

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CharlesU Prague PlantPopGenomics

Two-year postdoc research project on the population genomics of sexual selection in plants!

The Plant Repro Evo lab (https://lab-allience.natur.cuni.cz/plantreproevo) is searching for a motivated postdoc researcher to work on the population genomics of sexual selection in plants. The project will study the impact of sexual selection on the evolution of plant genomes in natural populations. In addition, part of the project will elucidate the genetic basis of male performance in plants.

The project will use already well-established methods (QTL approach), but also will require potentially to develop new population genomics approaches. We expect the successful candidate to work autonomously and actively lead the project, and thus he/she should have experience with population genomics, genomics in general, and bioinformatics. The postdoc project is directly connected to the work of PhD students working on the molecular basis of sexual selection and the role of sexual selection in plant speciation, and therefore we expect the successful candidate to be able to work in collaboration with a team. Part of the project will involve visiting the lab of collaborators, in particular Adrien Sicard's lab in Uppsala, Sweden (https://sicardlab.wordpress.com/). Therefore, we expect the applicant to be mobile.

The Plant Repro Evo lab is hosted by the Department of Botany of Charles University (https://-www.natur.cuni.cz/biology/botany) and is located in the beautiful Botanical Garden of the university, right in the historical centre of the culturally vibrant Prague city (Czech Republic).

The contract is for two years, to start at the beginning of January 2022. For more information, contact Clément Lafon Placette (lafonplc@natur.cuni.cz), and if you wish to apply, please send a CV, a cover letter and the contact of two references to the same email address before the 30th of October.

Dr. Clément Lafon Placette

Assistant Professor,Plant Reproduction Evolution lab

Department of Botany Charles University Benátská 2 CZ-128 01 Praha 2 +420 774 300 495

Research: https://lab-allience.natur.cuni.cz/-plantreproevo/research Pedagogy: https://lab-allience.natur.cuni.cz/plantreproevo/teaching Clément Lafon Placette <lafonplc@natur.cuni.cz>

CRGBarcelona ModelingSequenceEvolution

Computational postdoc position in population genetics at the Centre for Genomic Regulation (CRG), Barcelona, Spain

The Evolutionary Processes Modeling group at the Centre for Genomic Regulation invites applications for a postdoc position to study genetic variation in human genomes using computational data analysis, population genetics and statistical modeling.

Read more and apply here:

https://recruitment.crg.eu/content/jobs/position/-postdoctoral-researcher-group-evolutionary-processes-modeling%E2%80%99 Deadline: 30 November 2021.

About the institute

The Centre for Genomic Regulation (CRG) is an international research institute based in Barcelona, Spain, with more than 400 scientists from 44 countries. The CRG shares principles of an interdisciplinary, motivated and creative scientific team that is supported by high-end and innovative technologies and a flexible and efficient administration.

In 2013, the CRG received the 'HR Excellence in Research' logo from the European Commission. This is in recognition of the institute's commitment to developing an HR Strategy for Researchers designed to bring the practices and procedures in line with the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

For further information, see https://www.crg.eu/ . About the group

Cancer is a genetic disease, subject to population genetics forces like mutation, selection and stochasticity. Our group is particularly interested in how the evolution and survival of cancer cell populations relies on mutation influx as well as in selection inference from observed mutation data. To this end, we develop mathematical and computational approaches to estimate mutation rates and selection. Estimates of the strength of selection in cancer allow for a prioritization of genes and non-coding regions by their disease relevance, with the ultimate goal of promoting therapeutic advances. Coding sequences of cancer tumors not only exhibit positively selected mutations that drive cancer (www.nature.com/articles/s41588-019-0572-y), but there also exists a small fraction of genes that the tumor cannot afford to lose (www.nature.com/-articles/ng.3987). In addition to genes, cancer driver loci can occur in the non-coding part of the genome (www.nature.com/articles/s41467-017-00100-x).

We are also interested in mutation rates and selection inference in the context of human genetic variation, including polymorphisms (http://www.nature.com/articles/-ng.3831 ; https://academic.oup.com/mbe/article/36/-8/1701/5475505?login=true) and de novo variants (www.nature.com/articles/s41467-020-17162-z). Here, a particular focus of the group lies on the description of purifying selection in humans and across species, accounting for mutational processes as well as the effects of genetic drift.

The Evolutionary Processes Modeling lab was established in October 2018 and is part of the "Bioinformatics and Genomics" program at the CRG. Further information can be found at https://weghornlab.net/ and at www.crg.eu/en/programmes-groups/weghorn-lab . Your profile

- You hold a PhD degree in population genetics, physics, statistics, bioinformatics, or a related discipline. - You have worked with DNA sequencing or other biological datasets and have experience with computational analysis. - You are familiar with the principles of population genetics and statistical analysis.

The ideal candidate should be highly motivated and eager to work on evolutionary and biological problems through the use and development of computational and theoretical approaches.

The offer

Contract duration: 1 year (with possibility of extension). Estimated annual gross salary: Salary is commensurate with qualifications and consistent with our pay scales. Target start date: As soon as possible.

We provide a highly stimulating environment with state-of-the-art infrastructure and unique professional career development opportunities. We offer and promote a diverse and inclusive environment and welcome applicants regardless of age, disability, gender, nationality, race, religion or sexual orientation. The CRG is committed

to reconcile a work and family life of its employees and offers extended vacation period and the possibility to benefit from flexible working hours.

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CzechRepl CommunityEcolEvolution

Postdoc in Community Ecology & Evolution

A two-year postdoctoral position (with possible extension) in eco-evolutionary dynamics of host-parasite communities is available on ERC-CZ grant in Jan Hrcek's lab [http://lab.hrcek.net] at the Biology Centre, Czech Academy of Sciences, Ceske Budejovice, Czech Republic.

How is species diversity maintained in communities is one of the main questions in community ecology and it has been studied without considering evolutionary changes. Yet, we now know that rapid adaptation often happens at the same timescale as ecological changes, resulting in entangled eco-evolutionary dynamics. We therefore need to find out what is the role of evolutionary changes in maintenance of diversity in communities and community stability.

The candidate will join the team working on a frontier ERC-CZ grant. This collaborative project utilizes a novel experimental community model system of wild Drosophila species and their parasitoids from tropical Australia. We are able to perform multigenerational laboratory microcosm experiments and track eco-evolutionary dynamics in fine detail. The candidate will conduct laboratory experiments on eco-evolutionary dynamics of communities, corresponding eco-evolutionary modelling, or both. Experience with ecological, evolutionary, or eco-evolutionary modelling is therefore an advantage. There is also possibility of fieldwork in Australia (likely to be possible in 2022 or 2023). Further, there will be opportunities to develop the project in a direction of the candidate's own choosing.

The laboratory is an international team of PhD students, postdocs and technicians and the applicant will have the opportunity to work extensively with other team members. The laboratory can provide substantial resources and support for exceptional research. Further, the candidate will collaborate within the PI's wide international network and establish new links for this project.

The review of applications will begin on 1st December 2021 and will continue until the position is filled. The salary of 60.000CZK/month gross + benefits more than comfortably covers living expenses in Ceske Budejovice and international holiday travel. Salary would increase if the applicant develops the project into a fellowship. Expected starting date is first half of 2022. The working language is English and applicants from all countries are eligible.

To apply please send one document with your CV, contact details for three references, and cover letter stating qualifications, previous work and motivation to Jan Hrcek [janhrcek@gmail.com].

Jan Hrcek <janhrcek@gmail.com>

DTU ComputationalPopulationGenetics

DTU Health Tech seeks qualified candidates for a postdoc position in computational population genetics with a potential start date around December 1, 2021 (or according to mutual agreement).

Responsibilities In this position, you will develop algorithms and computational methods to deal with the analysis of large datasets from modern and ancient sources. More specifically, these algorithms will be aimed at analyzing a large number of ancient genomes using population genetics methods. Additional information should be obtained by contacting the potential main supervisor directly. The university is located in the greater Copenhagen area, which is acknowledged for its excellent standards of living, childcare and welfare system.

Current computational methods are often ill-equipped to deal with DNA extracted from ancient populations. This ancient DNA shows high levels of fragmentation and accumulated chemical damage. Furthermore, the number of individuals that can be sequenced is often limited. Fortunately, several problems pertaining to ancient DNA and ancient paleogenetics can be described in a maximum-likelihood framework and computer science techniques can help us to solve such numerical problems efficiently via machine learning, numerical algorithms

and data structures. You will work in collaboration with other partners including the University of Copenhagen in order to develop the next generation of algorithms and software applied to DNA from fossils which can then be used to reconstruct population history and infer selection.

Given the COVID19 pandemic, we will happily accommodate requests for remote work until in-person work is deemed safe.

Qualifications You must hold a PhD degree (or equivalent) ideally in biological science with a focus on quantitative and mathematical aspects, or in computer science or mathematics.

The candidate we are looking for should ideally have the following qualifications:

* Knowledge of a programming language like Python, Perl, C++ and/or Java * Ability to work in a UNIX environment, ideally in a high-performance computing environment * Thorough understanding of basic principles of population genetics * Knowledge of probabilities and statistics * Firm grasp of first-year university mathematics (differential calculus/linear algebra) * Knowledge of coalescence theory or diffusion theory is an advantage * Expertise in next-generation sequencing data generation and processing is also a plus

The language of communication at DTU is English.

Apply at: https://www.dtu.dk/english/About/JOB-and-CAREER/vacant-positions/job?id=f1996cc7-f1d7-4ccb-98cb-8bdd5cf57406 Gabriel Renaud <gabriel.reno@gmail.com>

DurhamU PopulationGenomics

https://durham.taleo.net/careersection/du_ext/-jobdetail.ftl?job=21001048&lang=en Applications are invited for a Postdoctoral Research Associatein Evolutionary Biology with a particular emphasis onPopulation and Landscape Genomics. The research project isfunded by a collaborative NSFDEB-NERC grant that builds onwell over a decade of research on the evolutionary causes andconsequences of reproductive and aggressive interference inrubyspot damselflies (Hetaerinaspp.), this project tackles thequestion of how adaptations that reduce interspecificinterference affect range expansion.

The focal species,H. titia, varies in wing coloration bothseasonally and geographically, and wing colour determines thefrequency and intensity of territorial and reproductiveinteractions betweenH. titiaand other sympatricHetaerinaspecies. Taking advantage of amongpopulationvariation in wing colour, we will use genomic approaches tounderstand how behavioural interference between speciesinfluences range dynamics.

The successful applicant will be expected to take a leadershiprole in the design and management of the genomic analyses tocomparerates of diversification and historical demographyamongH. titiapopulations and betweenH. titiaand fourcongeners to differentiate between several possible historicalrange expansion scenarios.

Please contact Jonathan Drury (jonathan.p.drury@durham.ac.uk) with any questions. Deadline for application: 10 October

"DRURY, JONATHAN P." <jonathan.p.drury@durham.ac.uk>

ETHZurich MicrobialPredations

Applications are invited for a postdoc position and a PhD position in the lab of Greg Velicer at ETH Zurich as part of our team researching the ecology and evolution of predation in microbial communities, especially predation by and of myxobacteria.

Themes of our research relevant to these positions include: - abiotic, social, community and molecular factors impacting predator- prey interactions and their evolution, - effects of predation by and of myxobacteria on (co)evolution in microbial communities manipulated for initial composition, species richness and trophic structure, - predatory adaptation and prey counteradaptation (e.g. mechanisms, dynamics, genetic architecture, specialization) - evolutionary interactions between predation, aggregative multicellular development and motility.

Candidates with any relevant training background and a strong record of creative research who can thrive at both team and individual work in a scientifically and culturally diverse group are sought. Relevant areas of training/interest include (in alphabetical order) community ecology, community metagenomics, experimental evolution, microbial ecology and molecular genetics. Multiple projects relevant to these positions are ongoing and planned, but the interests and expertise of the selected candidates will inform specific project directions.

Support for least two years is available for the postdoc position, although it is expected that the selected candidate will apply for fellowships. PhD positions in Switzerland generally require a Masters degree. (Swiss Masters programs are roughly analogous to the precandidacy phase of US PhD programs. Potential applicants from countries in which a Masters degree is not normally required for entry into PhD programs can contact us to discuss possibilities for meeting the Masters requirement.)

To apply, please send one file to Rita Jenny at rita.jenny@env.ethz.ch that includes a motivation statement (one page max), your CV and contact information for two persons who have agreed to serve as references. All applications received by November 26 will be considered. Please specify the relevant position with a subject line of either "predation postdoc" or "predation PhD". Informal inquiries can be sent to gregory.velicer@env.ethz.ch.

Zurich, Switzerland has vibrant communities of ecologists, evolutionary biologists and microbiologists that offer many opportunities for interaction and collaboration. (https://ibz.ethz.ch/research/eco-evo-zurich.html)

Group research: https://evo.ethz.ch/ Relevant recent publications/preprints: Nair, Vasse et al. 2019 - doi.org/10.1038/s41467-019-12140-6 Wielgoss et al. 2019 - doi.org/10.1126/science.aar4416 La Fortezza et al. 2021 (preprint) - doi.org/10.1101/2021.06.17.448787 La Fortezza et al. 2021 (in press, book chapter preprint) - doi.org/10.20944/preprints202105.0451.v1 Freund et al. 2021 - doi.org/10.1098/rspb.2021.0456 Mayrhofer et al. 2021 - doi.org/10.3390/microorganisms9071362 Nair & Velicer 2021 - doi.org/10.3390/microorganisms9102079 Fiegna et al. 2021 (preprint) - doi.org/10.1101/2021.09.27.461844

See Google Scholar for additional relevant publications: https://scholar.google.ch/citations?user=-Vz_yy3MAAAAJ&hl=en&authuser=1 Velicer Gregory <gregory.velicer@env.ethz.ch>

FredHutch Seattle BayesianPhylogeneticInference

The Matsen group at the Fred Hutchinson Cancer Research Center has open postdoc positions to develop and apply new methods for Bayesian phylogenetic inference, as well as to develop new models and methods for analyzing viral and adaptive immune receptor data.

Join a lab:

- that provides a collaborative environment with strong statisticians, mathematicians, as well as staff programmers to accelerate your research - with a great track record of placing trainees in tenure-track positions, as well as in industry - with opportunities for advancement for people who want to stay - that is housed in a great central location in the beautiful city of Seattle

We have a number of other positions open, including bioinformatics and project manager positions: https://matsen.fredhutch.org/joining.html Bring your ideas and don't hesitate to get in touch, whatever your career level!

– Frederick "Erick" Matsen (he/him) Professor, Fred Hutchinson Cancer Research Center Affiliate Professor, Genome Sciences & Statistics, University of Washington Investigator, Howard Hughes Medical Institute http://matsen.fredhutch.org/ Erick Matsen <ematsen@gmail.com>

GeorgetownU EvolutionaryTheory

Postdoc in evolutionary theory Description

Manus Patten (pattenlab.com) in the Department of Biology at Georgetown University and Arvid Ãgren (arvidagren.com) at the Department of Evolutionary Biology at Uppsala University are searching for a postdoctoral fellow to conduct research on the "Paradox of the Organism," the observation that despite ample opportunity for organisms to be torn apart from within by selfish genetic elements and selfish cell lineages, they nevertheless persist. For more on our project, visit this link (https://www.pattenlab.com/the-paradox-of-

the-organism.html). This project is funded by the John Templeton Foundation and is part of a larger effort investigating agency, directionality, and function in biological systems (https://www.biologicalpurpose.org/).

The position is initially for one year, with an opportunity to renew for a second. The postdoc will be affiliated with the Department of Biology at Georgetown University. Full-time postdocs in residence in the DC metro area are eligible for benefits from Georgetown University. We welcome applications from individuals who wish to be considered for part-time, remote, or other flexible working arrangements.

Start date: January 2022 (or negotiable)

Starting salary: $56,000 (US dollars)

Qualifications

Candidates should have obtained a PhD in Biology or related field by January 2022. Narrowly, for purposes of our focal project, we are looking for the postdoc to have expertise in the mathematical modeling of biological processes (e.g., social evolution theory, multi-level selection theory, population genetics, quantitative genetics). But more broadly, to make the most of participating in the larger effort, we seek a postdoc with interests in foundational questions in evolutionary theory and a commitment to interdisciplinary scholarship.

Application process

To apply, please email your CV, the contact info for two references, and a brief (~1 page) statement of your interests to Manus Patten (mmp64@georetown.edu). Please email Manus and/or Arvid Ãgren (arvid.agren@ebc.uu.se) with informal inquiries. We will review applications on a rolling basis until the position is filled. For full consideration, please apply by November 30, 2021.

The Biology Department at Georgetown (biology.georgetown.edu) is a vibrant, multidisciplinary academic community in the heart of the U.S. capital. Georgetown University is an Equal Opportunity/Affirmative Action Employer fully dedicated to achieving a diverse faculty and staff. All qualified applicants are encouraged to apply and will receive consideration for employment without regard to race, color, religion, national origin, age, sex (including pregnancy, gender identity and expression, and sexual orientation), disability status, protected veteran status, or any other characteristic protected by law.

Manus Patten <mmp64@georgetown.edu>

HarvardU PopulationGenetics

A cover letter, CV. and names of two references can be submitted to maha@hms.harvard.edu

The Farhat Lab in the Department of Biomedical Informatics is seeking a highly motivated postdoctoral researcher in population genetics interested in pursuing innovative studies in the field of pathogen evolutionary genomics and its translation to the clinic. The research aims to enhance our understanding of the biology of M. tuberculosis infections and identify molecular markers for the diagnosis and surveillance.This position provides outstanding opportunities for continued scientific development and for contributing to pioneering research. Specifically, the fellow will apply as well as develop code to process and analyze mycobacterial molecular and phenotype data. They will join a team of computational and experimental postdoctoral fellows, graduate, and undergraduate students, and a software and web engineer.

Qualifications/Preferred Skillsets

1) Ph.D. in Bioinformatics, Systems Biology, Evolutionary Biology, Microbiology, Applied Math, or related field. Strong coding/computing skills.

2) Familiarity or strong interest in the analysis of pathogen genomic/molecular data

For more information on the Farhat lab visit: https://-scholar.harvard.edu/mahafarhat "Farhat, Maha Reda" <Maha_Farhat@hms.harvard.edu>

Heidelberg Independent

Dear Community,

Applications for a new "Independent PostDoc" program at my home institute, the Heidelberg Institute for Theoretical Studies are now open:

https://www.h-its.org/hits-job/independent-postdoc-program/ Alexis

– Alexandros (Alexis) Stamatakis

Research Group Leader, Heidelberg Institute for The-

oretical Studies Full Professor, Dept. of Informatics, Karlsruhe Institute of Technology Affiliated Scientist, Evolutionary Genetics and Paleogenomics (EGP) lab, Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology Hellas

www.exelixis-lab.org Alexandros Stamatakis <alexandros.stamatakis@gmail.com>

IndianaU EvoDevoPlasticity

Postdoctoral Fellow: evaluating the proximate causes and evolutionary consequences of developmental plasticity

We are seeking a highly motivated and creative individual to join the Led??n-Rettig lab as a Postdoctoral Fellow at Indiana University. We use interdisciplinary approaches to understand both the proximate mechanisms mediating developmental plasticity and its ecological and evolutionary outcomes. To answer these questions, we use spadefoot toads, whose larvae exhibit extraordinary developmental plasticity in response to dietary and social cues; further, this plasticity is associated with the evolution of novel and complex traits, such as predaceous and often cannibalistic behaviors. A successful candidate will combine transcriptomic, genomic, endocrine, behavioral and morphological analyses to understand (1) how these traits arose evolutionarily, and (2) how early life responses to the environment carryover into adulthood and future generations, through transgenerational mechanisms.

We use this non-model amphibian because of its unique environmental responsiveness, yet, the system offers an abundance of tools for molecular investigation, including several species with published genomes and transcriptomes. We currently house a colony at Indiana University to facilitate controlled, experimental investigation of developmental plasticity, and collect our animals from the field, both locally and in the Southwestern United States. For more information on our group, please visit our lab website (ledonrettig.com)

Indiana University:Indiana University host several mechanisms for postdoctoral training. We are home of CISAB, the Center for the Integrative Study of Animal Behavior, which provides laboratory, networking, and funding resources for behavior research. We are also home to NCGAS, the National Center for Genome Analysis Support which provides training and workshops to those using genomic data. Additionally, our lab is positioned down the hall from IU???s Center for Genomics and Bioinformatics, which provides library construction and next-generation sequencing, as well as consulting.

Location:Bloomington is a culturally-rich community in close proximity to outdoor activities such as hiking and kayaking. Bloomington offers an abundance of live music, art galleries, a variety of festivals and weekly farmers markets.

Minimum qualifications:A PhD is required by the start of the appointment; expertise in any area of science will be considered, as long as the applicant is enthusiastic towards the goals of our research. Evidence of previous scientific scholarship is necessary. Experience with next-generation sequencing data analysis and computational genomics is highly desirable, but not required.Salary:Commensurate with qualifications and experience, plus benefits.

Best consideration date:November 29, 2021 Anticipated start date:August 1, 2022, although specific start date is negotiable

To apply:Please submit(1) a cover letter explaining their scientific background and their reasons for wanting to join our group (2) a curriculum vitae with publication list and (3) contact information for three professional references to:https://indiana.peopleadmin.com/postings/-11724 For additional questions about the position, please contact Dr. Cris Ledon-Rettig (crisledo@indiana.edu).

The College of Arts and Sciences is committed to building and supporting a diverse, inclusive, and equitable community of students and scholars.

Indiana University is an equal employment and???affirmative action employer???and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation, gender identity or expression, genetic information, marital status, national origin, disability status or protected veteran status.

Cristina C. Led??n-Rettig, PhD (she/her)

Assistant Professor of Biology Indiana University 915 East Third St Bloomington, IN 47405, USA

ledonrettig.com

“Ledon-Rettig, Cris” <crisledo@indiana.edu>

INRAE France Marine eDNA

Postdoctoral position in trophic ecology , INRAE Rennes (France)

We invite applications for a 2-year and half (30 months) postdoctoral position at INRAE "Ecology and Ecosystem Health" lab located at Rennes (France), to work on the TROPHIC STRUCTURE AND FUNCTIONING OF KELP-FOREST FOOD WEBS

Context. Kelp forests are extensive underwater habitats that range along 25% of the world's coastlines, providing valuable resources, habitat, and services for coastal communities. These ecosystems are facing major threats due to marine pollution, overfishing, overgrazing (by urchins) and climate change that affect their trophic structure and functioning. To understand the mechanisms (such as functional compensation) that favor the resilience and stability of kelp forests, we need to improve our knowledge on their food web structure under variable environmental conditions.

This project co-funded by the French Office of Biodiversity (OFB) and the Brittany region aims to study (1) the trophic interactions among organisms associated with kelp forest (seals, birds, fish, invertebrates and algae) in two marine protected areas and (2) the relationship between kelp forest functional structure (diet of bioindicator species) and productivity (fish size and abundance) along a gradient of turbidity and human pressures (sediment discharge).

The successful candidate will be involved in sampling activities (in coordination with scientific partners and stakeholders) and will lead eDNA analyses developing a multi-marker DNA metabarcoding approach. She/He will be also responsible for the compilation of reference database of DNA barcodes, bioinformatics analysis and manuscript write-up.

REQUIREMENTS. Candidates should have a PhD degree in ecology or equivalent and have spent at least 18 months outside of France between May 1st, 2017 and the starting of the project (a prerequisite from the Brittany region). She/He must have a background in eDNA analysis. Experience in designing and applying metabarcoding analysis as well as additional skills in community ecology in particular on marine ecosystems will be appreciated. Autonomy and interpersonal skills (ability to work in groups) are mandatory. The candidate will be selected based on previous scientific track record and qualifications of relevance to the described projects

The position is an excellent opportunity for candidates who plan to defend their PhD before January 2022. All nationalities and genders are encouraged to apply. The position may start between January and May 2022. The fixed term contract provides a net salary of 2,200 euros per month.

LOCATION & HOST LAB. The successful applicant will work directly with Erwan Quéméré in a stimulating research group based in the Research unit ESE Ecology and Ecosystem Health (Rennes, France) (https://-/www6.rennes.inrae.fr/ese_eng/). The group offers a creative working environment. It uses a broad range of innovative techniques (remote-sensing, genomic, spatial, imagery, modelling, etc.) to study marine and freshwater ecosystems at various levels of biological organisation (from genes to organisms, populations and communities). The lab and local collaborators benefit from all equipment to develop the metabarcoding approach: a room dedicated to "environmental DNA" analysis (PCR-free laboratory), an Illumina sequencing platform and a bioinformatic server. The project benefits from an attractive collaborative environment with the National Museum of Natural History (MNHN) (Paris, Concarneau, Dinard), IFREMER (Brest) and the Biological Station of Roscoff (CNRS, Sorbonne University). The successful candidate will move regularly between sampling sites in Brittany, meet partners and participate in conferences.

APPLICATION. DEADLINE. 30.11.2021. Incoming applications will continue to be considered until the position is filled.Applications should include: CV with list of publications in peer-reviewed journals; a letter explaining research interests and three academic references. Applications should be sent to Erwan Quéméré, erwan.quemere@inrae.fr, Eric Petit, eric.petit@inrae.fr and Jean-Charles Leclerc, leclercjc@gmail.com Informal inquiries may be made to Erwan Quéméré, erwan.quemere@inrae.fr

Erwan Quéméré <erwan@quemere.fr>

KewGardens UK CropBiodiversityGenomics

Dear colleague,

Following a period where hiring personnel at Kew Gardens got frozen because of the pandemic, Alex Antonelli and I are thrilled to announce that once more, we are looking for a postdoctoral researcher to work with us on understanding the origin and evolution of neglected crops, with particular emphasis on the coca (the source of cocaine) and fever tree (the source of quinine). More details on the project and job description can be found here:

https://careers.kew.org/vacancy/-postdoctoral-researcher-biodiversity-genomics-463257.html We will be very grateful if you could please share this with any colleague that you know might be interested in working with us!

With best wishes and thanks,

Oscar (and Alex)

– Oscar Alejandro Pï¿½rez Escobar Research Team Leader - Sainsbury Orchid Fellow Royal Botanic Gardens, Kew Richmond, Surrey TW9 3AB - UK https://-www.tropicalphylodiv.com Associate Editor

Systematics and Biodiversity Journal https://-www.tandfonline.com/loi/tsab20 Off the press:

Molecular clocks and archaeogenomics of a Late Period Egyptian date palm leaf.Mol. Biol. Evol.msab188

A chromosome-level assembly of a Kordofan melon illuminates the origin of watermelons.PNAS118: e2101486118 Whole plastomes are not enough: phylogenomic and morphometric exploration of the orchid bee cladeOphryssect.sphegodes.JXBeraa467

The Royal Botanic Gardens, Kew is a non-departmental public body with exempt charitable status, whose principal place of business is at Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, United Kingdom.

Oscar Alejandro Perez Escobar <O.PerezEscobar@kew.org>

LBBE Lyon UngulateViralEvolution

Post-doctoral position open at LBBE (Lyon, France) on the "Individual and ecological determinants of orthonairovirus infection in wild ungulates"

Duration: 18 months; starting January 2022

The Laboratoire de Biométrie et Biologie Evolutive LBBE (https://lbbe.univ-lyon1.fr/fr) is welcoming applications from enthusiastic and independent Post-doctoral candidates to participate to a starting research projects on the ecology of orthonairoviruses, RESPOND.

Context: The genus Orthonairovirus is a rapidly emerging group of tick-borne bunyaviruses that includes important pathogens of humans and livestock, as well as a collection of other viruses about which little is known notably regarding their pathogenic potential to humans and animals, not even the hosts in which they naturally circulate. Among them, Crimean-Congo Hemorragic Fever Virus (CCHFV) is nowadays the most important Orthonairovirus in terms of human disease, causing severe forms of hemorrhagic fever, with increased numbers of sporadic cases and outbreaks over the years. Other orthonairoviruses have also been associated with milder disease forms. The presence of CCHFV outside the endemic areas was recently evidenced in ticks recovered from Iberian ibex, deer and wild boar in Spain. Recently, serological evidence of CCHFV was reported, in cattle from Corsica (Grech-Angelini et al., 2020) and in wild ungulates in Spain (Espunyes et al. 2021).

Objectives: While studies report the presence of CCHF and other orthonairoviruses in various areas and species, knowledge on the determinants of exposure to orthonairoviruses of tick's hosts and the consequences of these viruses on their fitness remain poor. The intensive monitoring of the roe deer (Capreolus capreolus) and the wild boar (Sus scrofa) in the French populations of Chizé (roe deer and wild boar), Trois-Fontaines and Aurignac (roe deer) might help to gain such knowledge. These research programs result in longitudinal follow-up of known-aged individuals over lifetime and an assessment of population dynamics and evolutionary processes.

Samples of serum are available from the roe deer captured since 2010 and samples will be collected on wild boar. The candidate will participate to the analyses of these serum samples to detect antibodies to CCHFV

and other orthonairoviruses. Ticks will be collected during the study period both on captured roe deer / wild boar and in the field. Ticks will be screened for orthonairovirus sequences. Prevalence and distribution of the identified orthonairoviruses will be determined according to the host species' characteristics (e.g. sex, age, immune status), and species of tick harbored. Data from roe deer and ticks will be pooled to identify i) the individual (e.g. sex, age) and ecological determinants of orthonairovirus infection by of roe deer and wild boar; and ii) the consequences of orthonairovirus infection on their health (e.g. through an assessment of immune performance or parasitic load), reproductive performance and survival.

Environment: The LBBE is part of CNRS (Unit 5558) and University of Lyon (University Claude Bernard Lyon 1). Research topics encompass various aspects of Biometry (or Biostatistics) and Evolutionary Biology. The laboratory comprises 96 permanent positions and about as many post-graduate students and post-docs. Research themes in the lab are clustered around a methodology (emphasizing the importance of modeling and informatics in life and medical sciences), and an evolutionary perspective, regardless of the investigation level (from molecules to communities). This double angle results in a synergy between methodological developments and biological questions.

Candidates: The applicants are expected to have a strong background in serological diagnostic molecular biology. Prior experience in epidemiology and analysis of complex ecological data, and international training will constitute an advantage. Proven ability to identify research objectives and meet agreed deadlines, self-motivation, flexibility, and assistance to others ongoing research works are essential. The ideal candidates should be highly motivated, curious and enthusiastic to work in a collaborative team. Excellent written and communication skills in English are required.

Application: Candidates are invited to contact Emmanuelle Gilot-Fromont (emmanuelle.gilotfromont@vetagro-sup.fr) and Gilles Bourgoin (gilles.bourgoin@vetagro-sup.fr) for further details. Please send an application with the following: - Cover letter - Concise summary of previous research activities - Curriculum vitae including publication list and contact details for 2-3 referees

Deadline for application: 24th October 2021

References related to the project Akl, T. et al. 2019. Detection of tick-borne pathogens in questing Ixodes ricinus in the French Pyrenees and first identification of Rickettsia monacensis in France. Parasite 26,

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London EvoDevoEpigenomics

An open post-doctoral position in the laboratory of Dr. Alex de Mendoza at Queen Mary University of London (United Kingdom). This is a European Research Council funded position under the project METHYLEVOL, aimed at understanding the evolution of DNA methylation in animals and other eukaryotes. This position is for 2 years and can be extended up to 4 years.

The candidate should have previous experience in molecular biology. Most sought after experience is in cnidarian model systems (specifically Nematostella vectensis), including lab culture, genetic manipulation, spawning. Alternatively, experience in functional EvoDevo techniques of other non-traditional model systems is also welcome. Bioinformatics experience would be a plus, but we can train the candidates in this aspect. Ample opportunities for training in functional genomics. Find link to the application and salary/conditions details here: https://webapps2.is.qmul.ac.uk/jobs/job.action?jobID=5631 Applications close on October 30th. All you need is: 1.- Curriculum vitae (CV). 2.- Motivation letter. 3.- Names and contact details of two references.

Potential candidates should not hesitate to get in touch with a.demendozasoler@qmul.ac.uk to discuss your interest in the posts and the projects, even if you cannot make it to the deadline.

More information on the group, publications and research topics in the group can be found in the laboratory website: https://www.demendozalab.com/ Research environment:

Queen Mary University of London and the School of Biological and Chemical Sciences are in London's East End, and hosts a vibrant community of researchers with complementary expertise in evolutionary genomics and EvoDevo (https://www.qmul.ac.uk/sbbs/about-us/our-departments/biology/), with access to state-of-the-art computational resources and genomics facilities. Furthermore, we are part of the Epigenetics Hub, a highly integrated group of researchers with different expertise in different aspects of epigenetics, from basic to applied

research: http://qmulepigenetics.com/home Alexandre de Mendoza Soler <a.demendozasoler@qmul.ac.uk>

LousianaStateU Museum Systematics

Work Location: Baton Rouge, LA

To apply, please visit https://-lsu.wd1.myworkdayjobs.com/LSU/job/B0009-MJ-Foster-Hall/Postdoctoral-Researcher_R00061531 . Special Instructions: Applicant should provide a CV, a cover letter, contact information for three references, and a 2-page maximum research statement.

Job Description: The candidate will conduct research in coordination with one or more of the curators. The candidate will also be responsible for helping with the laboratory supervision and training of graduate and undergraduate research assistants and management of the LSUMNS molecular genetics core facility. Ongoing projects in the lab include systematics and population genetics studies of birds, fish, mammals, reptiles and amphibians. The position is a one-year contract with the opportunity for renewal upon annual review. The LSUMNS is dedicated to building a culturally diverse and pluralistic community, and we strongly encourage applications from women, minorities, individuals with disabilities, veterans, and other members of groups underrepresented in STEM.

Job Responsibilities: (75%) Conduct research on a semi-independent basis. Prepare and publish scientific manuscripts under the direction of a curator. Attend, contribute, and where necessary lead relevant meetings. Plan and develop research methods and techniques within the framework of the research program, such as phylogenomics, transcriptomics, comparative and population genomics, target capture, and other high-throughput sequencing methods. Bring new expertise to the research program. Undertake any other duties relevant to the program of research, including field work. Collaborate with research colleagues and support staff internally and develop appropriate external contacts relevant to the project and future funding opportunities. Be an active member of LSUMNS's vibrant academic community by attending seminars, participating in journal clubs, etc.

(25%) Responsible for helping with the laboratory supervision and training of graduate and undergraduate research assistants, and management of the LSUMNS's shared molecular genetics facility. Ongoing projects in the lab include systematics and population genetic studies of birds, mammals, reptiles and amphibians, and fish. Monitor laboratory cleanliness and safety. Order general lab supplies for the department. Establish and enforce lab rules and regulations, and orient new staff/students at beginning of each semester. Attend regular meetings with the research team and investigators as required.

Required Qualifications: Ph.D. in Biology or related discipline (the degree must be conferred by the effective date of the appointment); expertise in evolutionary biology and computational biology; experience with next-generation molecular methods, such as whole-genome sequencing, target capture, and other genomic tools; strong publication record; ability to manage an active laboratory; and a record of and interest in continuing mentorship and outreach.

Special Qualifications: LSU requires the COVID-19 vaccine for all students, faculty, and staff or mandatory monthly testing. New employees must either submit proof of vaccination by October 15, 2021 or within three (3) days of their official start date, otherwise be entered into the mandatory monthly testing protocol beginning in November 2021.

Additional Position Information: Background Check - An offer of employment is contingent on a satisfactory pre-employment background check.

Benefits - LSU offers outstanding benefits to eligible employees and their dependents including health, life, dental, and vision insurance; flexible spending accounts; retirement options; various leave options; paid holidays; wellness benefits; tuition exemption for qualified positions; training and development opportunities; employee discounts; and more!

LSU is an Equal Opportunity Employer: LSU believes diversity, equity, and inclusion enrich the educational experience of our students, faculty, and staff, and are necessary to prepare all people to thrive personally and professionally in a global society. We celebrate diversity and are committed to the principles of diversity and inclusion. We actively seek and encourage qualified applications from persons with diverse backgrounds, cultures and experiences. To learn more about how LSU is committed to diversity and inclusivity, please see LSU's Diversity Statement and Roadmap. Persons needing accommodations or assistance with the accessibility of materials related to this search are encouraged to contact the Office of Human Resource Management (hr@lsu.edu).

HCM Contact Information: Questions or concerns can

be directed to the LSU Human Resources Management Office at 225-578-8200 or emailed HR@lsu.edu

Thank youm

Abby Simpson Office of Human Resource Management | Talent Acquisition Partner

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Lyon EvolutionaryInnovations

Two-year Postdoc position Developmental genetic basis of an evolutionary innovation Where:

The Khila lab at the Institute of Functional Genomics (IGFL), Ãcole Normale Supérieure de Lyon, UMR CNRS 5242, Lyon, France http://igfl.ens-lyon.fr/ http://igfl.ens-lyon.fr/equipes/a.-khila-developmental-genomics-and-evolution The Francesconi lab at the Laboratoire de Biologie et Modelisation de la Cellule (LBMC), Ãcole Normale Supérieure de Lyon, UMR CNRS 5242, Lyon, France http://-www.ens-lyon.fr/LBMC http://www.ens-lyon.fr/-LBMC/equipes/quantitative-regulatory-genomics Salary: 2500-3000/month Euros (based on experience after PhD) Starting date: January 2022 Deadline for applications: October 30th, 2021 or till the position is filled

Project title: Understanding the origin of evolutionary innovations using water strider propelling fan as a model

Keywords: EvoDevo, developmental genetics, RNAi, Single cell-sequencing

Background: Evolutionary innovations are qualitatively new and beneficial phenotypes that allow the bearing lineages to access previously unexploited ecological opportunities. Studying these traits offers a unique opportunity to understand how novelty arises and evolves. Although many iconic examples have been documented, it is still difficult to study the origin of evolutionary innovations for various reasons. For example, systems bearing striking evolutionary innovations may be intractable for experimentation, or the innovation itself may be too complex for manipulation.

Model system: The Khila lab has established the propelling fan of the water strider Rhagovelia (Figure1A) as a model to study the origin of evolutionary innovations. The propelling fan in Rhagovelia is composed of ˜20 plume-like structures that can be deployed or retracted as the animal rows on the water (Santos et al., 2017) (Figure 1B). The fan allows the water strider to sustain permanent movement on fast flowing streamsÂ' - a previously unexploited ecological opportunity that is not accessible to fan-less species. This innovation may have contributed to the burst of speciation of the genus Rhagovelia, which alone accounts for almost half of the species count in the family (over 400 species). We investigate the origin of this evolutionary innovation through a comparative study of the cellular and developmental genetic mechanisms underlying fan development in species with one pair, two pairs or no fans (Figure 1).

Project: The postdoctoral fellow will lead the effort to generate single cell sequencing data from the legs Rhagovelia and sister species legs, see (Santos et al., 2017). This tissue includes multiple cell types, identifiable based on molecular markers, including a cluster of fan cells (Santos et al. 2017). She or he will analyse the single cell data in collaboration with Francesconi team and build a putative gene regulatory network to be experimentally validated through experiments of gene expression and RNAi knockdown.

Requirement: PhD degree.

Required skills: Excellent communication skills in English (written and spoken), motivation, creativity, curiosity, critical thinking, good work ethics, teamwork, and good inter-personal relationship with colleagues. Acquired skills in large-scale data analysis and computational biology. A track record of peer-reviewed publications.

Desired skills: Knowledge in evolutionary developmental biology, previous experience in single cell RNA-seq experimental and data analysis steps would be a plus.

How to apply: By email to abderrahman.khila@ens-lyon.fr or mirko.francesconi@ens-lyon.fr with a motivation letter explaining why you are interested by this position and how you think you are a good fit, your CV and names and e-mail addresses of two or three referees who can write letters of reference on your behalf.

Lab publication on the Rhagovelia fan: Santos, M.E., Le Bouquin, A., Crumiere, A.J.J., Khila, A., 2017. Taxon-restricted genes at the origin of a novel trait allowing access to a new environment. Science 358, 386-390.

Abderrahman Khila <abderrahman.khila@ens-lyon.fr>

MIZ Poland Phylogenomics

Postdoc: MIZ_Poland.Phylogenomics

Call for a postdoc position

The research group led by Dr Dagmara ÂyÂ³a at the Leibniz Institute of the Analysis of Biodiversity Change (LIB, Hamburg, Germany) is looking for candidates for a postdoc position to work within the project entitled: "The Impact of the Paleocene-Eocene Thermal Maximum on diversification dynamics in Paederinae rove beetles" funded by the Polish National Science Centre and carried out at the Museum and Institute of Zoology, Polish Academy of Sciences (MIZ, PAS). The main goal of this project is to investigate the evolutionary response of Paederinae predatory beetles to the most rapid and significant climatic warming event in the Cenozoic. To do so, a set of innovative methods, such as machine learning for species identification, Next Generation Sequencing, and Bayesian statistical phylogenetics will be combined with modern approaches in insect systematics.

Scope of work: - performing laboratory work, i.e. DNA extractions, library preparation, enrichment with UCE baits, sequencing - processing and preparing raw sequences for the phylogenomic analysis - participating in phylogenetic and biogeographic analyses - working closely with other members of the group - participating in data analysis and interpretation of the results - writing publications with other members of the team - presentation and dissemination of the obtained results in the form of conference talks and scientific papers

Requirements: - PhD degree in biological sciences or a related area, awarded or to be awarded before January 2022, but no earlier than 7 years ago - experience in the molecular lab work, including NGS techniques or interest in learning - experience in bioinformatics concerning the analysis of genomic data for phylogenetic purposes or interest in learning - theoretical knowledge on phylogenetics and evolutionary biology - experience in working with beetles will be an advantage, but it is not required - fluency in English (at least B2 level) - enthusiasm for science - communication and organizational skills - creativity, high motivation and ability to work alone and in a team

Conditions of employment: The postdoctoral researcher will be based in the Museum and Institute of Zoology in Warsaw, but will also work in close collaboration with the Zoological Museum in Hamburg (Germany), part of the Leibniz Institute for the Analysis of Biodiversity Change (LIB). The position starts on 1.01.2022 or soon after and is funded for 2 years.

A salary is ca. 8300 PLN gross (ca. 6400 PLN after taxes ~ 1400 EUR) per month, which is significantly higher than the mean salary in the country (5504 PLN gross, according to https://stat.gov.pl/en/latest-statistical-news/communications-and-announcements/-list-of-communiques-and-announcements/average-gross-wage-in-the-2th-2021,281,31.html). This is sufficient to cover the life expenses and assures a good standard of living in Poland.

Research environment: The research at MIZ is focused on a broad range of themes in animal biology, including systematics, biogeography, evolutionary biology, ecology and population genetics. Dagmara ÂyÂ³a's research group is part of the Department of Systematics, Zoogeography and Ecology of Invertebrates led by Prof. K. Wioletta Tomaszewska focused on insect systematics, taxonomy, evolution and phylogeny. MIZ laboratories contain modern equipment for genomic analyses, as well as tools for studying morphology, like SEM and micro-CT. The Museum's zoological collection is among the largest and most valuable in Europe.

Application process: The deadline for submitting the application is 30.11.2021 11:59 pm CEST. The application must be in English. Please submit the documents as one PDF file named with your surname to zyladagmara@gmail.com with the email subject "Application for a postdoc position".

The file must include:

- A copy of your PhD degree certificate (or a document confirming your enrollment in a PhD programme together with a letter from the PhD supervisor stating the expected completion date) - Cover letter (max. 1 page) - CV including the list of publications and/or manuscripts in preparation, with the following statement provided at the end: "I give my consent to the processing of personal data provided in my application documents by the Museum and Institute of Zoology PAS for the purpose of the recruitment process, pursuant to the Personal Data Protection Act of 10 May 2018 (Journal of Laws 2018, item 1000) and in agreement with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free

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mcmaster.ca/~brian/evoldir.html

Montpellier BiodiversityAdaptation

Call for a 2-yr Postdoc position at FRB-CESAB within the framework of the research project BIOSHIFTS Global redistribution of biodiversity: A macro- and eco-evolutionary approach to understand species vulnerability to global changes

Location: FRB - CESAB, 5, rue de l'Ãcole de Médecine, 34000 MONTPELLIER (France) Salary: 2518 €gross per month Contract: 24 months fixed term, full time Closing date: 15 November 2021 Starting date: January 2022

Host structure The Foundation for research on biodiversity (FRB) was created in 2008. It gathers public research institutions, environmental NGOs, land and genetic resources managers and the private sector. It provides a forum where science meets society in order to address the current challenges related to biodiversity research. The Centre for Synthesis and Analysis of Biodiversity (CESAB) is FRB's main programme and a leading research organization in Europe, with an international reputation. Launched in 2008 after the "Grenelle de l'Environnement" by the Ministries for research and for ecology, it was created by eight public research institutions (BRGM, CIRAD, CNRS, IFREMER, INRA, IRD, IRSTEA and MNHN), joined in 2014 by LVMH and in 2017 by the University of Montpellier. Its aim is to implement the innovative work of synthesis and analysis of existing data in the field of biodiversity. Advancing knowledge, developing culture and collaboration, facilitating links between scientific disciplines and with the stakeholders, are the main objectives of CESAB, which welcomes every year a large number of researchers from all continents. For more information about CESAB: https://www.fondationbiodiversite.fr/en/-about-the-foundation/le-cesab/ Context & description BIOSHIFTS is an international consortium composed of 14 researchers from 7 countries and 12 research agencies/institutes with a diverse and complementary range of expertise in the field of climate change research and biodiversity redistribution. The overreaching aim of BIOSHIFTS is to extend the conceptual and analytical tools in range shift research, thereby improving our ability to forecast biodiversity changes and inform decision-making process in a rapidly changing world. BIOSHIFTS will leverage the power of a comprehensive geoâcompiling +30,000 species range shifts documented in marine, freshwater and terrestrial ecosystems over recent decades (Lenoir et al. Nature Ecology and Evolution 4: 1044-1059), coupled with open-source trait and environmental databases as well as innovative macroevolutionary approaches to investigate range shift processes across ecosystems, taxonomic and environmental contexts (both natural and anthropogenic). The specific objectives of BIOSHIFTS are to: (i) provide a comprehensive overview of the patterns and magnitude of biodiversity redistribution on Earth; (ii) explore the links between macroevolutionary processes (e.g. past rates of niche evolution) and contemporary range shifts; and (iii) address the fundamental question of how climate-induced range shifts arise from the interplay of intrinsic (e.g. physiological tolerance, dispersal ability, ecological generalism, adaptive potential) and extrinsic (e.g. climate velocity, habitat heterogeneity, human pressures) mechanisms. Beyond generating fundamental knowledge regarding the range shift processes, BIOSHIFTS will also explore the predictive utility of the identified mechanisms to support effective climateâstrategies for biodiversity conservation. For more information about BIOSHIFTS: https://www.fondationbiodiversite.fr/en/the-frb-in-action/programs-and-projects/le-cesab/bioshifts/ The post-doc is expected to: - Coordinate progress and work in close cooperation with the different BIOSHIFTS partners; - Contribute to the creation of a fully functional geo-database integrating information about range shift estimates, species traits, habitat characteristics and study-level variables; - Lead the development of the analytical framework, drawing upon state-of-the-art phylogenetic comparative and macroevolutionary methods as well as trait-based and meta-analytical approaches; - Lead the dissemination of project results including writing scientific articles and presentation of the results at international conferences.

Qualifications We are looking for a highly motivated post-doctoral researcher with strong background in global change biology, concepts in data synthesis science and macroevolution, who is excited about research questions pertaining to range shifts processes and biodiversity conservation. The successful candidate is expected to hold a PhD degree in ecology or

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Montpellier StructuralGenomics

Postdoc position in Genomics and Bioinformatics

Key-words : Structural genomics - meiotic recombination - machine learning Duration: 3 years - starting February 2022 Laboratory: DIADE, a joint research unit between IRD, University of Montpellier and Cirad Location: Montpellier, France

Applications should be sent by e-mail to the contact hereby, not later than Nov. 31, 2021. Contact: mathias.lorieux@ird.fr Required skill for applicants: PhD in genomics, bioinformatics or applied mathematics. Mathematical modeling. Machine learning. Spoken and written English

Description of the position: In meiotic recombination, crossing overs (CO) do not occur randomly along chromosomes. The laws that control CO location are still poorly understood, although many studies have been devoted to them. The central question we wish to answer - using rice, Oryza sativa L., as a model - in this project is: ≪ Does fine knowledge of the structural differences between two genomes make it possible to accurately predict the probability of occurrence of recombination (or CO) events in the meiosis in the F1 hybrid of these two genomes? ≫

To answer this question, the postdoc fellow will be involved in all or part of the following activities: (1) develop a method for the automatic identification and classification of the set of structural variants (SV) between two distant genomes, (2) estimate local recombination in a population of 2,000 F2 individuals descended from the F1 hybrid between the distant genomes, (3) establish rules of causality between SV and local recombination, using machine learning methods, and (4) establish a predictive model of recombination in a hybrid as a function of the genomic sequence of the parents of the hybrid.

This project is part of a larger ANR grant aiming at studying meiotic recombination. All the resources - crosses, DNAs, sequences - necessary to the project have already been produced. The DIADE research Unit at IRD has a strong background and many collaborations - both national and international - in the field of genomics and bioinformatics. Montpellier offers a very complete scientific environment in these research fields.

Montpellier is a very attractive multi-cultural, dynamic city, located near the Mediterranean sea

“valerie.poncet@ird.fr” <valerie.poncet@ird.fr>

NationalResearchCouncil Italy EvolutionaryBiology

Dear EvolDir members,

we have an open position toï¿½ join my lab. The position is quite broadly defined in terms of ideal candidate background/expertise and is focused on data analysis.

The position will be based at the IRBIM institute (which is part of the Italian National Research Council, the largest research institution in Italy) in Messina.

The official announcement (in Italian only) can be found at https://bandi.urp.cnr.it/doc-assegni/-documentazione/11615_DOC_IT.pdf To help potential international applicants (and anyone who’d like to know more, really), I have written a short “news” on my website at https://www.fruciano.org/events/were-hiring/ Please, notice that I cannot accept applications directly to me via email (kindly, consult the two links above).

The deadline for applications is October 28th 2021.

I look forward to receiving applications from qualified and motivated candidates!

Best regards,

Carmelo Fruciano

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Carmelo Fruciano Italian National Research Council (CNR) IRBIM Messina http://www.fruciano.org/ Carmelo Fruciano <c.fruciano@unict.it>

NorthCarolinaStateU ModelingGeneDrive

Postdoc: Modeling Gene Drive and Evolution of Insecticide Resistance in Mosquitoes

OVERVIEW: We have funding from NIH for a project titled “Combining Aedes aegypti genomics and modeling to improve gene drive strategies and our understanding of insecticide resistance evolution”. Aedes aegypti is

the primary vector of dengue, Zika, chikungunya, and urban yellow-fever. We are searching for a postdoc to work on the modeling aspects of the project.

PROJECT DESCRIPTION: The idea of using selfish genetic elements to drive specific transgenes into a mosquito population either to reduce its size or to render it unable to transmit a particular pathogen was proposed over 40 years ago. It is only recently, however, with the advent of CRISPR-based gene editing technology, that this approach has gained broad attention from researchers and the news media. The need for this new technology is in part due to evolution of mosquito resistance to insecticides.

The most straightforward approaches for building gene drives using CRISPR/Cas9 technologies are theoretically expected to result in spread of the gene drive to individuals in all populations that are connected by even minimal gene flow. These approaches are appropriate in some cases, but detailed mathematical models are needed to understand the dynamics of spread and the potential for resistance evolving to the gene drive mechanisms. Our group and others have proposed more complex approaches for developing gene drives that are spatially and/or temporally limited. Novel molecular approaches accompanied by modeling are needed for development of these limited gene drives.

We currently have a detailed spatial model that simulates the population dynamics and population genetics of Ae. aegypti in a city, Iquitos, in the Amazonian region of Peru. There are rich data sets on both mosquito dynamics and dengue epidemiology that have been collected in this city. One important characteristic of this mosquito is limited among house movement and strong population structure. A main goal of our NIH grant is to modify this model to explore how and to what extent population structure will impact insecticide resistance evolution and the performance of novel gene drive strategies.

Dhole S, Lloyd AL, Gould F. 2020. Gene drive dynamics in natural populations: the importance of density-dependence, space and sex. Annu. Rev. Ecol. Evol. Syst. 51:505-31

JOB DESCRIPTION: The postdoc in this position will lead efforts on modifying the detailed model and utilizing it to test hypotheses. The postdoc will have the option of also conceptualizing and developing general models to evaluate novel approaches for building spatially/temporally limited gene drives. Our project is strengthened by collaborations with a number of labs in the US and in Peru, and activity in the Genetic Engineering and Society Center at NC State that examines societal aspects of novel genetic technologies. The postdoc will interact with members of these other research groups. If desired, there will be an opportunity for some work in Peru and for mentoring undergraduate and graduate students. The appointment is for two-years with the potential to write new grants for extension beyond that period.

QUALIFICATIONS: We are looking for a postdoc with a solid background in population biology and population genetics who has experience with modeling and who wants to do applied research. Experience with C++ or related languages is desirable. Ability to work independently and to communicate effectively as a member of a team is essential.

To apply: email a cover letter and CV to Fred_Gould@ncsu.edu AND Alun Lloyd@ncsu.edu

Fred Gould University Distinguished Professor Co-Director Genetic Engineering and Society Center My pronouns: he,him, his 919-832-8633

Fred Gould <fgould@ncsu.edu>

NorthernArizonaU 2 ConservationGenomics

Postdoctoral Researcher in Conservation Genomics and Restoration of Whitebark pine

We invite applications for a postdoctoral researcher to work on a collaborative project funded by the National Park Service, BLM-Montana and Northern Arizona University. This project brings together existing and new genomic resources to build a powerful platform for the study of genomic diversity and potential for adaptation to climate change and resistance to white pine blister rust in natural populations of whitebark pine. Whitebark pine (Pinus albicaulis) is a five-needle pine species severely affected by disease and pests, as well as drought and fires. This research project aims to estimate genome-wide levels of diversity that will inform conservation and restoration activities. The postdoctoral researcher will be based at Dr. De La Torre's Forest Genomics lab at Northern Arizona University (NAU), with the potential to visit several National Parks in western North America.

Job description:

* Analyze and interpret molecular data using bioinformatic tools * Summarize research results for distribution/communication to the scientific community through

peer-review publications in high- impact factor journals and conference presentations. * Train undergraduate students in molecular techniques to extract DNA/RNA and preparation of libraries for sequencing.

Minimum Qualifications:

* PhD degree in Biology, Genetics, Forestry, or related field of study. * Proficiency in R (Perl or Python is a desirable but not mandatory) * Experience with large datasets and high-performance computing * Molecular lab experience * Ability to travel for sample collections or attendance to conferences

How to apply: Send your research statement, CV, and the names of 3 references to Amanda.de-la-torre@nau.edu.

Deadline for applications is November 30th, 2021. Start date: Feb 1st, 2022 (flexible).

For more information, please contact: Dr. De La Torre, Amanda.de-la-torre@nau.edu

Postdoctoral Researcher in Plant Epigenomics

We invite applications for a postdoctoral researcher to work on a 4-year project on the epigenomics of disease resistance. This project brings together existing and new genomic, epigenomic and transcriptomic resources to build a powerful platform for the study of epigenomic regulation of immune responses in long-generation tree species. This project will investigate the White Pine Blister Rust (WPBR) - sugar pine pathosystem to understand the role of DNA methylation in regulating trans-generational immune response. White pine blister rust (WPBR) caused by Cronartium ribicola is a devastating fungal disease causing great economic and ecological loss in five-needle pines in North America. The postdoctoral researcher will be based at Dr. De La Torre's Forest Genomics lab at Northern Arizona University (NAU) and will collaborate with Dr. Wegrzyn's Plant Computational Genomics lab at University of Connecticut.

Job description:

* Analyze and interpret RNA-seq data using bioinformatic tools * Analyze and interpret DNA methylation data using bioinformatic tools * Summarize research results for distribution/communication to the scientific community through peer-review publications in high-impact factor journals and conference presentations. * Train undergraduate students in molecular techniques to extract RNA/DNA and preparation of libraries for sequencing

Minimum Qualifications:

* PhD degree in Biology, Genetics, Bioinformatics, or related field of study. * Proficiency in Perl or Python, and R * Proficiency with Linux and high performance computing.

How to apply: Apply through the NAU Careers website https://in.nau.edu/human-resources/current-job-openings/ In Staff Openings, look for Job ID 605586

Deadline for applications is November 15th, 2021. Start date: Jan 1st, 2022.

For more information, please contact: Dr. De La Torre, Amanda.de-la-torre@nau.edu

Amanda De La Torre <Amanda.de-la-Torre@nau.edu>

Norway GeneEditing

Dear All,

We are recruiting a postdoc in functional genomics in Atlantic salmon in Norway.

The main purpose of the post-doctoral position is to qualify for work in high-level scientific positions. The goal of this project is to reveal the functional impact of target structural variants on early development in Atlantic salmon using CRISPR-Cas9 and/or Tol2 transgenesis in embryo and/or cell lines. To achieve this goal, the recruited researcher/postdoc will collaborate with the ongoing Atlantic salmon genomics project team at CIGENE.

The candidate will: Participate in the selection process of targets from the candidate list design, develop and perform CRISPR experiments and Tol2 transgenesis of salmon embryos and/or cell lines investigate phenotype in Atlantic salmon embryo, skin and liver cell lines Illumina-based DNA, RNA sequencing in collaboration with bioinformatics researchers disseminate research in leading scientific journals in the field Work with other researchers, incuding PhD and master's students

Planned starting date is April 1st. 2022.

For detail and application, please see below. https://www.jobbnorge.no/en/available-jobs/job/214147/researcher-within-functional-genomics-in-atlantic-salmon Thank you very much,

Marie

– Marie SAITOU, Ph.D. Tenure-Track Principal Investigator, Centre of Integrative Genetics (CIGENE), Faculty of Biosciences, Norwegian University of Life Sciences https://sites.google.com/view/saitou-lab Marie Saitou

<marie.saitou@nmbu.no>

OklahomaStateU EvolImmunogenet-icsDiseaseOklahomaStateU EvolImmunogeneticsDisease

Postdoctoral Position

Evolutionary Genetics of Host Responses to Emerging Infectious Disease

Research in the Waldman lab at the Department of Integrative Biology at Oklahoma State University focuses on the interaction of disease, adaptive immune function, and the evolution of behavioral strategies in response to emerging infectious pathogens.

Our recent studies have demonstrated that Asian amphibians are resistant to the amphibian chytrid pathogen whereas species elsewhere vary in their resistance or tolerance. These differences map to variation in the major histocompatibility complex (MHC). Host population structure and patterns of assortative mating vary with MHC type and pathogen prevalence. Particular MHC alleles appear to confer disease resistance but incur other fitness costs. These tradeoffs vary not only with MHC type but also pathogen variants and host microbiomes.

We seek a postdoctoral associate with a good grounding in modern methods of population genomics to join our research group. Our research is global in scope, incorporating comparisons of host/pathogen relationships among amphibians in North America, Asia, and Oceania. The successful candidate will be involved with projects involving graduate students but also will have ample opportunities to develop their own projects. Interactions with colleagues internationally along with members of our department are encouraged. The Department of Integrative Biology has 28 faculty whose research addresses three main research themes: ecology, evolution, and environmental stress, all key aspects of our project.

Candidates should have a demonstrated research record incorporating molecular genetics and evolutionary or conservation biology. Initial appointment is for one year, with expectation for renewal given satisfactory progress. The start date can be negotiated.

Oklahoma State University is a Carnegie Tier 1 research university with excellent facilities for research and instruction, including a high-performance computing center. Because of its mid-continent location that spans a broad expanse of habitats, from deciduous forest to semi-arid grasslands, Oklahoma offers a rich tapestry of prairie and forest ecosystems that support an exceptional level of biodiversity.

The University is located in Stillwater, Oklahoma, rated the friendliest college town in America. Stillwater offers an exceptionally high quality of life - a thriving college community with a low cost of living, and a local airport served by daily commercial flights. Two major metropolitan areas, offering additional cultural, recreational and shopping opportunities, are little more than an hour away by car.

Applications should include a cover letter describing your experience and goals for the position, a full curriculum vitae, and the names and contact details (phone numbers and email addresses) of three references. Preliminary enquiries are welcome. Applications or enquiries should be emailed to bruce.waldman@okstate.edu.

Oklahoma State University, as an equal opportunity employer, complies with all applicable federal and state laws regarding non-discrimination and affirmative action. Oklahoma State University is committed to a policy of equal opportunity for all individuals and does not discriminate based on race, religion, age, sex, color, national origin, marital status, sexual orientation, gender identity/expression, disability, or veteran status with regard to employment, educational programs and activities, and/or admissions. For more information, visit https:///eeo.okstate.edu . Bruce Waldman <bw@bronze.lcs.mit.edu>

Paris EvolutionaryGeneticsEvodevo

A postdoctoral position is available to work on a two-year project entitled “Quantitative Tools for assessing the Correlated Evolution of Genes and Phenotypes: Application to Birds Color Patterns” in collaboration with the teams of Hï¿½lï¿½ne Morlon < https://www.phyloeco.bio.ens.psl.eu/ >, Amaury Lambert < https://www.lpsm.paris/pageperso/amaury.lambert/ > and Marie Manceau < https://www.manceaulab.com/ > at the Ecole Normale Supï¿½rieure < https://www.ens.psl.eu/en > and Collï¿½ge de France < https://www.college-de-france.fr/site/en-college/index.htm > in Paris.

This project aims at (1) developing model-based phy-

logenetic inference tools aimed at identifying putative genomic regions implicated in trait evolution over macroevolutionary time scales, and (2) applying the approach herein developed to empirical datasets of color pattern variation in clades of birds.

The postdoctoral researcher will lead the development of an integrated phylogenetic model combining molecular and phenotypic evolution for analysing the correlated evolution of genes and phenotypes, implemented in a Bayesian framework. He/she will also be responsible for the compilation of available genetic data for birds. The color pattern data is already partly available and will be collected over the course of the project by the Manceau team.

Applicants with diverse backgrounds are encouraged to apply (e.g. mathematics, physics, computational biology, evolutionary biology, genomics, developmental biology). Interest/experience in advancing phylogenetic comparative methods, models of molecular and/or phenotypic evolution and Bayesian statistics will be particularly appreciated.

Applicants should have solid quantitative and programming skills, as well as good writing skills. Speaking French is not mandatory.

The postdoctoral researcher will be primarily based at the Institute of Biology of the Ecole Normale Supï¿½rieure < http://www.ihttp/www.ibens.ens.fr/-bens.ens.fr/ > (IBENS), with regular visits at the Centre for Interdisciplinary Research in Biology (CIRB) at the Collï¿½ge de France < https://www.college-de-france.fr/site/en-cirb/index.htm >. The IBENS and the CIRB are two multidisciplinary research centres in Biology with a combined staff of over 500 members, both conveniently located in the Latin Quarter in downtown Paris. The centres develop research in a wide range of disciplines, including evolutionary biology, ecology, developmental biology, computational biology, genetics, and comparative genomics.

Review of applications begins immediately and until November 28th. The starting date is flexible starting February 2022. To apply, please submit: i) a cover letter summarizing research interests and expertise ii) a Curriculum Vitae (including publications), and iii) the names and contact information for at least two references, all compiled in a single pdf file. Questions and application should be sent to Hï¿½lï¿½ne Morlon (helene.morlon@bio.ens.psl.eu), Amaury Lambert (amaury.lambert@college-de-france.fr) and Marie Manceau (marie.manceau@college-de-france.fr).

Hï¿½lï¿½ne MORLON <helene.morlon@bio.ens.psl.eu>
Hï¿½lï¿½ne MORLON <helene.morlon@bio.ens.psl.eu>

Pasteur Paris QuantitativePopulationGenetics

POSTDOC IN QUANTITATIVE and POPULATION GENETICS, Institut Pasteur, Paris

The Quintana-Murci laboratory (Unit of Human Evolutionary Genetics, CNRS UMR2000) is recruiting a post-doctoral researcher in quantitative and population genetics at Institut Pasteur, Paris. Our research is focused on how natural selection, human demography and lifestyle have shaped the patterns of diversity of the human genome and, ultimately, phenotype variation and disease risk (https://research.pasteur.fr/en/-team/human-evolutionary-genetics/). Specifically, our projects aim to increase our understanding of (i) the genetic and evolutionary determinants of phenotype variation, (ii) the occurrence of natural selection, in its different forms and (iii) the demography history of human populations, with a focus on Africa and the Pacific.

The current postdoc project will be focused on exploring both the genetic architecture of phenotype variation in Polynesians (height, metabolic functions, skin pigmentation, immune response, etc.) and the evolutionary mechanisms that affect their distribution. The objective is to determine if population differences in these quantitative traits are the result of genetic drift or past or ongoing directional selection, a question that is key to understand human health disparities in the Pacific. This proposal, which combines quantitative genetics, population genetics, computational modelling and the development of statistical frameworks, will shed new light into the mechanisms of human genetic adaptation, during their last journey into uninhabited lands.

Requirements: - Ph.D. in quantitative genomics, statistical genetics, population genetics, bioinformatics, or computational biology - Strong programming and bioinformatics skills (R and Bash scripting, cluster computing) - Proficiency in English.

Duration: 2 years funding are available, and support will be provided to become self-financed through competitive fellowship applications.

Application Procedure: E-mail a CV, motivation letter and three reference names (in a single pdf file) to quintana@pasteur.fr by **November 30, 2021**.

Please put "Postdoc Quantitative Genetics" in the subject line of your email. Interviews will be held soon after this date. The starting date can be any time during spring 2021.

Lluis QUINTANA-MURCI <lluis.quintana-murci@pasteur.fr>

PennsylvaniaStateU 2 ConservationGenomics

The Hamilton Lab (http://jillahamilton.com/-index.html) at Pennsylvania State University is seeking to hire a postdoctoral research associate to contribute to an NSF-Plant Genome funded research program studying the genomic basis of climate adaptation in Poplar hybrids. The project includes a large collaboration Virginia Tech, University of Vermont, University of Maryland and ArbNet (Morton Arboretum). The researcher will analyze full-genome resequencing data from Poplar clones of mixed ancestry (P. trichocarpa x P. balsamifera) alongside phenotypic data (phenology and other), and climatic data from Poplar planted in replicated common gardens established in arboreta across the United States as part of the PopUpPoplar Network (http://popup-poplars.com/index.html). The post-doctoral position is highly interdisciplinary, combining phenotypic data across a broad range of environments and genome resequencing to identify regions of the genome that contribute disproportionately to phenotypic differences across varying ancestral backgrounds and environments. A major goal will be to build upon new methods combining spatial modeling of adaptive genetic variation with genome-phenotypic associations to identify genetic variation that may indicate pre-adaptation to novel climate conditions.

The position requires a Ph.D. in forestry, evolutionary biology, population genomics, quantitative genetics, bioinformatics, or a related field, and the applicant must be able to provide evidence that all requirements have been met for the completion of the PhD. prior to the effective date of hire. Familiarity with analyzing whole-genome resequence data and expertise using bioinformatic tools to infer genomic structure is necessary, as well as experience using Unix or Linux environments. The postdoctoral fellow will be expected to analyze genomic, phenotypic and climatic datasets, lead preparation and publication of peer-reviewed manuscripts, present findings from the research project, and contribute to outreach associated with the project. In addition, there will be ample opportunity to pursue research questions besides those of the particular study.

Interested applicants should submit a cover letter describing research interests and experience, a curriculum vitae, and contact information for three professional references to the WorkDay link below. This is a fixed-term position funded for one year from date of hire with an excellent possibility of renewal for multiple additional years. This position will be located at Penn State in University Park. Review of applications will begin immediately and continue until the position is filled. Informal inquiries are welcome ' contact Jill Hamilton (jvh6349@psu.edu)

https://psu.wd1.myworkdayjobs.com/en-US/-PSU_Academic/job/University-Park-Campus/-Postdoctoral-Scholar—Adaptive-Introgression-in-Populus_REQ_0000020083-1 –

Jill Hamilton, Ph.D., jvh6349@psu.edu

Assistant Professor & Director ' Schatz Center in Tree Molecular Genetics

Department of Ecosystem Science & Management

Penn State University

http://jillahamilton.com/index.html https://-ecosystems.psu.edu/research/centers/schatz —

The Hamilton Lab (http://jillahamilton.com/-index.html) at Pennsylvania State University is seeking to hire a postdoctoral research associate to contribute to a conservation genomics research program on ex situ and living collections of Oregon ash. The project includes a large collaboration with the US Forest Service, Huntington Botanic Garden, and Oregon Department of Forestry. The researcher will contribute to range wide field sampling for ex situ conservation and process tissue for landscape genomic and gene-environment analyses (GEA) in Oregon ash (Fraxinus latifolia). One major goal of the project is to create a 'genetic passport' for ex situ seed collections of Oregon ash. In addition to range wide sampling, genomic screening of living collections maintained for EAB-screening and genecology will be used to assess fine-scale variation within and among families for development of seed orchards and breeding programs. The post-doctoral position is highly interdisciplinary, combining population and landscape genomic analyses to quantify genetic variation maintained within ex situ collections, will use GEA analyses to estimate genetic-environmental associations necessary to establishing seed-transfer guidance across climatic gradients, and contribute to genomic screening of families to pair with

EAB-resistance

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PennsylvaniaStateU EvolGeneticsBeeMimicry

The Hines Lab at The Pennsylvania State University (Biology Department, University Park, PA, USA; hineslab.org) is hiring a Postdoctoral Scholar to perform research on an NSF-funded project examining the genetic basis of mimetic color diversity in bumble bees. The postdoc will lead a project examining how transcriptomes shift with the repeated acquisition of mimetic color variants spanning a clade of North American bumble bees. The exceptional diversity and convergence in this system provides an opportunity to examine the different genetic routes to an adaptive phenotype and to connect micro- to macroevolutionary processes through examining patterns of inheritance of adaptive alleles across lineages.

The project involves field collection of bumble bee queens in the American West, rearing of bumble bee colonies, developmental staging and dissections, transcriptome sequencing, and comparative analysis of transcriptome variation across several bumble bee morphs and species. Applicants must have a Ph.D. in a biology-related field, have a strong record of research involving both molecular and bioinformatic techniques, and an interest in evolutionary genetics/evo-devo. Experience in working with insects is desired, but not necessary.

This experience provides numerous opportunities for training as PSU has a strong focus on Bioinformatics and Genomics, houses several project-relevant facilities in the PSU Huck Institute of Life Sciences (e.g., microscopy, genomics, proteomics, bioinformatics), is home to the Center of Pollinator Research and the Insect Biodiversity Center, and offers numerous cross-departmental seminars and programs. The postdoc will also engage the labs of Jeff Lozier (U. Alabama) and Jonathan Koch (USDA ARS, Utah) in this research.

The Pennsylvania State University requires all applicants to register and complete the application form at the Penn State employment website (https://hr.psu.edu/careers; REQ_0000021143). A complete application will include a cover letter detailing relevant experience and research interests, a current CV, and contact information for three professional references. As per Penn State policy, this is a limited-term appointment funded for one year from date of hire with excellent possibility of re-funding with intention of 3 years of funding. Anticipated start date is between January 2022 (preferably) and Summer 2022. Review of applications will begin November 1 and continue until the position is filled. Interested applicants are encouraged to contact Heather Hines (hmh19@psu.edu) for more information.

The Pennsylvania State University is committed to and accountable for advancing diversity, equity, inclusion, and sustainability in all of its forms. We embrace individual uniqueness, foster a culture of inclusion that supports both broad and specific diversity initiatives, leverage the educational and institutional benefits of diversity in society and nature, and engage all individuals to help them thrive. We value inclusion as a core strength and an essential element of our public service mission.

"Hines, Heather M" <hmh19@psu.edu>

PennsylvaniaStateU VectorMicrobeInteractions

The laboratory of Elizabeth McGraw (http://vectorbiologygroup.com/) at Penn State is recruiting a highly-motivated Postdoctoral Scholar to work on the interactions between Wolbachia, arboviruses, and mosquitoes. The position will begin inearly 2022. Candidates with skills in molecular biology, evolution, virology, and or vector biology will be considered. Candidates who enjoy teamwork, leadership, and collaborative science in a diverse campus community are desirable.

The position requires a PhD in Biology, Ecology, Evolution, Entomology, Virology, Molecular Biology, or a related field. Competence with statistical software and data management are necessary. Excellent communication skills, including writing, are required, as is a strong publication record. Salary/benefit package is competitive.

Additional Information: To be considered for this position, submit completed application including a cover letter detailing experience and research interests, a current CV, and contact information for three professional

references. Review of applications will begin on November 1, 2021 and continue until the position is filled. Please direct questions about the process via e-mail toeam7@psu.edu.

Penn State and the McGraw Lab are equal opportunity, affirmative action employers, and are committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

Apply online athttps://apptrkr.com/2540042 CAMPUSSECURITYCRIMESTATISTICS:For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go tohttp://www.police.psu.edu/clery/, which will also provide you with detail on how to request a hard copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion,age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

Here is the link to the add in Nature.

https://www.nature.com/naturecareers/job/-postdoctoral-scholar-mcgraw-lab-the-pennsylvania-state-university-penn-state-748030 Elizabeth A. McGraw Professor & Head, Biology Department Huck Scholar in Entomology The Center for Infectious Disease Dynamics (CIDD) 208 Mueller Lab The Pennsylvania State University University Park, PA 16802 vectorbiologygroup.com @McGrawLab eam7@psu.edu +1-814-863-4530 pronouns: she/her

“Mcgraw, Elizabeth Ann” <eam7@psu.edu>

Poitiers France TickBacteriaSymbiosis

A two-year position as a postdoctoral researcher at the Ecology and Biology of Interactions laboratory of the University of Poitiers (France) < https://ebi.labo.univ-poitiers.fr/ >

The position, open from January 2022, is associated with the ANR-funded collaborative project MICROM “Microbial competition in mutualistic interactions with ticks”. The MICROM consortium, led by Olivier Duron, involves three teams (O. Duron MIVEGEC, Montpellier, F. Vavre LBBE, Lyon and D. Bouchon EBI, Poitiers) in the field of endosymbiosis.

MICROM aims at deciphering the competition between Francisella and Coxiella symbionts using different approaches from genomics, transcriptomics, in vivo and in vitro imaging.

The recruited post-doc will participate in this innovative program with a particular focus on in vitro experiments assessing the competitive abilities of the two beneficial symbionts. The post-doc will be responsible for monitoring tick cell lines, performing infection and co-infection and characterising the cellular phenotypes. Methods include RT-qPCR, dual-RNAseq, FISH combined with electron microscopy.

The post-doc will be part of the Ecology, Evolution & Symbiosis team < https://ebi.labo.univ-poitiers.fr/-equipe-ees-ecologie-evolution-symbiose/ > of the EBI laboratory in Poitiers, which has a long experience in research on symbiosis. The post-doc will have access to the funding and infrastructures needed for this project, in a stimulating scientific environment. Regular exchanges and mobility are planned with the various project partners as well as with external collaborators such as the Tick Cell BioBank in Liverpool.

Relevant expertise: We are looking for an autonomous and highly motivated candidate with a genuine interest in symbiosis research with expertise in the following areas: - Cell culture - Molecular biology - Imaging approaches, cellular biology, histology. Experience in electron microscopy is a plus. - Interested in acquiring expertise in experimentation with arthropods: care, injection, dissection - Expertise in bioinformatics is a plus

For more information and to apply to CNRS job portal: < https://bit.ly/3AV75ax >.

Please send also to Didier Bouchon <didier.bouchon@univ-poitiers.fr> CV including publication list Cover letter justifying the interest in the position Two academic references

Pr. D. Bouchon

Universite de Poitiers UFR Sciences Fondamentales et Appliquées Laboratoire Ecologie et Biologie des Interactions - UMR CNRS 7267 Equipe Ecologie Evolution Symbiose - Batiment B8-B35 5 rue Albert Turpain TSA 51106 F-86073 POITIERS Cedex 9 tel : +33 (0)5 49 45 38 95 fax : +33 (0)5 49 45 40 15

http://ebi.labo.univ-poitiers.fr/ http://-endosymbart.univ-lyon1.fr/ ResearchID: http:/-

/www.researcherid.com/rid/B-2419-2012 my-ORCID: http://orcid.org/0000-0002-4938-408X mailto:didier.bouchon@univ-poitiers.fr

Didier Bouchon <didier.bouchon@univ-poitiers.fr>

Riken TheoreticalBiology

Theoretical Biology, RIKEN iTHEMS, Japan

Full details: https://www.riken.jp/en/careers/researchers/20211006_1/index.html iTHEMS is seeking Postdoctoral Researcher(s) to pursue top-level research in mathematical, computational, and theoretical biology in collaboration with an interdisciplinary group of researchers across fields such as mathematics, physics, chemistry, life sciences, engineering, computational sciences, information sciences, and social sciences, under the concept of iTHEMS. In particular, the successful applicant(s) are expected to spend at least 50% of their time working with Dr. Ryosuke Iritani carrying out interdisciplinary research addressing fundamental questions in population genetics, phylogenetics, and bioinformatics, by using mathematical and theoretical approach in dynamical systems, stochastic process, statistical physics, and/or information theory. Applicants are expected to have a considerable expertise in those theories. For further details, send an email to the contact address below. If you have questions about the nature of the research, contact R. Iritani (ryosuke.iritani [at] riken.jp).

Contact Information

RIKEN Interdisciplinary Theoretical and Mathematical Sciences Program (iTHEMS) 2-1 Hirosawa, Wako, Saitama 351-0198 For inquiry, send an email to ithems_app [at] ml.riken.jp with Subj: iTHEMS PD (iTHEMSBiology21, W21158). Please cc to ryosuke.iritani [at] riken.jp if necessary.

– — Ryosuke IRITANI (Ph.D.) - Research Scientist, iTHEMS, RIKEN, Japan. https://ryosukeiritani.wordpress.com/home/ Ryosuke Iritani <lambtani@gmail.com>

SanFranciscoStateU ViralEvolution

Come join us in San Francisco! NIH / NSF funded postdoc position at San Francisco State University to work with Dr Pleuni Pennings in the CoDE Lab.

We are looking for a postdoc who can work on two different projects on viral evolution. One project is in collaboration with Dr Zandrea Ambrose and Dr Philana Lin from the University of Pittsburgh. The other project is in collaboration with Dr Adi Stern in Tel Aviv.

Both of the grants are nearing their end, which is why we are advertising only a short term opportunity (1 year of funding). This is a great opportunity though because there is great data available and there is a possibility of writing / contributing to two papers.

Preferred qualifications: I am looking for someone with experience and interest in several of the following domains: evolution, virology, bioinformatics (next-gen sequencing data) and statistics. If you are interested in linkage and recombination, this would be a really cool project for you!

The preferred candidate will also have an interest in / experience with one or more of the following: teaching, working with students from groups who are traditionally underrepresented in research, outreach (e.g., writing, social media, video).

The preferred candidate will have experience with writing clear / understandable scientific prose as evidenced by a writing sample.

I'd be very happy to see applications from people who have left academia and are interested to come back. If you are not sure if you qualify, please reach out!

I hope to find someone who can start soon (Nov or Dec 1st 2021).

Why this is a great opportunity: These are two cool projects in a productive lab (see my Google Scholar profile). You can expect to get several papers out of this short postdoc.

You will be part of a diverse lab and department of biology.

You will be working on an exciting project that bridges virology and evolutionary genetics and that could help us understand TB and HIV are such a dangerous combination.

You will be able to contribute to training of students of diverse backgrounds.

You will get the opportunity to work with people at the University of Pittsburgh and the University of Tel Aviv.

In the CoDE lab, you will work in a supportive environment where research is important, but papers are never more important than people.

Appointment: Funding is available for one year. An extension will be possible if we are lucky enough to get new funding for the lab. The starting salary is $57,000 per year.

How to apply: Send a 1-2 page cover letter, your CV, a paper (or draft) written by you, and names and email addresses for three references to pennings@sfsu.edu. Only pdf's please!

Deadline: I will start looking at applications from Oct 23th, 2021 and hope to hire as soon as possible after that.

CoDE Lab website: https://-pleunipennings.wordpress.com/ Pleuni Pennings Office hours Wed 8-10 PM Zoom link for office hours: https://sfsu.zoom.us/j/4778498638?pwd=-ZWFYNDJtOEZFUWhDWmxYSXJlTndpdz09 New paper in eLife!https://elifesciences.org/articles/10670 Associate Professor, Biology, SF State University Website: http://pleunipennings.wordpress.com/ Pleuni Pennings <pspennings@gmail.com>

SaoPaulo Brazil SnakeVenomEvolution

"Open position at Butantan Institute in Sï¿½o Paulo, Brazil for a post-doctoral fellowship to study the composition and function of snake venoms, and the correlation with speciation and evolutionary processes.

The research focus on the analysis of genomic, proteomic, and transcriptomic data, and tests of functional activities in vitro and in vivo.

The methods range from bioinformatics analysis of genomes, transcriptomes, and proteomes to biochemical and pharmacological tests to characterize and evaluate the function of the snake venom.

The data generated will be analyzed in an evolutionary context, seeking to test hypotheses of phenotypic diversification, genetic structure, and speciation.

Minimum qualification:

1) Ph.D. in an area related to the project (e.g., evolutionary biology, molecular biology, genomics, bioinformatics, toxinology)

2) Experience in bioinformatics including interpretation of omics data (genomics, transcriptomics, or proteomics);

Desired qualifications:

1) Experience in macro and microevolutionary analyzes and/or studies of biological action of venoms, in vitro and in vivo, as well as biochemical and pharmacological tests;

2) Fluency in English and Portuguese.

Candidates should send an e-mail to ana.moura@butantan.gov.br until Nov 15, 2021, containing:

- CV;

- Cover letter justifying the interest in the position;

- 2-3 academic references.

This opportunity is open to candidates of any nationality. The selected candidate will receive a Post-Doctoral fellowship from the Sï¿½o Paulo Research Foundation (FAPESP) of R$ 7,373.10 monthly and a research contingency fund, equivalent to 10% of the annual value of the fellowship which should be spent on items directly related to the research activity."

Ana Maria Moura da Silva Pesquisador Cientï¿½fico VI Laboratï¿½rio de Imunopatologia Tel:+55 11 2627-9779 www.butantan.gov.br Ana Maria Moura da Silva <ana.moura@butantan.gov.br> Ana Maria Moura da Silva <ana.moura@butantan.gov.br>

Singapore ButterflyEvoDevo

Two post-doctoral positions: Evo-devo of butterfly wing patterns and odor learning in butterflies

Dept. Biological Sciences (DBS), National University of Singapore

Two post-doctoral positions are available in the lab of Antï¿½nia Monteiro (Department of Biological Sciences, National University of Singapore). One to study the evolution and development of butterfly wing patterns, the other to investigate the developmental genetics of odor learning in butterflies. Both projects can involve

multiplex in situ spatial transcriptomics and/or single-cell sequencing of wings and brains, followed by functional genetic perturbations, to investigate the role of candidate genes and/or cis-regulatory elements in the evolution and development of certain color patterns and/or behaviors in butterflies.

The initial appointment is for two years but the positions can be extended beyond that period and can start immediately. Salary will be competitive and commensurate with experience (starting at S$5000/month). Candidates with experience in bioinformatics, single-cell sequencing, developmental biology, molecular biology methods, and confocal microscopy, are especially welcome to apply.

The Department of Biological Sciences offers world-class research labs and infrastructure and a convivial and collaborative environment. Singapore is a lush, green city offering tropical weather year around, a diversity of food, and nearby exotic locations.

Interested applicants should contact Antï¿½nia Monteiro (antonia.monteiro@nus.edu.sg) with a CV, a brief statement of research interests, and the names of three references.

Antonia Monteiro <antonia.f.monteiro@icloud.com>
Antonia Monteiro <antonia.f.monteiro@icloud.com>

Smithsonian NMNH GradAndPostdocFellowships

Applications are open for: 1. Smithsonian Institution Fellowship Program (SIFP https://fellowships.si.edu/-opportunity/smithsonian-institution-fellowship-program-sifp). These are 10 week or 1-2 year graduate student fellowships or 2 year postdoctoral fellowships.

2. Smithsonian Biodiversity Genomics Fellowship Program (SBGFP https://fellowships.si.edu/opportunity/-smithsonian-biodiversity-genomics-postdoctoral-fellowship-program-biog). This is a 2 year postdoc to work on genomics.

3. Smithsonian Burch Fellowship in Theoretical Medicine and Affiliated theoretical science (Burch https://fellowships.si.edu/opportunity/george-burch-fellowship-theoretical-medicine-and-affiliated-theoretical-science). These are 2 year postdocs that needs some connection to medical applications, though looking back at previous ones it obviously doesn't have to be immediate.

Submission deadline is 1 November 2021.

If you are interested in applying, first contact an appropriate mentor to discuss your proposed project well ahead of the submission deadline. To find possible mentors check out https://naturalhistory.si.edu/research/-invertebrate-zoology or https://ofi.si.edu/wp-content/-uploads/2020/11/SORS-2021-1.6.pdf . Please share this notice with your communities, colleagues, and potential applicants!

Want to know more about fellowships offered SI-wide? https://fellowships.si.edu/ Cheers - Karen

Karen Osborn Research Zoologist/Curator of Polychaetes, Peracarids and Plankton Department of Invertebrate Zoology w 202.633.3668 osbornk@si.edu http:/-/orcid.org/0000-0002-4226-9257 Mail: Department of Invertebrate Zoology, Smithsonian National Museum of Natural History, MRC-163 P.O. Box 37012, Washington, D.C. 20013-7012 USA

Courier Address: Smithsonian Institution, MR 0163, Natural History, West Loading Dock, 10th and Constitution Ave NW, Washington, D.C. 20560

OsbornK@si.edu

Smithsonian PDF PhD Fellowships

Applications are open for: 1. Smithsonian Institution Fellowship Program (SIFP https://fellowships.si.edu/-opportunity/smithsonian-institution-fellowship-program-sifp). These are 10 week or 1-2 year graduate student fellowships or 2 year postdoctoral fellowships.

2. Smithsonian Biodiversity Genomics Fellowship Program (SBGFP https://fellowships.si.edu/opportunity/-smithsonian-biodiversity-genomics-postdoctoral-fellowship-program-biog). This is a 2 year postdoc to work on genomics.

3. Smithsonian Burch Fellowship in Theoretical Medicine and Affiliated theoretical science (Burch https://fellowships.si.edu/opportunity/george-burch-fellowship-theoretical-medicine-and-affiliated-theoretical-science). These are 2 year postdocs that needs some connection to medical applications, though looking back at previous ones it obviously doesn't have to be immediate.

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ahead of the submission deadline. To find possible mentors check out https://naturalhistory.si.edu/research/-invertebrate-zoology or https://ofi.si.edu/wp-content/-uploads/2020/11/SORS-2021-1.6.pdf . Please share this notice with your communities, colleagues, and potential applicants!

Want to know more about fellowships offered SI-wide? https://fellowships.si.edu/ Cheers - Karen

Karen Osborn Research Zoologist/Curator of Polychaetes, Peracarids and Plankton Department of Invertebrate Zoology Smithsonian National Museum of Natural History 202.633.3668 osbornk@si.edu http://-orcid.org/0000-0002-4226-9257 Mail: Smithsonian Institution, Department of Invertebrate Zoology, MRC-163 P.O. Box 37012, Washington, D.C. 20013-7012 USA

Courier Address: Smithsonian Institution, MR 0163, Natural History, West Loading Dock, 10th and Constitution Ave NW, Washington, D.C. 20560

OsbornK@si.edu

TulaneU CoffeeConservation

Interdisciplinary Post-doctoral Research Associate for Convergence Research in Sustainable Coffee Production.

We seek a post-doctoral research associate for a newly funded, NSF-funded Convergence Research project. Centered in the Yoro region of Honduras, this exciting and interdisciplinary project brings together conservation biologists, ecologists, agronomists, farmers, indigenous peoples, economists, social scientists, land managers, and engineers to co-design, assess, and implement a system for sustainable coffee production. The post-doc will work with the team on the initial phase of this NSF project which focuses on sustainability at the coffee-farm scale. The primary research project of the postdoc will be to develop an ecological-economic modeling of a farm ecosystem and there is a lot of scope for innovation and for the postdoc to add their own ideas and take on additional research projects. After a period of familiarization, the postdoc will assume a leadership and coordination role.

The start date is January 1st 2022 or as soon as possible after that. You must have a PhD in hand by the start date. The position is for two years (contingent upon annual review at year 1) with some possibility of further extension. The starting annual salary is $50,000 plus benefits and based at Tulane University in New Orleans, Louisiana with travel to Honduras and collaborating institutions in the US. For more details and to apply, please go https://apply.interfolio.com/95966 For informal enquiries, please contact Dr Caz Taylor (caz@tulane.edu)

Caz Taylor <caz@tulane.edu>

UArizona ComputationalPopulationGenomics

The Gutenkunst group at the University of Arizona has an open postdoc position focused on computational population genomics. The postdoc will support to our recent NIH grant to explore new models of natural selection within and between populations. In particular, we are seeking candidates interested in applying our joint DFE inference method to existing evolutionarily and ecologically interesting data sets. (See our recent MBE publication: https://doi.org/10.1093/molbev/msab162). Candidates should have some computational population genetics or molecular ecology experience.

The University of Arizona has great strength in population and evolutionary genetics, offering potential interactions with Drs. Joanna Masel, David Enard, Mike Barker, and others. Computational resources are similarly excellent. The campus is highly interdisciplinary and very collegial.

At 2,500 feet above sea level, culturally diverse Tucson, Arizona is nestled among five mountain ranges in the beautiful Sonoran Desert and is surrounded by Saguaro National Park. Housing is affordable, quality of life is high, and outdoor recreation opportunities include the southernmost ski area in the United States and over 100 miles of bike trails. The area receives over 350 days of sunshine per year and enjoys average high/low temperatures of 82/54 degrees F.

To learn more about the Gutenkunst group, see http:/-/gutengroup.mcb.arizona.edu/ . If interested, contact me at rgutenk@arizona.edu with your CV and any questions. Application review is ongoing and will continue until the position is filled.

Ryan Gutenkunst Associate Professor and Associate Department Head Department of Molecular and Cellular Biology, University of Arizona phone: (520) 626-0569, office: LSS 325, web: http://-gutengroup.mcb.arizona.edu "Gutenkunst, Ryan N -

(rgutenk)" <rgutenk@arizona.edu>

UArkansas NeuroEvoDevo

An NSF-funded postdoctoral fellow position is available in the Nakanishi lab (https://wordpressua.uark.edu/-nakanishi-lab/) at the Department of Biological Sciences, University of Arkansas. The primary field of the lab's research is cnidarian evolutionary developmental biology. In particular, this NSF-funded project will investigate the mechanism of life cycle transition, focusing on elucidating how neuropeptides control this process using the sea anemone Nematostella vectensis.

We are seeking a highly motivated and independent scientist with strong interests in advancing our understanding of the mechanism of cnidarian life cycle transition. The specific focus of the project will include 1) identification of neuropeptide receptors that are involved in metamorphosis regulation, and 2) characterization of the identity and function of transcription factors that are regulated by neuropeptidergic signaling at metamorphosis. In addition, the postdoc will be encouraged to develop an independent line of research that is broadly related to the NSF project theme and research interests of the lab. Moreover, the postdoc will have opportunities to mentor diverse students at the high school, undergraduate and graduate levels.

This is a full time, 40 hour per week position. The salary is commensurate with experience and education and includes full benefits. This is a one-year appointment, with the possibility to extend up to two additional years renewable based on the need for the position, availability of funding, and continued satisfactory level of performance in the role.

For a complete position announcement and information regarding how to apply, visit https://-uasys.wd5.myworkdayjobs.com/en-US/UASYS/job/-Postdoctoral-Fellow-in-Biology_R0006864 .Applicants must submit a curriculum vitae, a cover letter/letter of application, and a list of three professional references (name, title, email address, and contact number).

For more information, please contact Nagayasu Nakanishi, Assistant Professor in Biological Sciences, at nnakanis@uark.edu.

The University of Arkansas is an equal opportunity, affirmative action institution. The university welcomes applications without regard to race/color, sex, gender, pregnancy, age, national origin, disability, religion, marital or parental status, protected veteran or military status, genetic information, sexual orientation, gender identity or any other characteristic protected under applicable federal or state law. Persons must have proof of legal authority to work in the United States on the first day of employment. All applicant information is subject to public disclosure under the Arkansas Freedom of Information Act.

Nagayasu Nakanishi, Ph.D Assistant Professor Department of Biological Sciences University of Arkansas Fayetteville, AR 72701 479-575-2031 (office) 479-575-7393 (lab) nnakanis@uark.edu https://wordpressua.uark.edu/nakanishi-lab/ nnakanis@uark.edu

UBielefeld IndividualisationEvolutionEconomics

We are looking for a postdoctoral researcher to contribute to the new InChangE (Individualisation in Changing Environments) initiative by applying mathematical models as well as computer simulations as a means for studying causes and effects of individualisation in changing environments. This interdisciplinary project is positioned at the interface of biology and economics (jointly advised by Jun.Prof. Dr. Meike Wittmann, Theoretical Biology; Prof. Dr. Christian Stummer, Innovation and Technology Management; and Prof. Dr. Klaus Reinhold, Evolutionary Biology), and it is also linked with psychology, political sciences, and health sciences. Concrete research questions are as follows: What is the role of individualisation in the extinction or persistence of biological populations in changing environments or for the dynamics and consequences of an infection (e.g., through SarsCov2)? How does individual variation (i.e., individuality and heterogeneity) influence the spread of opinions via novel communication forms like social media or the digital transformation of companies and markets? When is individual-based simulation necessary to understand these dynamics and under what conditions can individuality be captured in meaningful approximations?

For further information (tasks, required qualifications, salary and benefits, application documents), please see the official job advert at: https://uni-bielefeld.hr4you.org/job/view/851/postdoctoral-research-position?page_lang=en The advertisement is conditional on the final funding decision.

The application deadline is October 27, 2021.

Best wishes,

Meike Wittmann

Junior Professor of Theoretical Biology Bielefeld University, Faculty of Biology Postfach 10 01 31, 33501 Bielefeld, Germany Office: W4-101 Phone: +49 521 106 67627 meike.wittmann@uni-bielefeld.de

Meike Wittmann <meike.wittmann@googlemail.com>

UCalifornia Davis EvolutionaryGeneticsTEs

POSTDOCTORAL SCHOLAR IN EVOLUTIONARY GENETICS OF TRANSPOSABLE ELEMENTS

The Ross-Ibarra lab at UC Davis invites applications for a Postdoctoral Scholar to work on the evolutionary genetics of transposable elements (TEs) in maize and its relatives. The project includes substantial freedom to develop projects involving the population or quantitative genetics of TEs and the opportunity to generate new data or take advantage of considerable existing data including thousands of genome sequences, dozens of reference genomes, and several large association mapping panels. As part of a larger research group investigating the evolution, function, and phenotypic consequences of TEs, the candidate will have opportunities to work on a number of ongoing projects with collaborating labs. The lab is housed in the Dept. of Evolution and Ecology and is also part of the Center for Population Biologyand the Genome Center, offering numerous opportunities for engagement with other academics across the biological sciences.

The position is for two years, subject to review after one year, and can begin as early as November 2021. This position is covered by a collective bargaining unit. It has a starting annual salary of $54,540 plus benefits (higher with more years of experience). Remote work is possible.

The application deadline is Oct 25 . To apply, please visit https://recruit.ucdavis.edu/JPF04476 and submit a cover letter, a CV with a list of references, and a brief statement about your contributions to service and diversity.

Jeffrey Ross-Ibarra

rilab.ucdavis.edu Dept. of Evolution and Ecology University of California Storer Hall, One Shields Ave Davis, CA 95616

Tel: 530-752-4565 @jrossibarra

Jeffrey Ross-Ibarra <rossibarra@ucdavis.edu>

UCalifornia Davis PopulationBiology

DEADLINE: November 3, 2021 POSTDOCTORAL FELLOW IN POPULATION BIOLOGY

The Center for Population Biology at UC Davis invites applications for a Postdoctoral Fellowship in Population Biology, broadly defined to include ecology, phylogenetics, comparative biology, population genetics, and evolution. We particularly encourage applications from candidates that have recently completed, or will soon complete, their Ph.D.

The position is for TWO YEARS, subject to review after one year, and can begin as early as July 1, 2022. This position is covered by a collective bargaining unit. It has a starting annual salary of $54,540 plus benefits, and $6,000 per annum in research support. The Fellow will be a fully participating member in the Center for Population Biology and will be expected to have an independent research program that bridges the interests of two or more CPB faculty research groups. The postdoctoral fellow plays a leadership role in our community with past fellows acting as important mentors, collaborators, and role models to our graduate students. We strongly encourage candidates to contact appropriate faculty sponsors before applying. We also ask that each Fellow propose a workshop, discussion or lecture series that they could offer to the community of population biologists at UC Davis; faculty sponsors or the Director of CPB, Graham Coop, can provide additional input on this aspect of the fellowship. For samples of past workshop abstracts and more information about UC Davis programs in population biology, see https://cpb.ucdavis.edu/cpb-postdoc-fellowship. Workshop proposals can focus on broad research techniques or topics, career development, or diversity equity and inclusion activities.

ONLINE APPLICATION: Interested candidates should submit a cover letter, a CV, a short description of research accomplishments (1-2 pages), a short description of proposed research including potential faculty mentors (1-2 pages), a brief description of their proposed

workshop (1 page or less), copies of two publications, and a statement of contributions to diversity, equity, and inclusion. All documents should be submitted in PDF format at: https://recruit.ucdavis.edu/JPF04487 (this job number and application link will be open and available for application input on or around September 27, 2021).

Applicants should also provide the information requested for three referees. Once entered, applicants will electronically request letters from referees who will then be prompted by email with upload instructions. The postdoctoral fellow plays a leadership role in our community with past fellows acting as important mentors, collaborators, and role models to our graduate students. Therefore, we ask the applicant to please advise the reference writers to comment on the candidate's past roles as a mentor and/or a community member. Refer to the on-line instructions for further information.

For full consideration, applications (including letters of reference) must be received by November 3, 2021. E-mail questions to smmann@ucdavis.edu.

The University of California is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for diversity.

– Graham Coop Professor, Department of Evolution and Ecology Director of the Center for Population Biology. University of California, Davis gcbias.org < http://www.eve.ucdavis.edu/gmcoop/ > Storer Hall, One Shields Ave., Davis, CA 95616 Ph: 530-752-1622 Fax: 530-752-1449

Graham Coop <gmcoop@ucdavis.edu>

UCalifornia SanDiego Microbiomes

A postdoctoral position is available in the Jackrel Lab in the Division of Biological Sciences - Section of Ecology, Behavior and Evolution at UC San Diego. Start date is flexible. The position is available for one year, and renewable for up to four years dependent on progress. This candidate will pursue avenues related to an NIH-funded research program aimed at advancing our understanding of the role of host genetics and the environment in regulating assembly of microbial communities, short-term changes in these communities through ecological succession, and long-term changes through evolutionary processes. In order to better understand complex biological networks, our lab seeks to elucidate the underlying structure of ecological interactions within host microbiomes in order to predict when and how microbiomes might confer beneficial versus deleterious functions associated with their host. Our lab aims to advance fundamental understanding of host-microbiomes by leveraging single-celled eukaryotic phytoplankton as a highly-tractable experimental system. We seek a postdoctoral scholar to:

(1) Harness the diversity of phytoplankton with bacterial -omics approaches to test how microbiomes assemble in response to host genetics. Use bacterial gene expression responses to host genetics, in tandem with fluctuating environmental conditions, to determine the host genetic x environmental forces that drive microbiome assembly of eukaryotic microbiomes.

(2) Evaluate mechanisms of microbiome change for maintenance of host homeostasis in fluctuating environments, including ecological shifts in bacterial taxonomic composition, shifts in bacterial gene expression, and bacterial strain evolution.

(3) Leverage classic community ecology theory to characterize traits of transient versus stable microbiome networks. Quantify bacteria-bacteria interaction strengths within naturally assembled and engineered microbiomes to understand how network structure contributes to transitions between host health and disease states.

Qualifications:

- Ph.D. or equivalent degree in Microbiology, Ecology, Evolution, Genetics or related fields.

- Expertise in one or more of the following is desired (and broadly defined): empirical community ecology, field and lab-based environmental microbiology, bacterial gene surveys, metagenomics, or metatranscriptomics.

- Familiarity with R for statistical analyses and data visualization.

- Ability to work independently to conduct an independent research project, as well as willingness to mentor graduate and undergraduate students.

Please email Sara Jackrel at sjackrel@ucsd.edu with any questions and to apply. Email applications should include:

- A cover letter that summarizes past research and how your interests fit with the lab.

- CV with complete publication list, including a list of manuscripts in review.

- Contact information for 3 references.

"Jackrel, Sara" <sjackrel@UCSD.EDU>

UCalifornia SantaCruz PlantSpeciation

The Kay Lab at UC Santa Cruz invites applications for the position of Postdoctoral Scholar funded by a NSF Dimensions of Biodiversity grant ("Biotic and abiotic drivers of Neotropical plant speciation"). The scholar will investigate the evolutionary genetics of the spiral gingers (monocot genus Costus). The project is a collaboration among PIs Kathleen Kay (UCSC), Jennifer Funk (UC Davis), Carlos Garcia-Robledo (University of Connecticut), Santiago Ramirez (UC Davis) and Dena Grossenbacher (Cal Poly SLO) to uncover patterns and mechanisms of speciation in a recent, rapid plant radiation throughout Central and South America. The candidate would have wide latitude to develop research directions in consultation with the PIs, and work could include population genomics, QTL mapping, comparative biology, and/or analysis of field experimental data in order to better understand key traits, processes, and genetic loci involved in adaptive divergence and reproductive isolation. Primary responsibilities include experimental design, coordinating and conducting data collection, managing and analyzing large datasets, mentoring junior lab members, coordinating research collaborators, and contributing to the dissemination of results through manuscripts, presentations, and public outreach. Applicants with the following preferred qualifications are strongly encouraged to apply: experience generating and analyzing next gen sequence data from non-model plants, excellent bioinformatics skills, a strong interest in plant speciation and adaptation, and a track record of publishing in leading journals. The position requires excellent time management and written/oral communication skills.

The position is available for up to 2 years; initial appointment will be for one with renewal pending review.

To apply, please send a cv, brief cover letter, a first-authored publication or preprint, and contact info for 2-3 references.

Informal inquiries by email are encouraged! <kmkay at ucsc.edu>

Apply by Oct 31 to receive full consideration. The Kay Lab https://kay.eeb.ucsc.edu/ The Ecology and Evolutionary Biology Department (https://www.eeb.ucsc.edu/)

Kathleen Kay <kmkay@ucsc.edu>

UColorado PlantMicrobeGenomics

https://jobs.colorado.edu/jobs/jobDetail?jobId=34001
Postdoctoral Researcher in Genomics of Plant Microbe Interactions

Requisition Number:

34001

Location:

Boulder, Colorado

Employment Type:

Research Faculty

Schedule:

Full-Time

Date Posted:

05-Oct-2021

Job Summary

TheKane Labin the Department of Ecology and Evolutionary Biology (EBIO) at CU Boulder, in collaboration with the Hulke Lab at the USDA-ARS in Fargo, ND, is currently seeking aPostdoctoral Scholar! This position will assist with a research project funded by the USDA and the Land Institute examining the genomics and quantitative genetics affecting microbial communities associated with the roots of cultivated and wild sunflowers (Helianthus) and related species. These microbes are already known to vary in their abundance depending on plant genotype, with substantial segregating variation existing in domesticated sunflower. The current position will work to expand our understanding of the genetics underlying variation within domesticated and wild sunflowers and other plant species. The postdoctoral scholar will work in a highly collaborative environment in the Kane and Hulke labs, working closely with faculty, post-docs and graduate students with expertise in:

Agricultural genomics and quantitative genetics; Plant-microbial interactions; Genome-wide association mapping; Plant ecophysiology, molecular genetics, and plant-microbe interactions.

This postdoctoral scholar includes the opportunity of collaborating on writing grant proposals, co-mentoring

undergraduate and graduate students, and collaborating with researchers at multiple levels, typically enabling participation in numerous first-author and co-authored publications annually. In addition, the postdoctoral scholar will be expected to contribute to an inclusive lab culture, and will be encouraged to participate in diversity, equity, and inclusion efforts.

The University of Colorado Boulder is committed to building a culturally diverse community of faculty, staff, and students dedicated to contributing to an inclusive campus environment. We are an Equal Opportunity employer, including veterans and individuals with disabilities.

Who We Are

For more information about the Kane Lab, see:http://-kane.weebly.com For more information about the Hulke Lab, see:https://hulkelab.org What Your Key Responsibilities Will Be

The primary duties will involve quantitative genetic analysis, population genetics, and statistics on datasets already in hand as well as new datasets, leading research dissemination via papers and talks, and collaborating with other lab members as part of a cooperative, productive research group.

What You Should Know

The initial duration of this postdoctoral position will be one year.

What We Can Offer

The salary is $50,000 per year.

Benefits

The University of Colorado offers excellentbenefits, including medical, dental, retirement, paid time off, tuition benefit and ECO Pass. The University of Colorado Boulder is one of the largest employers in Boulder County and offers an inspiring higher education environment. Learn more about theUniversity of Colorado Boulder.

What We Require

The minimum qualification is a Ph.D. from an accredited institution in plant science, genetics, biology, or a closely related field.

Special Instructions

To apply, please submit the following materials:

Cover Letter.

Current Curriculum Vitae/Resume.

Full text of three peer-reviewed publications relevant to the project area authored or co-authored by the candidate (attach to "Professional Publications").

One-to-three page research statement summarizing past research projects and your involvement and contributions to each (attach to "Statement of Research Philosophy").

One-page diversity statement summarizing past efforts and future goals in advancing diversity, equity, and inclusion in STEM (attach to "Diversity and Inclusion Statement").

Optional: Proof of Degree.

If you are selected as the finalist, your degree will be verified by the CU Boulder Campus Human Resources department using an approved online vendor.However, if your degree was obtained outside of the United States, please submit a translated version (if applicable) as an optional attachment.

During the application process you will need to enter contact information for one reference who will be contacted to provide a letter of recommendation and additional materials, if needed, as the search progresses.

Active review of applications will begin immediately, but the search will continue until the position is filled.

Note: Application materials will not be accepted via email. For consideration, applications must be submitted throughCU Boulder Jobs.

Posting Contact Name:Nolan Kane

Posting Contact Email:Nolan.Kane@colorado.edu

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This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at http://life.biology.-mcmaster.ca/~brian/evoldir.html

UConnecticut PopulationGenomics

University of Connecticut: Postdoctoral researcher in evolutionary genomics and transcriptomics A postdoctoral research position is available in Dr. Daniel Bolnick's research group (https://-bolnicklab.wordpress.com), in the Department of Ecology and Evolution at the University of Connecticut. The research group studies the evolution of species interactions, adaptation, and trait variation, merging expertise in ecology, genetics, and immunology, with stickleback-cestode interactions as a dominant focus. In recent years we have generated multiple large genomic

and transcriptomic datasets concerning gene expression responses to cestode infection, both stickleback and cestode population differentiation, and QTL mapping. We seek an individual with experience in bioinformatics relevant to population genetic and/or transcriptomic analyses of genetic data, to contribute to analyses and publications of existing data. Opportunities exist to pursue side-projects along with the core project task.

Tasks: The postdoctoral researcher will conduct analyses of existing population genomic and transcriptomic datasets and publish peer-reviewed articles reporting results arising from these data.

Duration: The position is currently funded for one year, with extensions subject to availability of grant funds. The preferred start date is early January 2022, with some flexiblity Qualifications: Applicants must have a PhD in evolutionary biology, genetics, computational biology, or a closely related field. Prior experience with analyses of genomic or transcriptomic data is essential. Expertise in population genetics is strongly preferred. Previous research experience and publications should demonstrate a commitment to basic research, good work ethic, computational skills, organizational ability, and publication productivity.

Applications should electronically submit a single pdf file with: 1) a Coverletter outlining research achievements, skills, and goals, 2) a copy of the applicant's CV, 3) copies of up to three publications or submitted manuscripts 4)) A list of three references, with contact information (email, telephone, and mailing address). We will request letters directly from these references, after identifying top candidates. Please notify the references that they may be contacted by Dr. Bolnick for recommendations.

An initial application should be emailed to Dr. Daniel Bolnick (daniel.bolnick@uconn.edu). Include the subject line "Evolutionary bioinformatics Postdoc: <YOUR NAME>". Application review will begin on June 1 2021, though late applications will be accepted until the position is filled.

For questions about this position, please email Dr. Bolnick (daniel.bolnick@uconn.edu). For information about the Bolnick Lab visit the lab website (https://bolnicklab.wordpress.com), lab photostream (https://www.flickr.com/photos/98765823@N08/-albums), and Dr. Bolnick's Google Scholar page (https://scholar.google.com/citations?user=-cfwxm0AAAAAJ&hl=en).

The University of Connecticut is an Equal Opportunity Employer. Applicants with questions about disability services can privately discuss their application with the University of Texas Disability Services Office (http://sites.utexas.edu/disability/). A statement of BolnickLab values can be found here: https://-bolnicklab.wordpress.com/2015/10/01/labvalues/ Dr. Daniel I. Bolnick Editor-In-Chief, The American Naturalist Professor, Ecology and Evolutionary Biology & Institute for Systems Genomics

daniel.bolnick@uconn.edu

MAIL TO: Department of Ecology and Evolutionary Biology 75 N. Eagleville Road, Unit 3043 University of Connecticut Storrs, CT 06269-3043, USA

Office Phone: 860-486-3156 Lab Phone: 860-486-3937 Cell Phone: 512-809-6217

Office:PBB 305C Lab: PBB 317&319; ATW 232, 234, 236 Lab website: https://bolnicklab.wordpress.com daniel.bolnick@uconn.edu

UCopenhagen FungusHostShiftGenomics

The Applied Evolutionary Ecology group at Department of Plant and Environmental Sciences, University of Copenhagen, Denmark is looking for a Postdoc interested in in comparative/population genomics and plant/insect pathogenic fungal research. The position is part of the Carlsberg Foundation funded project: From plants to animals - Understanding inter-kingdom hostshifts of fungal pathogens. Deadline for application is December 15th, 2021.

The project is a collaboration between researchers at University of Copenhagen (UCPH), University of Sao Paulo (USP), and the Max Planck Institute for Evolutionary Biology (MPI-EB). Funding is available for two years for a competitive Postdoc fellowship, laboratory costs and travel. The postdoc will be hosted by Henrik De Fine Licht (UCPH) and the project will be carried out in close collaboration with Professor Italo Delalibera Jr. (USP) and Professor Eva Stukenbrock (MPI-EB).

For more details and how to apply, please follow the link: https://employment.ku.dk/all-vacancies/-?show=155079 Henrik H. De Fine Licht HHDe-FineLicht@plen.ku.dk

Henrik H. De Fine Licht, PhD. Research Group Leader and Associate Professor University of Copenhagen, Department of Plant and environmental Sciences, Section for Organsimal Biology, Thor-

valdsensvej 40, 3rd Floor, 1871 Frederiksberg Phone: +45 35320097 (office), +45 61685769 (mobile) E-mail:ï¿½HHDeFineLicht@plen.ku.dk; HenrikLicht@gmail.com

Website https://sites.google.com/site/henrikdefinelicht/ Editorial board member BMC Evolutionary Biology: https://bmcevolbiol.biomedcentral.com/ Fungal Ecology: https://www.journals.elsevier.com/fungal-ecology Henrik Hjarvard de Fine Licht <hhdefinelicht@plen.ku.dk>

UCopenhagen StatisticalPopulationGenomics

Postdoctoral fellowship in statistical and population genomics From correlations to explanations: towards a new European prehistory (COREX)

We invite applications for a postdoctoral fellow at the University of Copenhagen, as part of the COREX synergy project. Synergy projects represent the top level of European Research Council funding, with a budget of euro 10 million over six years. In the project "From correlations to explanations: towards a new European prehistory (COREX)" geneticists and archaeologists from the University College London (led by Mark Thomas and Stephen Shennan) join forces with archaeologists from Gothenburg (led by Kristian Kristiansen and Karl Göran-Sjögren), and geneticists from Copenhagen (led by Kurt KjÃr, Eske Willerslev and Fernando Racimo). The project will combine prehistoric human genomic, archaeological, environmental, stable isotope and climate data to better understand the processes that shaped our biological and cultural past from the time of the first farmers to the Iron Age.

The candidate will be advised by Assoc. Prof. Fernando Racimo, whose research group focuses on using ancient and present-day DNA to understand patterns of selection and admixture over time, in combination with archaeological and paleo-environmental data, and to develop methods to infer dynamic population processes while accounting for both spatial and temporal variation.

OBJECTIVES

The candidate will be able to work with unprecedentedly large ancient genomic, archaeological and paleovegetation datasets from a period spanning the last 10,000 years of West Eurasian history. The focus of the project will be on performing exploratory analyses and developing computational models to connect population genetic processes (population expansions, migrations and admixture), patterns of material culture distribution (i.e. diffusion of technology and art forms), environmental factors (climate, ecozones, subsistence strategy and the presence of pathogens), sedimentary DNA and demographic data (such as population density estimates from radiocarbon date density data). This will be done using a variety of geostatistically-aware models that account for auto-correlations in both space and time.

This will serve as a pioneer example of how to build statistically-supported conceptual bridges between archaeological and genetic inference. Our project will serve to determine what the impact of the movement of people was on the European landscape, simultaneously on multiple scales: continental, regional and local.

The fully funded postdoctoral fellowship will be carried out at the Lundbeck Foundation GeoGenetics Centre, a unique center of research excellence in Denmark, with the aim to understand the evolution of complex traits using ancient DNA. The candidate will have to opportunity to collaborate with leaders in the fields of paleogenomics, sedimentary DNA and archaeology, including Mark Thomas, Stephen Shennan, Kristian Kristiansen, Kurt KjÃr, Karl Göran-Sjögren, Eske Willerslev, Ralph Fyfe, Karin Frei and Jesse Woodbridge. The University of Copenhagen is a world-leading institution of higher learning and provides excellent programs in genetics, archaeology, statistics, computer science and mathematics.

QUALIFICATIONS

The candidate will have a PhD degree or equivalent doctorate, with a background in one or more of the following areas: statistics, data science, evolutionary biology, population genetics, computational biology, bioinformatics and/or mathematics. The ideal candidate will demonstrate a working proficiency in one or more programming languages commonly used in data science (e.g. experience in Python, R, C/C++, Java or Julia) and have experience in the UNIX operating environment.

SALARY AND TERMS OF EMPLOYMENT

The employment as postdoc is a full time and fixed-term position for three years. Starting date 1 March 2022 or after mutual agreement. Salary, pension and terms of employment will be in accordance with the agreement between the Danish Ministry of Finance and AC (Danish Confederation of Professional Associations). Currently, the monthly salary starts at 35,915 DKK/ approx. 4,829 Euro (October 2021-level). Depending

on qualifications, a supplement may be negotiated. The employer will pay an additional 17.1 % to your pension fund. Non-Danish and Danish applicants may be eligible for tax reductions, if they hold a PhD degree and have not lived in Denmark the last 10 years.

The position is covered by the "Memorandum on Job Structure for Academic Staff at the Universities" of December 11, 2019.

QUESTIONS

For further information please contact Associate Professor Fernando Racimo: fracimo@sund.ku.dk Foreign applicants may find this link useful: www.ism.ku.dk (International Staff Mobility).

APPLICATION

Your online application must be submitted in English by clicking on this link:

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UEdinburgh EnvironmentalGenomics

We have the following post-doctoral position availablefor 2+2 years at the University of Edinburgh, UK.

Post-doctoral Research Associate (PDRA) in Environmental Genomics.

This is a dedicated research position funded byan innovative new Wellcome Trust Collaborative Award, which brings together multiple international research groups on a four-year project concerning the forensic epidemiology and impact of substandard and falsified antimicrobials on public health. This project will combine investigation of the biological and chemical propertiesof pharmaceutical products with social network analysis and modelling to understand the trade routes and impact of substandard and falsified antimicrobials. We aim that these analyses will lead to a step change in understanding and evidence to inform interventions to improve the quality of the global supply of antimicrobials.

The purpose of the role is primarily to undertake novel research into the identity and geographic origins of SF antimicrobials by combining in-depth metabarcoding of biological taxa present in samples (the 'pharmabiome'), with chemical analysis of SF antimicrobial products. Resulting data will be integrated with social network analysis to understand global patterns of illegal trade and its impacts on health and anti-microbial resistance. Research will be based at the Roslin Institute and will benefit from access to world class molecular genetic, bioinformatic and analytical chemistry infrastructure. The wider project consortium is led by the University of Oxford and encompasses a network of institutions in Europe, the USA, Africa and Southeast Asia. Given the breadth of this role, we encourage applicants with diverse scientific experience to apply.

Clickherefor a copy of the full job description.

For further information or to discuss the post informally, please contactRob Ogden.

Professor Rob Ogden Director of Conservation Science

Direct dial: +44 (0) 131 6517428 Mobile/Whatsapp: +44 (0)7746421499 Skype: rob_ogden

The Royal (Dick) School of Veterinary Studies and The Roslin Institute Easter Bush Campus,Midlothian,EH25 9RG Tel: 0131 651 7300 www.ed.ac.uk/vet The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

OGDEN Rob <Rob.Ogden@ed.ac.uk>

UEdinburgh EvolutionaryGeneticsEcology

Postdocs at the Institute of Evolutionary Biology, University of Edinburgh

Two four-year postdoctoral positions are available at the University of Edinburgh, to join the research group of Professor Loeske Kruuk. The project will investigate the evolutionary dynamics of wild animal populations, using data from seven long-term mammal studies to explore determinants of fitness and the effects of ongoing environmental change in natual populations.

Position 1 will focus on an analysis of fitness. The aims are to investigate the concept of fitness and its measurement in the genomics era, to quantify genetic and non-genetic causes of variance in fitness, including the impact of indirect genetic effects and social evolution, and to explore the use of genomic data to estimate rates of evolutionary adaptation in wild populations. Position 2 will focus on the effects of ongoing environ-

mental change on natural populations. The aims are to determine the impact on the process of natural selection on phenotypic traits and the ecological effects of changing environmental conditions, to assess the genetic and environmental basis of change in key phenotypic traits, and to use genomic prediction to test for adaptive evolutionary change. The project will use data from the long-term studies of several different wild mammal populations: bighorn sheep (Canada), eastern grey kangaroos and Tasmanian devils (Australia), spotted hyenas (Tanzania), meerkats (South Africa), and red deer and Soay sheep (Scotland). Analysis will combine detailed measures of life-history and phenotypic trait variation with pedigree and genomic data and long-term environmental monitoring.

Applicants should have a PhD in evolutionary ecology or genetics, or something similar, and be familiar with quantitative genetic concepts and analysis. Experience in management and analysis of complex data sets, including genomic data, would be advantageous. The project is funded by a European Research Council Advanced Grant, and involves collaboration with multiple colleagues and institutions worldwide. Start date January 2022, or as soon as possible after that.

The Institute of Evolutionary Biology at the University of Edinburgh is a leading research environment with multiple groups working on evolutionary quantitative genetics, evolutionary ecology, and adaptation to environmental change. And Edinburgh is a beautiful city to live in.

https://elxw.fa.em3.oraclecloud.com/hcmUI/-CandidateExperience/en/sites/CX_1001/job/2174
Please contact me directly (loeske.kruuk@ed.ac.uk) if you would like to discuss the positions.

@LoeskeKruuk Current affiliation: Research School of Biology, Australian National University, ACT 2601, Australia >From Dec 2021: Institute of Evolutionary Biology, School of Biological Sciences, University of Edinburgh, Edinburth EH9 3JT, UK https://www.ed.ac.uk/-biology/groups/kruuk The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336. Is e buidheann carthannais a th' ann an Oilthigh Dhï¿½n ï¿½ideann, clï¿½raichte an Alba, ï¿½ireamh clï¿½raidh SC005336.

KRUUK Loeske <Loeske.Kruuk@ed.ac.uk> KRUUK Loeske <Loeske.Kruuk@ed.ac.uk>

UGhent ancientDNA

The University of Ghent in collaboration with Durham University is recruiting a Post doctoral research assistant in ancient human genomics to work on the project "Migration, diet and health of the first permanent settlers of Belgium: inter- and multi-disciplinary perspectives".

The project, led by Prof. Isabelle De Groote, has received funding from Ghent University and aims to generate regional-scale insights into the lifeways of the first modern humans to settle permanently in Belgium during the Final Palaeolithic and Mesolithic. It will achieve this through multi- and inter-disciplinary analysis of contextualised data from archaeological, palaeontological and anthropological assemblages whilst developing state-of-the-art analytical techniques in the fields of proteomics and stable isotope analysis.

The position if for 3 full years and the salary is very generous. Deadline for applications is on the 7th of November 2021.

You can find details about the post, including how to apply at: https://career5.successfactors.eu/sfcareer/-jobreqcareer?jobId=21027&company=C0000956575P For enquiries about this job, please contact Prof. De Groote: isabelle.degroote@UGent.be

"FERNANDEZ-DOMINGUEZ, EVA" <eva.fernandez@durham.ac.uk>

UGoettingen ExperimentalEvolutionMaizeAlgae

The Division of Plant Breeding Methodology at the University of Göttingen is looking for a productive scientist to perform experimental evolution studies with maize and algae. The full job description and application information is available here:

https://www.uni-goettingen.de/en/24860.html?cid=-100945 Interested applicants may contact Tim Beissinger with any questions: beissinger@gwdg.de

The Division of Plant Breeding Methodology is a highly international group working on a wide array of agricul-

tural plant species. We are closely linked to Göttingen's Center for Integrated Breeding Research (CiBreed), which includes scientists interested in all branches of plant/tree/animal breeding.

Göttingen is a beautiful university city in central Germany with a long-standing academic tradition.

Tim Beissinger Chair of Plant Breeding Methodology, Department of Crop Science Managing Director, Center for Integrated Breeding Research University of Göttingen Carl-Sprengel-Weg 1, 37075 Göttingen Email: beissinger@gwdg.de Web: www.uni-goettingen.de/plantbreeding "Beissinger, Timothy Mathes" <beissinger@gwdg.de>

UKentucky DrosophilaCryopreservation

Summary: The Teets Lab at University of Kentucky is recruiting a postdoc to work on an NIH-funded project on Drosophila cryopreservation. One of the primary goals is to be able to cryopreserve diverse strains for long-term selection experiments and evolutionary studies. Experience with Drosophila genetics is a plus but not necessary. Our lab is a large, collegial group with diverse interests, and we welcome people from all backgrounds to apply. See details below!

Postdoctoral Associate in Drosophila Cryopreservation Location Department of Entomology and Department of Horticulture University of Kentucky, Lexington, KY

Contact Nicholas Teets Associate Professor Email: n.teets@uky.edu Phone: (859)-257-7459 Lab website: www.teetslab.com Bruce Downie Professor Email: adownie@uky.edu Phone: (859)-257-5237 Lab website: www.seedsleuths.com Description: The Teets and Downie labs at University of Kentucky are seeking a postdoctoral associate to lead an NIH-funded project on Drosophila cryopreservation. The successful applicant will conduct research on novel strategies to load cryoprotective molecules into Drosophila embryos so that they can be stored at low temperature for prolonged periods. The postdoc will be part of a collaborative team at University of Kentucky and University of Louisville with expertise in insect cold tolerance, protein biochemistry, anhydrobiosis, and bioengineering. Specific duties will include designing and conducting experiments to optimize survival and normal development of previously frozen embryos, presenting results at conferences and in scientific articles, and mentoring undergraduate students. The successful candidate is expected to embrace the collaborative nature of this project and travel between both universities as needed (~75 minute drive) to perform duties.

Qualifications: Applicants should have a PhD in biology, entomology, molecular biology, or a related field. Experience working with Drosophila is preferred but not required. Applicants should have a demonstrated record of research productivity, as evidenced by peer-reviewed publications, conference presentations, and/or grant funding. Desired qualifications include the ability to work in a team, experience with mentoring undergraduate students, and strong oral and written communication skills.

Location: The Department of Entomology at University of Kentucky is consistently ranked in the top 10 nationally and features an excellent mix of basic and applied research. The department has a proven track record of job placement in a variety of sectors, including academia, industry, government science, and extension, to name a few. Lexington, KY is an affordable mid-sized city that is family friendly and ranks 10th in the US in the percentage of residents with a college degree. The University of Louisville is a premier metropolitan research university with state-of-the-art micro/nanotechnology and imaging centers and the Theranostic Ultrasound Laboratory.

Start Date and Compensation: The position is available to start immediately. The position includes a minimum salary of $47,500 plus benefits. Benefits for Postdoctoral Scholars are summarized here: https://www.uky.edu/-postdoc/benefits . Application Procedures: Interested applicants should submit a single PDF containing 1) a cover letter summarizing research interests, professional experience, and career goals, 2) a CV including a complete list of publications, and 3) names and contact information for professional references. Submit application materials directly to Dr. Nick Teets by email (n.teets@uky.edu). Review of applications will begin immediately, and for consideration please apply by November 1, 2021.

"Teets, Nicholas M." <n.teets@uky.edu>

UKonstanz 2 SpeciationAdaptationGenomics

Two Two-year Postdoctoral Position in Evolutionary Biology

"Species delimitations, and genomics of speciation and adaptation" Two two-year postdoctoral positions working in Axel Meyer's group in the Department of Biology at the University of Konstanz in Germany are available immediately. Funding is through grants of the German Science Foundation. The projects focus on empirical data and conceptual issues regarding species delimitation and hybridization in cichlid fishes. The research will center around the use of whole genome level data to resolve species boundaries in rapidly diversifying cichlid lineages in the East African Rift lakes as well as in Central America. The research will make use of previously sequenced high-quality genomes as well as de novo sequencing of cichlid genomes to generate marker sets and guidelines within modern analytical frameworks for genomically diagnosing species. We are also searching for someone who is familiar with (cichlid) fish and fieldwork and who also has molecular bench experience. The funding period will be for two years and salary will be based on the German salary scheme TV-L E13 (annual before-tax salary is about 68,000 Euros).

The Evolutionary Biology group in Konstanz is composed of ~20 postdocs, graduate students and technicians. The collaborative research environment in the lab is highly integrative, very international, and operates in English. Therefore, the ability to speak German would be a plus, but is not essential. Further information on researchers and research in evolutionary biology in the Meyer-lab can be obtained here: http://-www.evolutionsbiologie-uni-konstanz.com/. Konstanz is a beautiful and pleasant place to live as it borders the third largest lake in Central Europe and lies at the foothills of the Alps. The University of Konstanz is an equal opportunity employer and is rated as one of the best universities in Germany. Requirements: PhD in biology and/or bioinformatics. Skills we would like you to have: understanding of phylogenetic methodologies, knowledge of wet-bench molecular techniques would be a plus, proven familiarity with high-throughput sequencing analyses, facility with one or more programming languages (such as Python, Perl, or R), and at least three peer-reviewed publications. Applications should be sent to Axel Meyer - a.meyer@uni-konstanz.de - and include (1) a cover letter explaining your background and motivation, (2) a CV, and (3) email addresses of two references. The deadline for applications is 30th of November - starting dates are asap.

Axel Meyer <prof.dr.axel.meyer@gmail.com>

ULB Brussels 2 EvolutionaryGenomics

The Research Unit of Molecular Biology and Evolution (MBE) of the Université Libre de Bruxelles (ULB) invites applications for a post-doctoral position, with expertise in evolutionary genomics.

Ongoing research in the group of Karine Van Doninck involves topics at the core of evolutionary biology, including the evolution of sex, genome maintenance, recombination and extreme stress resistance on different eukaryotic systems, including rotifers, amoeba and Corbicula clams. We are employing different tools (including experimental ecology, population genetics, phylogeny, comparative genomics, transcriptomics, bioinformatics, molecular and cellular biology) to study evolutionary processes at the level of populations, both experimental and natural, and genomes.

The recruited candidate will integrate the ERC CoG entitled "Rotifers highlight the evolution of asexuals (RHEA)" of Prof. Karine Van Doninck. The first genomes of the bdelloid rotifer Adineta vaga were obtained by the team of Karine Van Doninck (Flot et al., 2013_Nature and Simion et al., 2021_Science Advances) and additional chromosome-scale genome assemblies of different species are being obtained. More recently, Karine Van Doninck and her team have also started to explore the molecular mechanisms making bdelloid rotifers unique in terms of hyper-resistance to desiccation, freezing and ionizing radiation. Both desiccation and radiation induce massive genome breakage (termed "genothripsis) that bdelloid rotifers can repair, reconstructing their entire genome.

Within this ERC grant and the ALGAPA France Génomique project we have planned to sequence and assemble chromosome-scale genomes of different rotifer species, including bdelloids, monogononts, seisonids and Acantocephala following the pipeline we have used in our manuscript Simion et al., 2021_Science Advances. The rotifer samples have been obtained, cultured and

most DNA extractions have been done. The selected candidate involved in this ERC project RHEA will be responsible for assembling and annotating the genomes of different rotifer species. The candidate will then perform comparative approaches to explore genome evolution in ancient asexuals, studying the chromosome structures, the origin of paleotetraploidy and the history of horizontal gene transfer (HGT) acquisitions in bdelloid rotifers. Through a funded collaboration with the research group of Prof. Timothy Barraclough at Oxford University and Dr. Paul Simion at Rennes (former postdoc), the selected candidate will also be involved in our new phylogenomic project aiming at building a robust phylogenetic framework of rotifers to better understand the timing and quantity of HGTs in bdelloid rotifers.

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MBE is hosted at the Université Libre de Bruxelles (ULB) since 2021 within a newly renovated, spacious laboratory at campus Solbosch (UD5) in Brussels, sharing a L2 laboratory, equipment, and expertise with the neighbouring laboratory of Evolutionary Biology and Ecology (https://ebe.ulb.ac.be) and the engineer group of Prof. A. Shavandi. ULB offers many opportunities to establish collaborations and share scientific expertise and technological platforms with excellent research groups in different disciplines. Combining interdisciplinary approaches to tackle biological questions became the strength of our research group, which was crowned by the award of an ERC Consolidator grant and an ESA project (Rotifers in Space).

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We offer a full-time contract for two years. The contract starts between October 2021 and December 2021.

Applicants are expected to show outstanding commitment to research and must have obtained a PhD by the start of the position. A strong expertise in genomics is required. More specifically, solid competences in bioinformatics (e.g. scripting pipelines) and in genome evolution are needed. Knowledge or interest regarding recombination, metazoan evolution, phylogenomics and population genomics is an added-value.

Applications should be submitted viaemail tokarine.van.doninck@ulb.be. The application package should contain the following documents:

- A curriculum vitae with the complete list of publications

- A cover letter mentioning why the candidate is interested in the position

- Minimum 2 recommendation letters

Interviews:Interviews will be conducted with the selected candidates. Selected candidates could also be invited to give a seminar to MBE ULB.

For any additional information, please contactkarine.van.doninck@ulb.be

Karine VAN DONINCK Full Professor ULB - UNamur karine.van.doninck@ulb.be

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Title of the announcement: A postdoctoral position inmolecular andcellular biology to work on the notorious bdelloid rotifers within the ERCCoG of Karine Van Doninck at ULB (Brussels)

TheResearch Unit of Molecular Biologyand Evolution (MBE) of theUniversitï¿½

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ULB Brussels 2 EvolutionaryGenomics MolCellBiology

Title: ULB_Brussels.2PostdocPositions.EvolutionaryGenomics.Molecula

Two post-doctoral positions open within the Research Unit MBE (Molecular Biology and Evolution) at the Universit?? Libre de Bruxelles (ULB) to work on the ERC CoG of Prof. Karine Van Doninck entitled “Rotifers highlight the evolution of asexuals (RHEA)???. We invite applications for post-doctoral positions with expertise in genomics or in molecular and cellular biology.

Duration: 24 months; starting date flexible, between November 2021 and January 2022.

Ongoing research in the group of Karine Van Doninck involves topics at the core of evolutionary biology, including the evolution of sex, genome maintenance, recombination and extreme stress resistance on different eukaryotic systems, including rotifers, amoeba and Corbicula clams. We are employing different tools (including experimental ecology, population genetics, phylogeny, comparative genomics, transcriptomics, bioinformatics, molecular and cellular biology) to study evolutionary

processes at the level of populations, both experimental and natural, and genomes, but also to investigate extreme stress resistance at the individual level.

Context: The recruited candidates will integrate the ERC CoG entitled "Rotifers highlight the evolution of asexuals (RHEA)" of Prof. Karine Van Doninck. The first genomes of the bdelloid rotifer Adineta vaga were obtained by the team of Karine Van Doninck (Flot et al., 2013_Nature and Simion et al., 2021_Science Advances) and additional chromosome-scale genome assemblies of different species are being obtained. More recently, Karine Van Doninck and her team have also started to explore the molecular mechanisms making bdelloid rotifers unique in terms of hyper-resistance to desiccation, freezing and ionizing radiation. Both desiccation and radiation induce massive genome breakage (termed ???genothripsis) that bdelloid rotifers can repair, reconstructing their entire genome.

Objectives: Within this ERC grant and the ALGAPA France G??nomique project we have planned to sequence and assemble chromosome-scale genomes of different rotifer species, including bdelloids, monogononts, seisonids and Acantocephala following the pipeline we have used in our manuscript that just came out Simion et al., 2021_Science Advances. The rotifer samples for this study have been obtained, cultured and most DNA extractions have been done. The selected candidate with expertise in genomics will be responsible for assembling and annotating the genomes of the remaining rotifer species. The candidate will then perform comparative approaches to explore genome evolution in ancient asexuals, studying the chromosome structures, the origin of paleotetraploidy and the history of horizontal gene transfer (HGT) acquisitions in bdelloid rotifers. Through a funded collaboration with the research group of Prof. Timothy Barraclough at Oxford University and Dr. Paul Simion at Rennes (former postdoc), the selected candidate will also be involved in our new phylogenomic project aiming at building a robust phylogenetic framework of rotifers to better understand the timing and quantity of HGTs in bdelloid rotifers.

Within two work packages of this ERC grant we have started to unravel, with previous postdocs, the spatial and temporal dynamic of their DNA repair in somatic and germline cells (publication in prep. by Matthieu Terwagne) and the key actors of their extreme resistances (publication in prep. by Emilien Nicolas). The selected candidate with expertise in molecular or cellular biology will be fully involved in this ERC project RHEA and continue an in-depth analysis of the extreme resistances of bdelloid rotifers, together with the ERC technician and a PhD student, and in collaboration with Prof. Bernard Hallet (UCL).

Environment: The research unit MBE is hosted at the Universit?? Libre de Bruxelles (ULB) since 2021 within a newly renovated, spacious laboratory at campus Solbosch (UD5), sharing a L2 laboratory, equipment, and expertise with the neighbouring laboratory of Evolutionary Biology and Ecology (https://ebe.ulb.ac.be) and the engineer group of Prof. A. Shavandi. ULB offers many opportunities to establish collaborations and share scientific expertise and technological platforms with excellent research groups in different disciplines. Combining interdisciplinary approaches to tackle biological questions became the strength of our research group, which was crowned by the award of an ERC Consolidator grant and an ESA project (Rotifers in Space).

Offer: we offer a full-time contract for two years. The contract starts preferably between November 2021 and January 2022. Salaries are competitive at the European level.

Candidates: Applicants are expected to show outstanding commitment to research and must have obtained a PhD by the start of the position. For the postdoc in genomics, solid competences in bioinformatics

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ULodz VertebrateEvolution

Postdoc: EXILE - University of ÅódÅo - Department of Ecology and Vertebrate Zoology

REMINDER - DEADLINE FOR SUBMISSION OF APPLICATIONS: 20 October 2021

An exciting postdoctoral position funded by the Polish National Science Centre (NCN, grant EXILE) is available at the Department of Ecology and Vertebrate Zoology of the University of ÅódÅo (Poland) under the supervision of Philippe Kok (STELLAR Research Group, see http://www.philippekok.com/stellar-research-group/). The position is offered for one year, renewable for two further periods of one year (thus max 3 years) and is available from January 2022.

Brief scientific summary of the project: While potential responses of vertebrate communities to environmental constraints have been widely tested in post-Pleistocene landscapes, extrinsic and intrinsic drivers

of vertebrate population density in ancient insular terrestrial landscapes (fragmented paleosurfaces) are essentially unknown. The overarching objective of this project (acronym EXILE for EXobIoLogy on Earth) is to explore, document and understand how environmentally hostile naturally fragmented paleosurfaces may have driven/altered peculiar behavioural, bio-physical and eco-physiological adaptations, and ultimately the evolutionary trajectories of vertebrates. EXILE focusses on the "Lost World" moonlike tabletop mountains of northern South America (tepuis). We hypothesize that ancient endemic lineages of vertebrates thriving on these paleosurfaces, such as the toad genus Oreophrynella and the lizard genus Riolama, have developed unique behavioural, bio-physical and eco-physiological traits/strategies to cope with the tepuis' highly contrasted environmental conditions. EXILE stems from our previous work in this unique system and was inspired by unconventional findings, testimony to the tremendous research discoveries yet to be made in this unusual ecosystem. It is well known that body temperature and water balance are jointly influenced by heat and water exchange within the organism and between the organism and its environment. This exchange is modulated by (i) the biophysical and physiological properties of the organism and by (ii) behavioural strategies. Biophysical properties include morphology, surface properties, and metabolic modes. For instance, skin colour, thickness, and ultrastructure in reptiles and amphibians determine heating capacity and resistance to water loss. EXILE will specifically focus on two main complementary research axes: (1) thermal biology, and (2) bio-physical adaptations to dehydration. We will use selected Pantepui amphibians and reptiles on a single tepui summit at ca. 2,800 m elevation. In order to situate these results in the appropriate ecological and evolutionary context, we will also investigate non-insular upland (ca. 1,000 m elevation) closely-related taxa in the surrounding Pantepui tropical rainforest, as well as the closest relatives of the tepui taxa living in a Neotropical post-Pleistocene landscape at similar elevation (ca. 2,800 m elevation in the sub-paramo in the Andes). Field expeditions coupled with the use of advanced techniques such as highly sensitive thermal imagery, including the use of drones to record thermal images of the landscapes from the air, will be carried out to complete our project. We will also run a variety of cutting-edge behavioural tests, either in the native environment of the animals or in our field laboratory, and use modern imagery techniques (such as high-resolution X-ray microcomputed tomography and electronic microscopy).

Summary for the public is available here: https://-ncn.gov.pl/sites/default/files/listy-rankingowe/2020-09-30apsv2/streszczenia/505651-en.pdf Requirements: We are looking for an out of the box thinker with strong motivation and positive energy, as well as an eye for the details and excellent organisational skills. The successful candidate will have a PhD in biological or closely related science and experience in field work, preferably under difficult conditions and during extended periods. The EXILE project involves heavy field work in different locations (such as tepui top, intervening forest at tepui foot, and one locality around 2,800m elevation in the Andes), for usually 6-8 weeks, with at least 6 distinct field campaigns over 2-3 years.

The ideal candidate will also have some of the following: o Excellent publication record (according to experience); o Excellent skills in statistics; o Experience in behavioural tests; o Experience in thermal imagery (a drone pilot license is a plus); o Experience in Î¼CT/SR-Î¼CT/SEM/TEM/soft-tissue staining techniques; o Experience in population estimates;

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UMiami EvolutionBioticInteractions

Postdoc: UMiami.BioticInteractionsCarbonCycling

We have an upcoming opening for a 3-year Postdoctoral Associate position based at University of Miami(https:/-/amyzanne.org/vacancies)with a flexible start date. The successful applicant will primarily work on projects examining wood decay and microbial colonization of wood in response to wood construction, environmental gradients and carbon gas fluxes from an ongoing project in Far North Queensland, Australia. There will be additional opportunities for the person to join field projects in Australia and/or Brazil.Applicants should have a PhD in Biology and strong writing and quantitative skills, including inquantitative analyses, bioinformatics of sequence data and/or carbon modeling, as well as possible interest or experience in tropical field work. Interested candidates should contact me (Amy Zanne:aezanne@gmail.com) with inquiries. The eventual application will include a CV (including contact

information for 3 references), a short statement of previous research, and a cover letter explaining your interest in this position and how it will support you toward your

Aresty Chair in Tropical Ecology Department of Biology University of Miami 204A, Cox Science Center 1301 Memorial Dr. Coral Gables, FL 33146 Email:aezanne@gmail.com Website:amyzanne.org/ Twitter: @amyzanne

Amy Zanne <aezanne@gmail.com>

UNewBrunswick PopulationGenetics

Postdoctoral Fellow - Population Genetics/Genomics and Transcriptomics of Forest Trees

Forest Genomics Lab, Faculty of Forestry and Environmental Management University of New Brunswick, Fredericton, Canada

A postdoctoral fellow position is available from January 2022 in the Forest Genomics Lab of the University of New Brunswick to work on population genetics/genomics and transcriptomics of forest trees. The projects include studying genetic diversity and structure of populations, phylogeography, genetic and evolutionary impacts of forest fragmentation and forest management practices, evolutionary and adaptive genetic potential of central versus marginal populations of northern forest trees under climate change, and transcriptomic responses of forest trees to climate change conditions. The responsibility of the postdoctoral fellow will be to analyze the data and prepare manuscripts from some of the above completed research work as well as conduct research on evolutionary and adaptive genetic potential of central versus marginal populations of northern forest trees under climate change. The position offers excellent opportunities for many high impact publications. There will also be opportunities to participate in teaching and interacting with national and international collaborators.

Applications are invited from highly motivated, innovative and productive researchers who have excellent data analysis, writing, and leadership skills, are capable of working independently and have keen interest in population genetics and genomics and transcriptomics of forest trees. The applicant should have Ph.D. and research experience in population genetics/genomics or related areas and should have experience or capable of analyzing data on various aspects of population genetics and transcriptomics, including assembly and annotation of transcriptomes, and identification and characterization of differential gene expression.

Initial appointment will be made for one year. The position is renewable for a second year subject to availability of sufficient funds and satisfactory performance. The fellowship amount will be commensurate with the qualification and experience of the candidate in accordance with the NSERC guidelines.

Please send your application to Prof. Om Rajora via e-mail (Om.Rajora@unb.ca), consisting of a letter of application, statement of research interests and qualifications, complete CV, and names, addresses (e-mail and postal) and telephone numbers of three referees. Evaluation of the applications will commence on 15 November 2021 and will continue until the position is filled.

Om P. Rajora, Ph.D. Professor Faculty of Forestry and Environmental Management University of New Brunswick Fredericton, NB E3B 5A3 Canada

E-mail: Om.Rajora@unb.ca Phone: (506) 458-7477; Fax: (506) 453-3538

Om Rajora <om.rajora@unb.ca>

UNotreDame ModelingInfectiousDisease

3 Research Faculty or Postdoc Positions in Mathematical Modeling of Infectious Diseases at Notre Dame

Drs. Alex Perkins and Sean Moore at the University of Notre Dame invite applications for 3 positions at the level of Research Assistant Professor or Postdoctoral Researcher, depending on qualifications. The three projects with which these positions are affiliated include the following.

1) NIGMS MIRA R35 (PI Perkins) titled “Model-based inference and forecasting of co-circulating pathogen dynamics”

2) NIAID R21 (PI Moore) titled “Assessing the impact of COVID-19 interventions on human mobility and SARS-CoV-2 transmission dynamics in the United States”

3) DoD-supported Remote Emerging Disease Intelligence Network (REDI-NET) (Co-Is Perkins and Moore), https://redi-net.nd.edu/ These projects complement

several other ongoing projects within the Perkins Lab at Notre Dame, with more information available at http://perkinslab.weebly.com . Successful applicants should have a PhD in a quantitative field and an interest in infectious disease evolution and epidemiology, with prior experience in this area preferred but not required. Across these projects, there are a wide range of modeling and other techniques that could be relevant, so applicants with varied backgrounds, such as analysis of metagenomic data, are welcome to apply. Contracts will be offered on an annual basis but with the expectation of multiple years of support conditional on satisfactory progress. Salary will be competitive and determined based on the qualifications of the applicant. Standard benefits for Research Faculty and Postdoctoral Researchers at the University of Notre Dame will be provided. Start date is flexible, and applications will be considered on a rolling basis. Remote working arrangements can be explored.

Individuals with an interest in one of these opportunities should submit the following to taperkins<at>nd <dot>edu and smoore15<at>nd <dot>edu: a cover letter describing the applicant's research interests and background; a curriculum vitae; and contact information for 3 references.

taperkins@gmail.com

UOulu UrbanEvolution

Postdoctoral Researcher, Evolution in Urban Environments

PROJECT DESCRIPTION

Cities grow globally at an accelerating pace. Environmental change due to urbanization is expected to increasingly affect the evolution of extant species, potentially in a climate-dependent way. Yet, the evolutionary consequences of urbanization remain poorly understood, which is a significant problem in evolutionary biology. A few specific and conspicuous examples, however, demonstrate that urbanization-induced evolution takes place, industrial melanism in moths being the classical example of urban adaptation. This project will use a macro-scale approach to comprehensively examine urban adaptation and its climate-dependency by using Lepidoptera (butterflies and moths) as study system. The project focuses on four aspects of evolution in urban environments: (1) life history adaptations to urban environments, (2) adaptations to light pollution, (3) physiological adaptations to the urban thermal environment, and (4) the origins of urban adaptations.

The project is financed by Academy of Finland. Principal Investigator of the project is Dr. Sami Kivelä (University of Oulu, Finland). The project includes collaboration with Dr. Marko Mutanen (University of Oulu), Dr. Thomas Merckx (Free University of Brussels, Belgium), Prof. Toomas Tammaru (University of Tartu, Estonia), Dr. Karl Gotthard and Dr. Philipp Lehmann (Stockholm University, Sweden), Dr. Peter Huemer (Tiroler Landesmuseen, Austria), and Dr. TomáÂ Kadlec (Czech University of Life Sciences, Czech Republic).

You will participate in studies addressing all the research themes of the project. A lot of samples and experimental data already exist, and your responsibilities as a recruited postdoctoral researcher include processing of samples (e.g. morphometric measurements of moth specimens), analysing data and reporting results in collaboration with the rest of the research team members. There will also be a possibility to analyse population genetic (ddRADseq) data, to do some field work and run further experiments. You will also have teaching duties at the department at most 5% of working time.

QUALIFICATION AND SELECTION CRITERIA

We expect you to have

- PhD in evolutionary biology, ecology, genetics or related fields. Please note that your degree should be obtained within the last 10 years, latest by the start of the employment.

- Excellent English communication skills

- Previous experience on experimental work on insects and morphometric image analyses

- Experience and knowledge of population genetics, genomics, lepidopterology, life history evolution, behavioral ecology, statistics and using the R environment is considered as an advantage.

DURATION AND TERMS OF EMPLOYMENT

The earliest possible start date is the 1st of December 2021, but there is room for negotiation. Preferably, the start would be no later than in February 2022. Funding for the position exists until the 31st of August 2023.

Salary will be in accordance with the Finnish universities salary system (for teaching and research personnel) and will be based on demand level 5 - 6. In addition, a salary component based on personal work performance will be paid (maximum of 50% of the job-specific component). Typical salary being approx. 3400 - 3600 euro per month (before taxes). A trial period of six

months will be applied in the beginning of employment. Occupational health care is included.

HOW TO APPLY

The application must be submitted using the electronic application form (link below) latest on 31th of October 2021 at 23:59 (Finnish local time) together with:

1) motivation letter where the reasons for interest in this position are clearly indicated (max. 1 page)

2) a full CV formatted according to the guidelines of the Finnish Board of Research Integrity (TENK; see https://tenk.fi/en/advice-and-materials/template-researchers-curriculum-vitae)

3) list of publications formatted according to the guidelines of the Academy of Finland (see https://-www.aka.fi/en/research-funding/apply-for-funding/-how-to-apply-for-funding/az-index-of-application-guidelines2/list-of-publications/)

4) contact information of at least 2 academic referees and

5) relevant certificates/diplomas

The electronic application form is available at: https:/-/rekry.saima.fi/certiahome/open_job_view.html?did=-5600&lang=en&id=000011931&jc=1 FURTHER INFORMATION, please contact Sami Kivelä (sami.kivela[at]oulu.fi)

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UOxford EvolutionWildBacteria

Postdoctoral Researcher on evolutionary dynamics in wild bacterial communities

A three-year postdoctoral researcher position is available to investigate the tempo and mode of evolutionary dynamics in wild bacteria communities. The project is with Tim Barraclough and Kayla King in the Department of Zoology, University of Oxford, and Thomas Bell in the Department of Life Sciences at Imperial College London (Silwood Park campus).

Summary: How populations of bacteria evolve in laboratory experiments is well understood, but much less is known about evolution in diverse communities in the wild. Do bacteria adapt to their biotic surroundings? Does ecological diversity constrain or promote evolution of constituent species? This project aims to find out by applying well-developed approaches of experimental evolution to whole communities in the lab and the field.

The role: You will use a combination of metagenome sequencing and experimental evolution to investigate coevolutionary interactions within whole communities, focusing on the bacteria that live in rainwater pools formed by the roots of beach trees. The project is funded by the Natural Environment Research Council. The post-holder will spend time at both institutions in a pattern that can be arranged flexibly subject to constraints on the timing of experiments. The position offers opportunities to develop your own research interests and collaborations within the department and wider university. The post holder would provide guidance to less experienced members of the research group, including PhD and project students.

Qualifications: Strong interests in evolutionary biology, prior experience of microbial evolution working with genomic or metagenomic data and laboratory experiments, and a PhD in a relevant area.

How to apply: Submit your application, CV and covering letter online via this link by 19th Nov 2021 12:00 Greenwich Mean Time.

https://my.corehr.com/pls/uoxrecruit/-erq_jobspec_version_4.display_form?p_company=-10&p_internal_external=E&p_display_in_irish=-N&p_process_type=&p_applicant_no=-&p_form_profile_detail=&p_display_apply_ind=-Y&p_refresh_search=Y&p_recruitment_id=152704
Start date: we would prefer the successful candidate to start sometime in the first few months of 2022.

We are committed to equality and valuing diversity.

For more information e-mail Tim Barraclough, tim.barraclough@zoo.ox.ac.uk, and visit our lab pages: https://www.zoo.ox.ac.uk/barralab https://www.zoo.ox.ac.uk/king-lab https://-bellmicrobelab.wordpress.com Recent related lab publications:

Scheuerl, T., Hopkins, M., Nowell, R. W., Rivett, D. W., Barraclough, T. G., and Bell, T. 2020. Bacterial adaptation is constrained in complex communities. Nature Communications 11:1-8. https://www.nature.com/-articles/s41467-020-14570-z Betts, A, Gray, C, Zelek, M, MacLean, RC, King, KC. 2018. High parasite diversity accelerates host adaptation and diversification. Science 360:907-911 https://www.science.org/doi/10.1126/-

science.aam9974 “tim.barraclough@zoo.ox.ac.uk” <tim.barraclough@zoo.ox.ac.uk>

UppsalaU EvolutionaryGenomics

Postdoctoral opportunity in Evolutionary Genomics/Bioinformatics - Fish Genomics

We are looking for a highly motivated post-doctoral fellow in EvolutionaryGenomics/Bioinformatics for a two-year position at the Department of MedicalBiochemistry and Microbiology, Uppsala University in Prof. Leif Andersson'sresearch group (https://imbim.uu.se/research-groups/genetics-and-genomics/Andersson_Leif/)

We are conducting several large scale genomics projects on fish, including work on Atlantic herring, European eel, horse mackerel, sprat, European cisco, with additional studies planned (PMID for recent publications that illustrate ongoing research): Evolution and genetics of ecological adaptation in Atlantic herring (PNAS:PMID: 31451650; Genome Research: PMID: 31649060; PNAS: PMID: 32938798: eLife: PMID: P33274714); Population structure of the European eel (PNAS: PMID: 33479174).

Duties: Take part in bioinformatic analysis of whole genome sequence data(both short and long read-based), RNAseq, DNA methylation and ATAC-seqdata; perform population genetics analysis, including detection of signals ofselection based on whole genome sequence data from thousands of individuals;take part in improving genome assemblies as well as generating high quality-functional annotations of our genomes of interest.

Qualifications: A PhD in bioinformatics or a related area earned not morethan 5 years ago (time spent on parental leave can be deducted). Experiencein handling large scale next-generation sequence data is an absoluterequirement. Competence in computational biology, population geneticsand/or genome assembly is a merit. Since the project requires interactingwith other team members and other research groups, ability to interactwith others is an asset.

Further information and applications: Prof. Leif Andersson, Department ofMedical Biochemistry and Microbiology, Uppsala University, email: leif.andersson@imbim.uu.sePlease include CV, a letter describing yourresearch interest and skills, and the names and contact information (address,email address, and phone number) of at least two reference persons.

Deadline: You are welcome to submit your application no later than November 21,2021 by email:leif.andersson@imbim.uu.se. The position is available as soon possible.

Leif Andersson, Uppsala

Page Title

När du har kontakt med oss pÃ¥ Uppsala universitet med e-post sÃ¥ innebär det att vi behandlar dina personuppgifter. För att läsa mer om hur vi gör det kan du läsa här: http://www.uu.se/om-uu/-dataskydd-personuppgifter/ E-mailing Uppsala University means that we will process your personal data. For more information on how this is performed, please read here: http://www.uu.se/en/about-uu/data-protection-policy Leif Andersson <leif.andersson@imbim.uu.se>

UppsalaU SexspecificgeneExpression

a 1-year postdoctoral fellowship is available within evolutionary genetics at the Department of Ecology and Genetics, Uppsala University, Sweden.

The aim of the project is to experimentally examine how sexually antagonistic and sex-limited selection affect gene expression during the evolution of sexual dimorphism. The postdoc fellow will utilize replicated artificial selection lines in a seed beetle Callosobruchus maculatus to test for gene expression changes associated with an increase or decrease in sexual size dimorphism. The study this project will be based on is published here: https://www.nature.com/articles/s41559-021-01530-z The duties for the postdoc will include bioinformatic analysis of RNA-seq data and writing of manuscript based on the goals of the project.

For this position the candidate must hold a PhD degree in evolutionary biology or genetics/genomics. Experience in analyses of next-generation sequencing data is necessary.

Please see here for further information about the project and how to apply: https://-immonenelina.wordpress.com/news/ The position is available in the group of Assist. Prof. Elina Immonen (https://immonenelina.wordpress.com)

Application deadline: 15th Nov 2021

Uppsala is a great town to live in, and the Department of Ecology and Genetics is an international environment with staff and students from all over the world. Our

research spans from evolutionary ecology and genetics to studies of ecosystems. For more information, see http://www.ieg.uu.se . N?r du har kontakt med oss p? Uppsala universitet med e-post s? inneb?r det att vi behandlar dina personuppgifter. F?r att l?sa mer om hur vi g?r det kan du l?sa h?r: http://www.uu.se/om-uu/-dataskydd-personuppgifter/ E-mailing Uppsala University means that we will process your personal data. For more information on how this is performed, please read here: http://www.uu.se/en/about-uu/data-protection-policy Elina Immonen <elina.immonen@ebc.uu.se>

UppsalaU ThermalAdaptation

A two-year position as a postdoctoral researcher in ecological genomics at Animal ecology/Department of Ecology and Genetics, Uppsala University.

The post-doc position is available in the Swedish Research Council-funded project 'Evolution along environmental gradients: does non-adaptive plasticity drive climate adaptation and species range limits?' The goal is to understand the relative roles of phenotypic plasticity and genetic adaptation for thermal performance at different spatial scales using natural amphibian populations as models. Previous studies in these systems have shown the importance of countergradient variation in local climatic adaptation. The successful candidate will conduct laboratory experiments and gene expression analyses with populations collected along replicated climatic gradients in northern Europe to characterize plasticity along the geographical range of the moor frog. In addition, the candidate will participate in genomic analyses of material collected earlier across smaller spatial scales.

The position is available at the research group of Prof Anssi Laurila https://www.ieg.uu.se/animal-ecology/-Research+groups/laurila-lab/ Qualifications required: PhD degree or a foreign degree equivalent to a PhD degree in of evolutionary ecology, ecological genetics, molecular ecology or similar field. The PhD degree must have been obtained no more than three years prior to the application deadline. Experience with molecular genetic analyses is a requirement for the position.

Deadline to apply is 2021-11-08. Starting date 2022-01-10, or as agreed.

Uppsala is a great town to live in, and the Department of Ecology and Genetics is an international environment with staff and students from all over the world. Our research spans from evolutionary ecology and genetics to studies of ecosystems. For more information, see www.ieg.uu.se . For more information and how to apply see https://www.uu.se/en/about-uu/join-us/-details/?positionId=435296 or contact Anssi Laurila, anssi.laurila@ebc.uu.se

Anssi Laurila Animal Ecology/ Department of Ecology and Genetics Evolutionary Biology Center Uppsala University Norbyvägen 18D 75236 Uppsala Sweden

Tel. +46-18-4716493 Mobile: +46-70-2384356

När du har kontakt med oss pÃ¥ Uppsala universitet med e-post sÃ¥ innebär det att vi behandlar dina personuppgifter. För att läsa mer om hur vi gör det kan du läsa här: http://www.uu.se/om-uu/-dataskydd-personuppgifter/ E-mailing Uppsala University means that we will process your personal data. For more information on how this is performed, please read here: http://www.uu.se/en/about-uu/data-protection-policy Anssi Laurila <anssi.laurila@ebc.uu.se>

UPuertoRico ButterflyGenomics

Position in Riccardo Papa's lab, for single cell genomics of butterflies wing color pattern UNIVERSITY OF PUERTO RICO RIO PIEDRAS Post doc full time position in evolutionary genomics: the molecular architecture of color in butterflies Salary from $44,000 plus full benefits.

IMPORTANT INFORMATION: To apply, please submit in one PDFfile: (i) one page cover letter including motivation and research interests, (ii) a CV, and (iii) contact information for two references electronically, to riccardo.papa@upr.edu and rpapa.lab@gmail.com. Review of applications will start immediately and will continue until the position is filled. Job starts in January 2022..

Postdoc in evolutionary and functional genomics. An EPSCoR-funded postdoctoral position is available in the laboratory of Dr. Riccardo Papa in the Department of Biology of the University of Puerto Rico, Río Piedras Campus. This position is looking to increase diversity in the research group and foster collaboration and knowledge transfer. The laboratory has a rich background in studying the natural history of Heliconius butterflies, with a focus on whole genome sequencing and performing functional assays to go after the developmental and genetic architecture of color pattern

development in butterflies. These regions provide exciting candidates for further validation using functional approaches such as ATAC-seq, ChIP-seq and CRISPR to better understand the pathways involved in color pattern development and their evolution. The Papa's lab (https://www.riccardopapalab.com) is located in San Juan, the capital of the beautiful island of Puerto Rico, which provides amazing research opportunities and lifestyle. The selected postdoc will explore the genetic and epigenetic source of variation for natural selection and adaptation to work upon. This research project will investigate whatgoverns patterns diversity, what limits it, and what promotes its potential. To do so, methods ofpure genetics, phylogenetics, epigenetics, single cell genomics, developmental cell biology, and functional genomics will be utilized. The final goal is to characterize the molecular architecture of single cells/scales of unique colors.

SPECIAL REQUISITES The candidate must have completed a Ph.D. degree within the last 5 years, preferably in genomics, population genetics or statistical genetics. The position requires skills in the more bioinformatical areas of biology, and a strong record of research in these areas. High motivation and mobility will be necessary to collaborate with National and International research groups.

The work will focus on bioinformatics methods to analyze genomic sequencing and functional genomic data. Specifically, this includes building pipelines to assemble and analyze single cell sequencing (epigenetic and expression) data using multiple platforms.

Candidates from Minority Serving Institutions (MSI) are strongly encouraged to apply for the position.

IMPORTANT INFORMATION To apply, please submit (i) a cover letter including motivation and research interests, (ii) a full CV that includes all requisites for the position, (iii) contact information for two references electronically, and (iv) copies of all academic degrees *(diplomas and certifications). Inquiries about the position can be directed to riccardo.papa@upr.edu APPLICATIONS SUBMITTED WITH INCOMPLETE INFORMATION WILL NOT BE CONSIDERED.

CANDIDATES WITH A PH.D. DEGREE OF 5 YEARS OR MORE ARE NOTELIGIBLE FOR THIS POSITION.

riccardo.papa@upr.edu

USaoPaulo Brazil CoevolutionInEcologicalNetworks

Postdoctoral fellowship on Coevolutionary Dynamics in Ecological Networks at Paulo Guimaraes's Lab at the University of Sao Paulo, Brazil. The deadline for applications are 20 October 2021 (first position).

Essential qualifications: - A PhD in Ecology, Biological Sciences, Zoology, Parasitology, Botany, Genetics, Computer Science or Physics. - First author publications. - A strong background in Ecology, Parasitology, Quantitative Genetics or Physics.

Desirable qualifications: - International experience (PhD or postdoc). - Knowledge of at least one programming language (R, Matlab, Fortran, C, C++, Python). - Research experience on ecological interactions, preferably with fieldwork experience. - Publications as coauthor.

Mandatory documents for application: - Updated CV - A recommendation letter - PhD certificate - A short letter explaining why the candidate would like to work with coevolutionary dynamics of ecological interactions

The positions are open to Brazilian and foreign citizens. The selected candidates will receive a FAPESP postdoc fellowship - current salary of R$ 7.373,10 per month. The candidate will also receive 15% of its annual income for research expenses.

Application: Candidates should send the mandatory documents listed above to by e-mail (prguima@usp.br) indicating as e-mail subject: Post-doc [candidate name].

– – Paulo R. Guimarães Jr Professor Titular - Departamento de Ecologia Universidade de São Paulo (USP) www.guimaraes.bio.br Paulo Roberto Guimaraes Junior <prguima@usp.br>

USheffield SpeciationGenomics

We seek a highly motivated evolutionary genetics specialist to join an international team studying the role of chromosomal inversions in adaptation and speciation. You will have experience in handling whole-genome resequencing data and a commitment to research on the

genetic basis of evolutionary change. You will also enjoy fieldwork and be fascinated by the relationships between organisms and their natural environment. The post is funded by the Leverhulme Trust. You will join a vibrant group led by Professor Roger Butlin in Sheffield, Professor Kerstin Johannesson in Gothenburg and Dr Rui Faria in Porto. You will be based in Sheffield in the world-class Ecology and Evolutionary Biology grouping and you will be expected to travel to Sweden and Portugal.

Starting date: 1 February 2022

For further information, contact Roger Butlin: r.k.butlin@shef.ac.uk

To apply, go to www.shef.ac.uk/jobs and search for Job Reference Number: UOS030358

Closing date: 1 November 2021

– Roger Butlin

Professor of Evolutionary Biology Ecology and Evolutionary Biology School of Biosciences The University of Sheffield

Guest Professor Marine Sciences University of Gothenburg

r.k.butlin@shef.ac.uk

https://littorina.group.shef.ac.uk/ Roger Butlin <r.k.butlin@sheffield.ac.uk>

USouthernCalifornia HumanPopulationGenetics

Postdoctoral Research Associate in the Department of Biological Sciences,University of Southern California

A postdoctoral position is available in the Campbell laboratory in the Department of Biological Sciences at the University of Southern California. The Campbell lab is a highly collaborative environment, and we welcome scientists from all backgrounds. Our research combines field-based, experimental, and computational approaches to tackle fundamental questions in human genomics and evolution. In particular, we are interested in the past migration and admixture of modern humans in the Arabian Peninsula (AP) and Africa. Furthermore, weseek to identify variants that contribute to the development of normal variable traits (e.g., lactase persistence and skin pigmentation, as well as related phenotypes) and complex diseases (e.g., kidney and breast cancers). We also work with top-notch collaborators to investigate the dynamics of the gut microbiome in urban and rural populations in the AP. The successful applicant will contribute to the completion of these ongoing studies and will be encouraged to explore other projects that broadly fit within the lab's research interests and current funding.

Responsibilities:

The postdoctoral scholar is expected to perform analysis of large-scale genomic/phenotypic data from diverse human populations and collaborate with other scientists in theUnited States and abroad. Furthermore, this individual will lead multiple projects, work in a multidisciplinary environment and present/publish results in scientific conferences/journals. The postdoctoral scholar will also mentor graduate and/or undergraduate students in the lab.

Qualifications: The ideal candidate will have a Ph.D. in Population Genetics, Bioinformatics, Computational Biology, Biostatistics, Biological Anthropology, or in a related discipline. Proficiency in one or more programming languages (e.g., Python, Perl, R, etc.) and in cluster computing is essential. Prior experience with analyzing genotyping and next-generation sequencing data is also required.

Salary and duration:

The position is renewable annually for a maximum of three years contingent upon satisfactory performance and continued funding. Salary will be commensurate with qualifications and experience. The University of Southern California also offers competitive benefits that include medical, dental, and vision.

Interested applicantsshould submit: 1) a cover letter; 2) a complete CV detailing scientific experience, examples of technical skills, publications, presentations, etc.; 3) a one-page statement that includes research interests, experience with genomic data, and career aspirations; and 4) contact information for three references to mc44680@usc.edu with theadvertised position and the applicant's name in the subject line.

Applications will be reviewed until December 1st, 2021, and the position is expected to begin in the Spring 2022 semester. However, the specific start date is negotiable.

Informal inquiries about this position can be directed to the lab's Principal Investigator, Dr. Michael C. Campbell, at mc44680@usc.edu

Best wishes

Michael

Michael C. Campbell, Ph.D. Department of Biological

Sciences Human and Evolutionary Biology Section University Park Campus 3616 Trousdale Parkway, AHF B10E Los Angeles, California 90089

https://dornsife.usc.edu/cf/faculty-and-staff/-faculty.cfm?pid=1105230 Michael Campbell <mc44680@usc.edu>

USouthernMississippi PopulationGenomics

A postdoctoral research associate position is available at the University of Southern Mississippi to conduct research in population genetics and genomics of marine organisms with a focus on the greater amberjack Seriola dumerili.

Information about the position and the application process is available at this linkhttps://usm.csod.com/ats/-careersite/JobDetails.aspx?id=2213&site=1 Now hiring: Postdoctoral Research Associate!

Special Instructions to Applicantssubmit a cv, letter and contact for three (3) references.Job Summaryresearch in genomics,...

usm.csod.com

Contact for additional informationE. Saillant (E-mail eric.saillant@usm.edu)

Eric Saillant, Ph.D Associate Professor

The University of Southern Mississippi School of Ocean Science and Technology

Thad Cochran Marine Aquaculture Center 103 McIlwain Drive Ocean Springs, MS, 39564 Tel. (1) 228-818-8007 Fax (1) 228-872-4204 E-mail: eric.saillant@usm.edu

Eric Saillant <Eric.Saillant@usm.edu>

UTexas Austin EvoMorph

The Kemp Lab (www.thekemplab.com) seeks a postdoctoral fellow to contribute to a three year, NSF-funded project on the long-term stability of adaptive radiations using the fossil record. The successful applicant will develop novel, interdisciplinary approaches to studying diversification and extinction in changing environments, using Caribbean Anolis lizards as a model system. The researcher will work closely with Dr. Kemp in project design, data collection, data analyses, and training additional project personnel (a research technician and 1 - 2 undergraduates a year).

We seek candidates with a strong background in morphometrics and evolutionary morphology. Prior experience analyzing high-resolution X-ray chromatography (CT) data is required, and prior experience with natural history collections and reptile osteology is preferred.

The Kemp Lab is actively involved in K-12 outreach, and several educational modules will be developed as part of this project. Thus, candidates with an interest in K-12 education are highly encouraged to apply.

For more information and to apply: https://-utaustin.wd1.myworkdayjobs.com/UTstaff/job/UT-MAIN-CAMPUS/Postdoctoral-Fellow_R_00015108 The application consists of a CV, a letter of interest, and the names and contact information for three references. Applicants who are currently in the process of completing their PhD, an official letter from your advisor or graduate program indicating your expected date of degree completion will suffice. Applications will be evaluated on a rolling basis until the position is filled.

Melissa E. Kemp, PhD Assistant Professor, Department of Integrative Biology The University of Texas at Austin mkemp@austin.utexas.edu www.thekemplab.com "Kemp, Melissa" <mkemp@austin.utexas.edu>

UUlm BeeVirusExptEvolution

University of Ulm, Germany Institute of Evolutionary Ecology and Conservation Genomics

Wilfert group

We would like to recruit a Postdoctoral Research Fellow to join the team for our ERC consolidator project BeePath to study how the acquisition of vector-borne transmission affects viral evolution and epidemiology. As a model system, we use bee viruses and the introduction of a novel vector, the ectoparasitic Varroa mite. The project combines evolution in natural populations with experimental evolution in the lab. The advertised postdoc will join an existing team (one postdoc, one technician dedicated to this project) and focus on the lab-based experimental evolution and viral fitness analysis. The team will be joined by a further PhD student

from Autumn 2022. The project will focus on understanding patterns of evolution in viruses following the introduction of vector-born transmission. The ERC-funded post is for 4 years (salary scale TV-L 13, 100%) , with a preferred starting date in April 2022.

The post will include working on reverse viral genetics, experimental evolution, new sequencing approaches and bioinformatics as well as working with bees and associated lab work focussing on RNA virus detection. Expert dedicated technical support is available. The successful applicant will be able to develop research objectives, projects and proposals; identify sources of research funding and contribute to the process of securing funds and make presentations at conferences and other events.

Applicants will possess a relevant PhD in a related field of study. The successful applicant should have expertise in the fields of host-pathogen experimental evolution, disease ecology or evolutionary virology. The successful applicant will also be able to work collaboratively, supervise the work of others and act as team leader as required. Applicants should ideally have expertise in experimental evolution, molecular biology or microbiology, and/or bioinformatics. Experience in working with bees or insects would be desirable. Expertise or an interest in working with our collaborator Prof Mike Boots (UC Berkeley) on mathematical models would be welcome.

The position will be based at the University of Ulm, at the Institute of Evolutionary Ecology and Conservation Genomics. Ulm is a delightful historic city on the Danube in Southwestern Germany; it is one hour from the Alps, Lake Constance, Munich and Stuttgart. Additionally, the position offers the opportunity for an extended stay with our collaborator Mike Boots at UC Berkeley.

For further information, please contact Prof. Dr. Lena Wilfert lena.wilfert@uni-ulm.de. The closing date is the 8th of November 2021. The job advert with detailed information on profile and responsibilities, as well as the link to the online application system can be found here https://stellenangebote.uni-ulm.de/jobposting/-256b24c2806f9da68214db8f8eb37d81934f9b72 Please note that applications have to be processed online!

Prof. Dr. Lena Wilfert University of Ulm Institute of Evolutionary Ecology and Conservation Genomics Albert-Einstein Allee 11 D-89069 Ulm Germany Tel.: 0049-731-5030615 Fax: 0049-731-5022683

email: lena.wilfert@uni-ulm.de Website: https://www.uni-ulm.de/nawi/evolutionary-ecology-and-conservation-genomics/prof-dr-lena-wilfert Lena Wilfert Ulm <lena.wilfert@uni-ulm.de>

UVermont InsecticideResistance

Postdoctoral Researcher on transgenerational epigenetic inheritance of insecticide resistance

A postdoctoral position is available in the Insect Agroecology and Evolution Lab in the Department of Plant and Soil Science at the University of Vermont (UVM), led by Prof. Yolanda Chen, in collaboration with Prof. Sean Schoville at the University of Wisconsin (UW), Prof. Stephanie McKay (UVM) and Prof. Russell Groves (UW).

Summary: Agricultural insect pests show a remarkable ability to evolve resistance to insecticides. Although insecticide resistance is widely considered to be inevitable, the evolutionary processes underlying the evolution of insecticide resistance remain poorly understood. One possible explanation is that insecticide exposure may alter epigenetic modifications, which alter heritable patterns of gene expression without actually changing the underlying DNA sequence. The Colorado potato beetle (CPB), Leptinotarsa decemlineata, has been extraordinarily successful at adapting to all insecticide classes, including the neonicotinoid insecticide imidacloprid. We will test how beetle exposure to sublethal doses of imidacloprid can alter multigenerational and transgenerational epigenetic inheritance of insecticide tolerance.

Position Responsibilities: The postdoctoral associate will be expected to manage a multigenerational beetle breeding project, extract DNA/RNA, and analyze whole-genome bisulfite sequencing data from an experimental evolution study. This will provide training opportunities in bioinformatics analysis, genomic inheritance, and epigenetic analysis. The successful applicant will also help in the mentoring of undergraduate student projects.

Qualifications: Candidates are expected to have a Ph. D. in Evolutionary Genomics, Molecular Ecology, Genetics, Entomology, or related field. Experience in analyzing large bioinformatic datasets (reduced representation, transcriptomic, or sequencing). Desirable skills for this project include familiarity with Linux operating systems and computer programming (Python, and R). Experience in DNA/RNA extraction, running PCRs, and optimizing protocols.

How to Apply: Funding for this position is available for two years with the possibility of an extension. To apply, please send a single pdf with a cover letter demonstrat-

ing your interest in the position, a CV, 1-2 representative publications, and contact information for three references to Dr. Yolanda Chen, (yolanda.chen@uvm.edu) by Dec 1, 2021.

Start date is flexible but will be targeted for May 1, 2021.

Diversity and Inclusion: As a research team, we encourage junior scientists from underrepresented groups to apply. University of Vermont is an equal opportunity/affirmative action employer.

For more information about our research groups, please visit: http://labs.russell.wisc.edu/molecularecology/-http://blog.uvm.edu/yfanslow/ Dr. Yolanda Chen (she/her) Associate Professor Faculty Fellow - Gund Institute for the Environment Department of Plant and Soil Science University of Vermont 63 Carrigan Drive Burlington, VT 05405 Phone: (802) 656-2627 Insect Agroecology and Evolution Lab < http://-blog.uvm.edu/yfanslow/ >

Yolanda Chen <Yolanda.Chen@uvm.edu>

UWisconsin Madison PopulationGenetics

Post-doctoral position in population, quantitative, or evolutionary genetics,

University of Wisconsin-Madison

A post-doctoral position is available in the Ragsdale lab at the University of Wisconsin-Madison. Our research focuses on how demographic and evolutionary history and natural selection shape patterns of genetic diversity in humans and other species. Possible projects range from mathematical theory and methods devolopment to the analysis of large-scale sequencing datasets of diverse populations. There is a large amount of flexibility in designing research directions, either within existing projects in the group or bringing in your own related questions and interests. More information about our research interests can be found at https://apragsdale.github.io/-2_research.html . UW-Madison is home to a large and vibrant interdisciplinary community with strengths in evolution and genetics. Our group is within the Department of Integrative Biology (https://ibio.wisc.edu), and we interact with colleagues across campus through the Crow Institute for the Study of Evolution (https://-evolution.wisc.edu). The city of Madison is affordable and quality of life is high, with a large network of biking and running paths and immediate access to lakes and nearby wilderness. Chicago, Minneapolis/St. Paul, and Milwaukie are each short trips away.

Funding is available for at least two years, and the start date is flexible: Spring, Summer, or Fall 2022. The ideal candidate will hold a PhD in evolutionary or computational biology, genetics, statistics, applied math, or a related field, and will have strong programming skills, with proficiency in one or more programming languages (such as python, R, C, or similar). Experience analyzing population genetic data is a plus, but not essential.

To apply: Please email with your CV, a short statement of interest, and contact information for three references to Aaron Ragsdale (apragsdale@wisc.edu). Applications will be reviewed and considered as they are received. Informal inquiries are most welcome.

Aaron Ragsdale Assistant Professor Department of Integrative Biology, University of Wisconsin-Madison https://apragsdale.github.io Aaron Ragsdale <apragsdale@wisc.edu>

UWisconsin Madison PopulationGenomics

The research group of John Pool at the University of Wisconsin - Madison invites applications for a postdoctoral research position. Across its ten year existence, the Pool Lab has maintained a strong focus on population genomics and the genetics of adaptation, leveraging the power and efficiency of Drosophila as a model system. There is now also an emerging focus on the population genetics of early stage reproductive isolation.

One proposed focus of this position is on the population genomics of introgression between species. A later project could use a large panel of inbred line genomes from an admixed fly population to draw inferences about networks of incompatibilities between source populations that diverged only ˜13 kya, expanding on prior work (Pool 2015 MBE).

Our research group currently includes 2 advanced research staff members, 1 postdoc, and 4 PhD students. I have also advised 5 former postdocs, and the publication records of Amir Yassin and Justin Lack show what a productive environment our lab can be. I welcome postdocs taking important components of our research with them when they found their own labs. Further lab info: http://www.johnpool.net UW-Madison of-

fers a superb scientific environment with a supportive, collaborative, and egalitarian culture. Many labs focus on population genetics, evolutionary genomics, and Drosophila research: https://evolution.wisc.edu/-people/faculty/ https://genetics.wisc.edu/drosophila-and-other-insects/ Madison offers an exceptional quality of life in a beautiful landscape, and has been ranked as both the best US city for young adults and the best for raising a family. http://www.visitmadison.com/media/-rankings/ Downtown and campus are bordered by lakes, it's easy to get around by bike or bus, and Madison features diverse art, music, cultural, and culinary offerings.

We are highly interested in adding to the diversity of our lab in a broad sense, including gender balance, cultural perspectives, and intellectual backgrounds and skill sets.

To apply, send a statement of research interests (up to 1 page) addressing the intersection between your own scientific interests and the Pool lab's research in terms of potential projects, along with a CV and contact info for 3 references.

Start dates are flexible. Salary follows the NIH scale. Individual or family health insurance is offered.

Applications are due November 15. However, earlier applications are welcome, and later applications may still be considered. Informal inquiries are also welcome at any time.

John Pool Associate Professor Laboratory of Genetics University of Wisconsin - Madison

John E Pool <jpool@wisc.edu>

UWisconsin Milwaukee DeerGenomicsDisease

Postdoctoral position: Development and application of a high-throughput genomic resource to inform white-tailed deer population and disease management

Latch Laboratory, University of Wisconsin-Milwaukee

We seek a highly motivated candidate with a background in population genomics to fill a postdoctoral researcher position. The objective of this project is to develop and validate a GT-seq panel for high throughput genotyping of SNPs in white-tailed deer, using genomic data we have generated. The developed panel will then be used to address questions related to management of chronic wasting disease (CWD) in white-tailed deer. This position is based in the Latch Lab at the University of Wisconsin-Milwaukee, though the successful candidate will work with collaborators located throughout the Eastern US. The initial appointment is for 2 years, with potential for extension based on satisfactory performance and funding availability. Salary is competitive at $60,000 plus full benefits.

Responsibilities: - Bioinformatics to design GT-seq panel from larger panel of SNPs we have developed - Laboratory work to test, optimize, and validate the GT-seq panel, and genotype several thousand samples on the optimized panel - Analysis and interpretation of resulting genotype data - Preparing manuscripts as lead author, assisting with preparation of reports for relevant stakeholders, and contributing to grant proposals to support novel projects. - Coordination and communication with research team and state wildlife agency partners

Qualifications: - PhD in population genetics, molecular ecology, bioinformatics, or a related field - Proficiency in R programming language - Experience working with high-throughput sequencing data - Demonstrated record of research productivity, especially through a strong publication record - Excellent communication skills - Strong organizational skills - Interest in mammalian biology, population genetics, disease ecology, and/or wildlife management

Application details: To apply, submit a pdf document to Dr. Emily Latch (latch@uwm.edu) that includes: 1) a cover letter describing previous experience and fit to the position, 2) full CV, and 3) contact information for 3 references.

Review of applications will begin in October 2021, and will be considered on a rolling basis until the position is filled. The position is available effective immediately, with a flexible start date no later than Winter 2021-22. Questions regarding the position can be directed to Dr. Emily Latch.

Emily K. Latch Professor Department of Biological Sciences University of Wisconsin-Milwaukee 3209 N. Maryland Ave. Milwaukee, WI 53211 Email: latch@uwm.edu Web: http://www.uwm.edu/~latch latch@uwm.edu

UWyoming OrganismalEvolution

Post Doc Res Associate Laramie, WY, United States

JOB DESCRIPTION The University of Wyoming invites diverse applicants to consider our employment opportunities. We are also especially interested in can-

didates who have experience working with diverse populations and/or diverse initiatives.

JOB TITLE: Post Doctoral Research Associate

JOB PURPOSE:

A postdoctoral research associate position is available in the laboratories of Drs. Amy Krist and Sarah Collins at the University of Wyoming. This position is part of a multi-institution, 4-year NSF EPSCoR Track-II grant titled "From Genes to Ecosystems: Harnessing Elemental Data to Detect Stoichiometric Control-Points and their Consequences for Organismal Evolution." The successful applicant will combine tools emerging from the data revolution with the ecological stoichiometry framework. With the support of the interdisciplinary team, the postdoc will work to advance our understanding of how the supply of elements constrain ecological and evolutionary processes in aquatic ecosystems. The postdoc will develop their own research activities related to stoichiometric controls on foodwebs, stoichiometric constraints on organismal diversity and functional trait diversity, or stoichiometric controls on intraspecific variation across diverse ecosystems. More information about the STOICH project can be found at https://stoichproject.org . The position is 100% research. The salary is competitive and includes a comprehensive benefits package. The anticipated start date is January 1, 2022, but is negotiable. The position is renewable for up to three years contingent upon performance.

The University of Wyoming has strong research programs in ecology and evolutionary biology across multiple departments, including Botany, Zoology and Physiology, Ecosystem Science and Management, Plant Sciences, and the Program in Ecology.

ESSENTIAL DUTIES AND RESPONSIBILITIES: Develop and facilitate research collaborations with the STOICH project team. Write peer-reviewed publications and present project results to collaborators and at professional conferences. Attend STOICH project meetings and assist with growth of the STOICH database. Consult with mentor(s) to develop an Individual Development Plan (IDP), which may include additional project-supported activities like mentoring undergraduate and/or graduate students, participating in proposal writing workshops or other professional developmental opportunities, and/or engaging with inter-jurisdictional travel and empirical research activities, pursuant to the postdoctoral associate's career ambitions.

REMOTE WORK ELIGIBILITY: This position is eligible for remote work and/or a flexible work schedule.

MINIMUM QUALIFICATIONS: A Doctoral Degree is required for this position, however, consideration will be given to applicants that are currently pursuing their Doctoral Degree and will complete the degree prior to starting work.

Completion of all requirements for a PhD in biology, ecology, evolutionary biology or a related field.

DESIRED QUALIFICATIONS: Record of publishing in peer-reviewed literature Excellent verbal and written communication skills Previous interdisciplinary and collaborative work Expertise in ecological stoichiometry Experience working in aquatic ecosystems Experience working with large data sets

REQUIRED MATERIALS: Complete the online application and should upload the following application materials as a single pdf: a cover letter describing fit and interest in the position, a research proposal describing a research question related to the project (<1 page, not including references), a CV, and contact information for four references. This position will remain open until filled. Complete applications received by 10/15/2021 will receive full consideration.â€ https://eeik.fa.us2.oraclecloud.com/-hcmUI/CandidateExperience/en/sites/CX_1/job/-212299/?utm_medium=jobshare

HIRING STATEMENT: UW is an Affirmative Action/Equal Opportunity Educator and Employer. We are committed to a multicultural environment and strongly encourage applications from women, minorities, veterans and persons with disabilities.

In compliance with the ADA Amendments Act (ADAAA), if you have a disability and would like to request an accommodation to apply for a position, please call 307-766-2377 or email jobapps@uwyo.edu.

ABOUT LARAMIE: The University of Wyoming is located in Laramie, a town of 30,000 in the heart of the Rocky Mountain West. The state of Wyoming continues to invest in its university, helping to make it a leader in academics, research and outreach. The university has state-of-the-art facilities in many areas and the community provides the advantages of a major university.

— / —

Valencia PlantEvolution

A 3-yr postdoc position (2022-2024) to study genetic variability and divergence in plant populations in relation to fire regime, is available in Valencia, Spain

More information: https://www.uv.es/jgpausas/-sebusca2021en.html Juli Pausas

CIDE, CSIC | www.uv.es/jgpausas | blog < http:/-/jgpausas.blogs.uv.es/ > | @jgpausas < https://-twitter.com/jgpausas >

"The most dangerous worldview is the worldview of those who have not viewed the world", A. von Humboldt [article < https://doi.org/10.1111/1365-2745.13109 >]

"juli g. pausas" <juli.g.pausas@ext.uv.es>

WashingtonU Biodiversity

Biodiversity Postdoctoral Fellowships at the Living Earth Collaborative

The Living Earth Collaborative, a partnership between Washington University, the Missouri Botanical Garden and the Saint Louis Zoo, was established to advance knowledge and protection of the world???s biodiversity by supporting collaborative research and conservation efforts involving individuals from the three partner and other Saint Louis institutions. See https://-livingearthcollaborative.wustl.edu/for more information on the Collaborative including a list of recently funded projects and previous cohorts of postdoctoral fellows. As part of this effort, the Collaborative is pleased to announce the availability of four postdoctoral fellowships in the area of biodiversity research and conservation. Fellowships will be two years long, subject to review after the first year, with a starting date beginning June 1 ??? September 1, 2022. Salary will be $57,000 plus benefits, in addition to $6,000 per year for research support.

LEC Postdoctoral Fellows will be an essential part of the Living Earth Collaborative and are expected to develop an independent research or conservation program that engages with multiple members of the Living Earth Collaborative Community. Projects can be in any area related to biodiversity research or conservation including but not limited to: behavior, conservation, conservation veterinary medicine, ecology, economics, education, environmental justice, evolution, One Health, and public policy. Projects that involve LEC Biodiversity Fellows

(https://livingearthcollaborative.wustl.edu/about-us/researchers/) from at least two of the partner institutions, one partner institution and Saint Louis University, or two departments at Washington University are particularly encouraged. In addition, fellows are expected to be an integral part of the Living Earth Collaborative participating in and organizing events and interacting with the diverse LEC community. Applicants are strongly encouraged to contact prospective mentors prior to application and where appropriate, to work with mentors to develop a proposal.

To apply: Applicants should submit, as a single file, a cover letter, a CV, a description of previous research, conservation, and professional accomplishments (ca. 2 pages), and a description of proposed research/conservation activities (ca. 2 pages), including identification of mentors, who must be LEC Biodiversity Fellows. Postdocs are expected to be based in Saint Louis and must have been awarded a PhD, DVM or comparable degree by the beginning of their appointment. International applicants are encouraged. Documents should be uploaded to https://jobs.wustl.edu/-specifying Job Requisition JR62275. Applicants should also have three letters of recommendation sent to-livingearth@wustl.edu. Review of applications will begin December 1stand continue until the positions are filled.

Washington University is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, age, sex, sexual orientation, gender identity or expression, national origin, genetic information, disability, or protected veteran status.

Questions should be directed to:livingearth@wustl.edu

"Carlen, Elizabeth" <carlen.e@wustl.edu>

WorkshopsCourses

Computational Molecular Evolution Jul18-29

Dear Community,

Applications for the 12th summer school on computational molecular evolution organized by Cilia Antoniou, Ziheng Yang, Adam Leache, and myself from July 18-29 2022 in Hinxton, UK are now open:

https://coursesandconferences.wellcomeconnectingscience.org/event/computational-molecular-evolution-20220718/
Alexis

– Alexandros (Alexis) Stamatakis

Research Group Leader, Heidelberg Institute for Theoretical Studies Full Professor, Dept. of Informatics, Karlsruhe Institute of Technology Affiliated Scientist, Evolutionary Genetics and Paleogenomics (EGP) lab, Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology Hellas

www.exelixis-lab.org Alexandros Stamatakis <alexandros.stamatakis@gmail.com>

Online BayesianStatisticsInR Feb14-18

Dear all,

registration is now open for the 2nd edition of our course "Computational Bayesian methods using brms in R".

Dates: Online, 14-18 February

Course website: (https://www.physalia-courses.org/-courses-workshops/course46/)

This course provides a relatively accessible and technically non-demanding introduction to the basic workflow for fitting different kinds of linear models using a powerful front-end R package for Stan called brms.

We assume familiarity with R. Participants will benefit most if they have previously fit linear models and linear mixed models (using lme4) in R, in any scientific domain. No knowledge of calculus or linear algebra is assumed, but basic school level mathematics knowledge is assumed (this will be quickly revisited in class).

After completing this course, the participants will

1. have become familiar with the foundations of Bayesian inference

2. be able to fit a range of multiple regression models and hierarchical models for normally distributed data, for log-normal, and binomially distributed data.

3. be able to communicate the results of a Bayesian analysis

4. know how to select priors for their models using prior predictive checks

5. know how to assess the descriptive accuracy of a model using posterior predictive checks.

Should you have any questions, please feel free to contact us: info@physalia-courses.org

All the best,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846 Follow us on (https://twitter.com/Physacourses)

"info@physalia-courses.org" <info@physalia-courses.org>

Online DataAnalysisWithPython Jan24-28

Dear all,

registrations are now open for the Physalia course "Python Programming for Data Analysis":(https://www.physalia-courses.org/courses-workshops/course2/)

It will be held online in January, 24th-28th

In our course, the student will learn about the powerful tools to perform "data wrangling", i.e. to clean, unify and transform "raw data" into an accessible dataset to make it more appropriate for a variety of downstream analyses. This course will introduce the learner to the basics of the Python programming language and its data science libraries such as NumPy and Pandas as well as data visualization libraries such as Matplotlib, Altair, and Plotly. By the end of this course, students will be able to take "raw data", clean it, manipulate it, and run basic descriptive statistical analyses. Lessons consist of lectures followed by practical exercises where students will put into practice what they just learned during the course by solving problems and exercises of increasing difficulty.

Here you can find the full list of our courses and Workshops: (https://www.physalia-courses.org/courses-workshops/)

Should you have any questions, please feel free to contact us: info@physalia-courses.org

All the best,

Carlo

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"info@physalia-courses.org" <info@physalia-courses.org>

Online DNAMethylation Nov15-18

Dear all,

we have the last seats available on the Physalia-course " ECOLOGICAL AND EVOLUTIONARY STUDIES ON DNA METHYLATION IN PLANTS AND ANIMALS"

Dates: Online, 15-18 November

Course website: (https://www.physalia-courses.org/courses-workshops/dnamethylation/)

Instructors: Dr. Aline Muyle (CNRS, FR); Prof. Dr. Kees van Oers (Netherlands Institute of Ecology, NL) and Bernice Sepers (Netherlands Institute of Ecology, NL).

In this course, we will introduce the different available approaches for obtaining and analysing DNA methylation data, including bisulfite sequencing (BS-seq) with Ilumina and long reads with PacBio and Oxford Nanopore. We will cover all necessary steps to obtain methylation information from high throughput data to statistical analyses used to identify differentially methylated sites and regions. The data will be interpreted in terms of their biological importance in the field of ecology and evolution.

Should you have any questions, please feel free to contact us: info@physalia-courses.org

All the best,

Carlo

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Online FundamentalsOfBioinformatics Dec-6-8-10

Fundamentals of Bioinformatics Workshop

Hosted by:Data Analytics Core Contact Information:DataAnalyticsCore@groups.dartmouth.edu Location: Zoom link to be provided Workshop Goals:

- Develop a working understanding what Bioinformatic data analysis involves, how it is done, and what skills it requires - Gain an appreciation for how next-generation sequencing data is generated (NGS) and how the information generated is stored - Learn the major file-types used in bioinformatic data analysis and how to manipu-

late them - Learn how to install standard bioinformatic software usingConda - Understand the concepts of reference genomes and genome annotations and where to find them - Learn how to leverage theIntegrative Genomics Viewer (IGV)for exploring genomics data - Gain a working knowledge of basic programming in R and how it can be used for Bioinformatics - Learn how to leverage high performance computing systems (HPCs) to perform Bioinformatic data-analysis

Monday, December 6, 2021 Wednesday, December 8, 2021 Friday, December 10, 2021

All sessions are 12 - 5PM.

Registration Close Date: November 29, 2021 Registration Limit: 40 Workshop will not run with fewer than 25 participants

Application for registration can be foundhere.

Attendance will be capped at 40 participants; the workshop will not be held with fewer than 25 participants.

An in-person option will be available for this workshop given sufficient interest. In person attendees will be limited to the first 15 people who indicate interest.

Registration Fees are as follows:

CQB Lab Members : $0

CQB Mentor Lab Members : $60 for the first student and $50 for the second student from the same lab

Non-CQB Lab Members : $120 for the first student and $100 for the second student from the same lab

External Academic Attendees: $160 for the first student and $140 for the second student from the same lab

Non-Academic Attendees : $300

Workshop Contacts:

Shannon Soucy (Shannon.Soucy@Dartmouth.edu) Owen Wilkins (omw@Dartmouth.edu)

Shannon Margaret Soucy <Shannon.Margaret.Soucy@dartmouth.edu>

Online GeneralisedAdditiveModelsInR Feb14-18

Dear all,

registrations are now open for the Physalia course on "Generalised Additive Models in R", which will be held online in February (14th-18th).

Course website: (https://www.physalia-courses.org/-courses-workshops/gams-in-r/)

Instructor: Dr Gavin L. Simpson (Aarhus University, DK)

After completing this course, the participants will

1. Understand how GAMs work from a practical view point to learn relationships between covariates and response from the data 2. Be able to fit GAMs in R using the mgcv and brms packages 3. Know the differences between the types of splines and when to use them in your models 4. Know how to visualise fitted GAMs and to check the assumptions of the model

The course is aimed at at graduate students and researchers with limited statistical knowledge; ideally you'd know something about generalised linear models. But we'll recap what GLMs are so if you're a little rusty or not everything mentioned in the GLM course makes sense, we have you covered. Participants should be familiar with RStudio and have some fluency in programming R code, including being able to import, manipulate (e.g. modify variables) and visualise data. There will be a mix of lectures, in-class discussion, and hands-on practical exercises along the course.

Here you can find the full list of our courses and Workshops: (https://www.physalia-courses.org/courses-workshops/)

Should you have any questions, please feel free to contact us: info@physalia-courses.org

All the best,

Carlo

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"info@physalia-courses.org" <info@physalia-courses.org> "info@physalia-courses.org"

<info@physalia-courses.org>

Online GenomeAssemblyAnnotation Mar14-18

Dear all,

registrations are now open for the Physalia course on "Genome Assembly and Annotation": (https://www.physalia-courses.org/courses-workshops/course20/)

When: March, 14th-18th

This course will introduce biologists and bioinformaticians to the concepts of de novo assembly and annotation, providing a theoretical framework and practical examples. A variety of sequencing technologies and their applications to generate high-quality reference genomes will be presented and discussed. They include Illumina short reads (for both assembly and gene annotation), PacBio HiFi ('High Fidelity') and CLR ('Continous Long Read') reads, Oxford Nanopore long and ultra-long reads, as well as scaffolding technologies including optical mapping and proximity ligation (Hi-C). Special attention will be given to quality control throughout the assembly process (e.g. tools such as Genomescope, Merqury, Pretext) as well as to consensus and structural error mitigation. Annotation tools using Illumina RNA-Seq and Pacbio IsoSeq data will be introduced. By the end of the course the students will be able to understand what is needed to generate an annotated reference genome of high-quality.

Programme: (https://www.physalia-courses.org/courses-workshops/course20/curriculum-20/)

Should you have any questions, please feel free to contact us: info@physalia-courses.org

All the best,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

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Online GenomeAssembly Nov8-11

The University of Connecticut's Computational Biology Core within the Institute for Systems Genomics is offering a workshop on genome assembly.

The workshop will cover basic concepts and walk through the code for several strategies on a high performance computing cluster. The goal is to familiarize attendees with the steps necessary to sequence, assemble, and evaluate a genome.

All code required to complete the full analysis will be provided in a public github repository, and session recordings will be available to all participants after the workshop.

The workshop will take place over 4 days for 3-3.5 hours each day.

Dates: November 8-11 Time (ET): Day 1: 8:30am-12:00pm, Days 2-4 9.00am - 12.00pm Location: Online Cost: $350/$483USD for UConn affiliated/External attendees.

Workshop schedule: Day 1: Introduction to Linux/HPC Day 2: Introduction to k-mer plots, high throughput sequencing, quality control of sequence data, contaminant detection Day 3: Genome assembly strategies and short-read assembly Day 4: Long-read and hybrid assembly, post-processing, assembly benchmarking

Registration:

To register, please follow this link: https://forms.gle/nRUiBdmGoAuQUbfb8 Workshop FAQ:

Who should attend?

Anyone who wants to learn the fundamentals of genome assembly.

What are the prerequisites?

Prior bioinformatic experience is not required. We have dedicated the first day of the workshop to the basics of Linux and high performance computing.

What do I need?

You will need your own laptop to use, have a recent version of R, RStudio installed, and some other applications. We will send you details of software and installation instructions with your registration acknowledgement email.

Can I bring my own data?

We will provide experimental datasets for use during the workshop, as this helps to keep the workshop moving. There will be time, however, to discuss your own datasets and how you might work with them outside of the workshop.

How much does it cost?

The registration fee is $350/$483USD for UConn affiliated/External attendees.

How do I pay?

The fee is due at the time of registration. UConn affiliates can use KFS accounts. The only other means of payment we currently accept is credit card. Due to some complications we cannot accept international wire transfers at this time.

Where is the workshop?

It will be held on Blackboard-Collaborate platform, and will run from 9:00am to 12:00pm on the dates indicated.

How do I apply?

All registration is "first-come, first-served." There is no application process. Sign up as soon as possible to ensure your place in the workshop.

Questions?

If you have any questions, please don't hesitate to contact us at cbcsupport@uconn.edu

noah.reid@uconn.edu

SanDiego PAG-PopConservGenomics Jan8-12

Call for Abstracts-Deadline Extended Population and Conservation Genomics Workshop Plant and Animal Genome XXIX International Conference http://www.intlpag.org/ January 8-12, 2022, Town and Country Convention Centre, San Diego, California

The annual Population and Conservation Genomics workshop will be held at the Plant and Animal Genome XXIX International conference. The workshop is scheduled on Saturday, January 8, 2022 and Monday, January 10, 2022. You are invited to attend this Workshop and submit abstracts for oral presentations on any population and conservation genomics aspect of both plants and animals. The topics may include (but not limited to): population genomic diversity and structure; molecular evolution; landscape genomics; seascape genomics; natural selection and local adaptation; ecological and evolutionary genomics; population epigenomics; paleogeneomics; eDNA; bioinformatics in population and conservation genomics; population genomics of speciation; metapopulation genomics; application of genomics in breeding, forensics, biogeography, demography inferences, and conservation and management of genetic resources; genomic effects of domestication, management practices, fragmentation, bottlenecks, climate and environment change, and transgenic deployment; and gene conservation; etc.

The Workshop will have 2 sessions with a provision for 12 invited speakers. Most of the invited presentations will be selected from the submitted abstracts. Please send your abstract of no more than 250 words by e-mail to Om Rajora (Om.Rajora@unb.ca) as an attached Word file no later than October 31, 2021. You will be notified by November 5, 2021, whether your abstract has been selected for an oral presentation. Thereafter, the selected presenters will need to submit their abstract to the PAG website. Authors whose abstracts are not selected for oral presentations are highly encouraged to present a poster at the conference.

Inquiries and Abstract Submission

For information and questions regarding the Population and Conservation Genomics workshop, please contact Om Rajora at the following coordinates.

Dr. Om P. Rajora University of New Brunswick Fredericton, NB E3B 5A3, Canada. E-mail: Om.Rajora@unb.ca Tel: (506) 458-7477 Fax: (506) 453-3538

Om Rajora <om.rajora@unb.ca>

SanDiego PopConservGenomics Jan8-12

Call for Abstracts Population and Conservation Genomics Workshop Plant and Animal Genome XXIX International Conference http://www.intlpag.org/ January 8-12, 2022, Town and Country Convention Centre, San Diego, California

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Inquiries and Abstract Submission

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Dr. Om P. Rajora University of New Brunswick Fredericton, NB E3B 5A3, Canada. E-mail: Om.Rajora@unb.ca Tel: (506) 458-7477 Fax: (506) 453-3538

Om Rajora <om.rajora@unb.ca>

UGroningen LifeHistoryTheory Dec12-17

PhD course on Life History Theory, at the completely rebuild Field station the Herdershut, Schiermonnikoog, December 12-17 2021.

Life History Theory deals with species-specific adaptive schemes of the distribution of the reproductive effort over the life of an organism. The general theoretical problem is to predict which combination of traits will evolve under specific conditions. The concepts used are also relevant to study within species variation in life history traits. The one week course aims at giving an overview of the field and will discuss methodology and recent developments.

Contents & Structure

The subject will be worked out on the basis of lectures, case histories, discussion and literature. Attention will be paid to various groups of organisms such as birds, fishes, insects and plants. The contact with current research projects is guaranteed as concrete examples will be treated by scientists working in the field. In poster sessions work and/or plans of the participating students will be discussed with the whole group and we will use computers to illustrate some of the concepts.

Topics and Teachers will include but are not limited to:

Cost of reproduction, Optimality in evolutionary ecology, Aging in a life history context (Simon Verhulst, GELIFES)

Evolutionary genomics, Animal personalities (Kees van Oers, NIOO)

Life-history evolution in social insects (Ido Pen, GELIFES)

Age and size at maturity (Tom van Dooren, CNRS, France)

We are happy to announce that as before we will have two special guest lecturers. However, their names are at this moment not yet conclusive.

For more information on the preliminary programme and to register, please visit the course website https://www.rug.nl/research/ecology-and-evolution/-phdcourses/lifehistorytheory The course will be held on the Dutch isle of Schiermonnikoog and starts Sunday night the 12th of December and ends Friday the 17th of December 2021. The registration fee is euro 350,- for all participants belonging to the RSEE and affiliated research schools (PE&RC, WIMEK). All other participants pay euro 500,-. This includes lodging, meals, and the course material at the course venue.

For more information, visit the website or please contact the Course Organizers:

Prof. Simon Verhulst <s.verhulst@rug.nl> (Behavioural & Physiological Ecology, Groningen Institute for Evolutionary Life Sciences, University of Groningen)

Dr. Corine Eising <c.m.eising@rug.nl> (Research School Ecology & Evolution)

c.m.eising@rug.nl

Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from 'blackballed' addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notifcation of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that 'on vacation', etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail's your code can be temporarily changed to 000000.

To send messages to the EvolDir direct them to the email evoldir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as LaTeX files, Excel files, etc. ... plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category "Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:" and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formated) the message will be send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformating is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by LaTeX do not try to embed LaTeX or TeX in your message (or other formats) since my program will strip these from the message.