E v o l D i r

December 1, 2020

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

Montpellier DiseaseEvolution Jun11-14

Following the cancellation of the EEID 2020 due to the COVID-19 pandemic, the Montpellier meeting has been rescheduled to the 11-14 June 2021 .

Our preferred option is to maintain the spirit of previous EEID meetings, so we are doing our utmost to maintain an in-person event. The safety and well-being of all conference participants is our priority. The EEID 2021 organising committee will continue to monitor the COVID-19 pandemic as the situation evolves. The recent good news regarding vaccines are encouraging but it is difficult to forsee what will be feasible next spring. The final decision about whether the in-person meeting can take place will be made in early March 2021 . If our in-person gathering has to be cancelled the event will be converted into an online format.

Follow us on twitter @eeid2021, on our [https://www.facebook.com/Ecology-and-Evolution-of-Infectious-Diseases-Meeting-2021-106581460734837 | Facebook] account and on our new webpage: [https://www.eeidconference2021.org/]

We hope to see you in Montpellier in 2021. In the meantime, take care of yourselves and stay safe!

The EEID 2021 organising committee

Online EvoDevo Dec4

Dear EvolDir,

Join us on December 4th for the Stowers Research Conferences (SRC) Early Career Symposia: Evolutionary Developmental Biology II

WHAT: 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.

Evolutionary Developmental Biology speakers and sessions:

Session 1: Bauplan of Adaptation

-Paul Bump | Stanford University, Lowe Lab

-Anyi Mazo-Vargas | The George Washington University, Martin Lab

-Harold Suarez-Baron | University of Antioquia, Pabon-Mora Lab

Session 2: Neural Crest

-Megan Martik | California Institute of Technology, Bronner Lab

-Natasha Shylo | Stowers Institute for Medical Research, Trainor Lab

-Emily Maclary | The University of Utah, Shapiro Lab

Session 3: Selective Pressure

-Corine van der Weele | University of Maryland, Jeffery Lab

-Tarun Kumar | Harvard University, Extavour Lab

-Bob Zimmermann | University of Vienna, Technau Lab

WHEN: December 4, 2020 - 12:00pm-3:30pm US Central Time

WHERE: Online via Zoom Webinars

Registration is FREE: https://www.stowers.org/-conferences Registration Deadline: December 3, 2020

For updates and information please follow us on Twitter: @Stowers _SRC

Visit https://www.stowers.org/conferences to register and view the Program and Schedule.

Thank you! Nicolas Rohner and Blair Benham-Pyle, Symposium Host Matt Gibson, SRC Director

"Dreyer, Abby" <ADreyer@stowers.org>

Online EvolutionEcol Nov18

Dear EvolDir,

Join us for the next week of our popular online seminar series in Evolution and Ecology.

—

Wed 18 Nov

Dr. Jessica Abbott (Dept. of Biology, Lund University, Sweden)

"Understanding sex chromosomes using experimental evolution"

—

When: 5PM GMT / 9-10AM PST, Wednesdays.

Where: talks live-streamed to our YouTube channel https://www.youtube.com/channel/-UCMsYvoHLNVm4rbcTLj162zQ , post your questions for our speakers via Slack

Publicity: upcoming talks promoted on Slack & Twitter @EvoEcoSeminars (https://twitter.com/-EvoEcoSeminars How to join: our Slack 'Evolution and Ecology Seminars' here https://join.slack.com/-t/evolutionecol-xl54980/shared_invite/zt-ev4fe0io-M7B ~ D6p74blV_ZRcDtmAcg Please follow our Twitter feed and join the Slack group for details of future upcoming talks.

Hope that you can join us. Feel free to circulate to anyone who may be interested.

Many thanks,

Dr. Elizabeth Duxbury Dr. Andreas Sutter Dr. Iulia Darolti Dr. Wouter van der Bijl

Dr. Elizabeth Duxbury

Senior Postdoctoral Research Associate Prof. Alexei Maklakov Group School of Biological Sciences University of East Anglia Norwich Research Park UK

"Elizabeth Duxbury (BIO - Staff)" <E.Duxbury@uea.ac.uk>

Online EvolutionEcol Nov25

Dear EvolDir,

Join us for the next week of our popular online seminar series in Evolution and Ecology.

—

Wed 25 Nov

Professor Dame Caroline Dean (John Innes Centre, Norwich, UK)

"Adapting to different winters: non-coding transcripts and epigenetic switches at FLC"

—

When: 5PM GMT / 9-10AM PST, Wednesdays.

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"E.Duxbury@uea.ac.uk" <E.Duxbury@uea.ac.uk>

Online EvolutionEcol Nov4

Dear EvolDir,

Join us for the next week of our popular online seminar series in Evolution and Ecology.

—

Wed 4 Nov

Dr. Lutz Fromhage (Dept. of Biological & Environmental Science, University of Jyväskylä, Finland)

"The meaning of life- biologically speaking"

—

When: 5PM GMT / 9-10AM PST, Wednesdays.

Where: talks live-streamed to our YouTube channel https://www.youtube.com/channel/-UCMsYvoHLNVm4rbcTLj162zQ , post your questions for our speakers via Slack

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"E.Duxbury@uea.ac.uk" <E.Duxbury@uea.ac.uk>

Online EvolutionEcology Nov11

Dear EvolDir,

Join us for the next week of our popular online seminar series in Evolution and Ecology.

—

Wed 11 Nov

Prof. Hopi Hoekstra (Dept. of Organismic & Evolutionary Biology, Harvard University, USA)

"A tale of tails: genetic and developmental basis of adaptation"

—

When: 5PM GMT / 9-10AM PST, Wednesdays.

Where: talks live-streamed to our YouTube channel https://www.youtube.com/channel/-UCMsYvoHLNVm4rbcTLj162zQ , post your questions for our speakers via Slack

Publicity: upcoming talks promoted on Slack & Twitter @EvoEcoSeminars (https://twitter.com/-EvoEcoSeminars How to join: our Slack 'Evolution and Ecology Seminars' here https://join.slack.com/-t/evolutionecol-xl54980/shared_invite/zt-ev4fe0io-M7B ~ D6p74blV_ZRcDtmAcg Please follow our Twitter feed and join the Slack group for details of future upcoming talks.

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University of East Anglia

Norwich Research Park

UK

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Online HonourProfJohnAWoolliams Jan28

Dear colleagues,

Professor John A. Woolliams is retiring after 43 years of a distinguished career at various incarnations of today's Roslin Institute. Over this period, John has been a recognised international leader in the science of quantitative genetics and its application to animal breeding. He has made significant contributions in several key areas, including the development of the quantitative genetic theory that underlies key principles of modern breeding programs; applied research to solve practical problems in breeding programs of livestock, companion animals and conifers; and notably, the training and mentoring of numerous students and scientists, many of whom are now leaders in the field. Lastly, he has always been a true gentleman, patient and compassionate colleague and mentor, yet carefully direct when needed.

It is a shame that the pandemic is preventing us from celebrating John's career in person. Instead, we are organising an online symposium to honour John's contributions to quantitative genetics and animal breeding. This event will take place on the 28th of January 2021 (10:30 - 16:30). You can view the programme and a more detailed summary of John's key contributions as well as register for the symposium at

https://www.eventbrite.co.uk/e/symposium-in-honour-of-professor-john-a-woolliams-tickets-129488510621
I believe many of you will want to wish John much enjoyment in this next phase of his illustrious career. You can reach him at john.woolliams@roslin.ed.ac.uk

On behalf of the organising committee.

With regards!

University of Edinburgh Gregor Gorjanc, PhD Roslin Institute Chancellor's fellow in Easter Bush Data Driven Innovation for AgriTech Midlothian twitter: @GregorGorjanc EH25 9RG mail: gregor.gorjanc <at> roslin.ed.ac.uk Scotland, UK

gregor.gorjanc@gmail.com

Online MarineEvolution Nov23-25 DeadlineExtension

Dear colleagues,

We would like to inform you that the registration deadline for the First Italian Congress on Marine Evolution, EVOLMAR2020 has been extended to November 15th. The conference is organized by the Zoological Station Anton Dohrn, Naples (SZN) and the Italian Society for Evolutionary Biology (SIBE-ISEB), and will take place in an entirely virtual format on the 23rd-25th of November 2020.

The meeting will feature a combination of invited keynotes, contributed talks and posters around 4 thematic areas: macroevolution, populations and species, adaptation, biodiversity.

We received 92 contributions from scientists in 18 different countries, and so far over 230 people have registered to attend the event. While abstract submission is now closed, due to the much greater interest in the conference than we were originally expecting we have decided to keep the registration open for one more week.

Presentations will be in English and conference participation is open to all. Thanks to the support of many dedicated sponsors, we have been able to keep the registration fee to a minimum (only 10 euros).

Additional information is available on the conference website (https://www.evolmar.it/); on the Twitter (https://twitter.com/evolmar2020), Facebook (https://www.facebook.com/EVOLMAR2020) and Instagram (https://www.instagram.com/evolmar2020/) accounts; or by contacting the congress secretariat: congress[at]evolmar.it

The final conference program, including abstracts, can be accessed at: https://easychair.org/smart-program/-EVOLMAR2020/ The EvolMar2020 Organizing Committee

Francesco Santini <francesco.santini@alumni.utoronto.ca>

Online MICPhylogenomics Feb15-17

Dear EvolDir Community,

We are pleased to announce that the **Mathematical, Inferential, and Computational Phylogenomics** (MIC-Phy) workshop will take place online from 15th to 17th February 2021.

The MIC-Phy workshop intends to stimulate a broader discussion on novel phylogenomic models, focusing on the computational and statistical aspects of using large and heterogeneous sequences to build species trees and perform inference. We welcome submissions on recent advances in phylogenetic method development (both theoretical and computational), as well as key insights into new or old data gained using novel methods.

Keynote speakers:

* Ziheng Yang (University College of London, UK)

* Tracy Heath (Iowa State University of Science and Technology, USA)

We will hold small computer tutorials entitled **New approaches to phylogenetic inference**. The main focus will be polymorphism-aware phylogenetic models and software sessions in RevBayes and IQ-TREE.

MIC-Phy is supported by the WWTF and VetMedUni Vienna, and there is no registration fee! You can find more information about the workshop at https://-mrborges23.github.io/micphy2021/ . Important dates:

* 15th January 2021: Deadline for workshop registration and abstract submission

* 1st February 2021: Notification of oral/poster presentation and workshop acceptance

* 9th February 2021: Registration and poster submission deadline

Best wishes,

Rui Borges and Carolin Kosiol

(On behalf of the organizing committee)

ruiborges23@gmail.com

Online SMBE 2021 SolicitationCallForHubs

SMBEv 2021

A Virtual Meeting to Beat All Virtual Meetings

We are in the first stages of developing our plan for our society'Âs annual meeting. We decided earlier in the year that the meeting this summer will be virtual (Auckland is postponed until 2022). Today, we are asking our membership for volunteers to help organize and deliver SMBE'Âs first (but probably not last) virtual meeting.

This is your opportunity to help shape not only this year'Âs meeting, but future inclusive, distributed, and carbon-friendly society meetings!

What will the virtual conference look like?

Our 2021 meeting will take advantage of a Hub model, which will allow us to reach and engage our global community. We will have THREE geographically distributed Hubs, one in Australia/Asia, one in Europe/Africa, and one in US/Canada/SouthAmerica. Each Hub will coordinate roughly ÂĂ of the Symposia (which will be solicited as normal), which will distribute the timing of the symposia themselves across time zones and encourage as much synchronous participation as possible.

I want to help organize SMBEv2021! What role can I play?

There are lots of ways for you to get involved! You can volunteer to be a Hub Coordinator, a member of a Hub Team, a Symposium Coordinator, or to help during the conference to ensure that symposia, Q&A, and poster sessions run smoothly.

We are now inviting proposals for Hub Coordinators and Hub Teams. (Deadline 15 December 2021)

Hub Coordinators and Hub teams will take on a role similar to the local conference organising committee of in-person meetings, but without the hassle of booking local venues! Hub teams will:

-

Collaborate with each other and with liaisons from the SMBE council for decision-making as to online platforms and other logistical aspects (e.g. timing of symposia and plenary talks, planning "social" events) of SMBEv2021

-

Collaborate to solicit symposia and distribute these among Hubs -

Deliver ÂÃ of the conference, including ensuring that symposia within that Hub run smoothly, that members behave with respect and decency, and that they, along with all symposia organisers within their Hub, are trained appropriately to manage any aberrant behaviours. -

Hub Coordinators will also be members of the scientific committee that, together with Beth Shapiro, Mary O'ÂConnell, Harmit Malik (representing SMBE Council) will select the symposia, with an aim to ensure (1) quality of the symposia and (2) diversity of symposia that represent our community'Âs broad demographics and scientific interests.

Note that Hub Coordinators and Team Members cannot also propose to organize symposia, as they will be in charge of selecting the symposia that will be featured at SMBEv2021. However, teams that are not chosen to be HUB coordinators will be strongly encouraged to participate as symposium organizers!

Symposium organisers will lead the submission of symposium proposals. Selected symposia will be assigned to a hub, which will determine the timing of the symposium during the conference. Symposium leaders will have all the usual responsibilities of a symposium organiser, but without a budget. In addition, they will:

-

make sure that all talks are received ahead of time, functioning on YouTube, and accessible -

be responsible for ensuring quality of talks and that timing is kept precisely -

moderate discussions online for both the talks and associated poster session

We are hoping that the call for symposia will be released in early February.

I want to be a Hub Coordinator or Hub Team Member. How do I apply for this awesome role?

We are currently soliciting proposals for Hubs! If you would like to be part of a hub, please:

-

Identify a Hub Coordinator and 3-5 Hub Team members who will work together within your geographic region. -

Check your calendars! While we don'Ât anticipate that this will be even close to the amount of work that it takes to organize an in-person meeting, there will be some busy times. We will need to set aside time in January/February for selecting symposia, and in March/April to select talks and posters And the conference will be held 4-8 July 2021! -

Work with the Hub Coordinator to answer the six questions below, and submit these (along with any supporting information) to smbe.contact@gmail.com

PLEASE SEND IN YOUR APPLICATIONS BY DECEMBER 15, 2020. If you have any questions, please reach out to us at smbe.contact@gmail.com

QUESTIONS FOR HUB TEAMS

1. Please provide your name and contact details.

2. Where in the world are you based, and what time zones are you comfortable working in?

3. What previous experience do you have organizing meetings or workshops? Please describe one or more challenges that you experienced, and how you overcame these challenges.

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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

Virtual ULiverpool PopGroup54 Jan4-6

Dear all:

The 54th Population Genetics Group Meeting of the Genetics Society UK will be held virtually, hosted by the University of Liverpool, from January 4th-6th, 2021.

Plenary and prize talks will include:

Graham Coop, University of California Davis Vera Gorbunova, University of Rochester, NY Edze Westra, University of Exeter, Penryn UK Mariana Wolfner, Cornell University, NY Gonçalo Faria, Institute for Advanced Study in Toulouse, France, John Turner celebrating the 100th birthday of Philip Sheppard

You can find information and updates on our website: http://www.populationgeneticsgroup.org.uk/ and by following us on twitter: https://twitter.com/popgroup Register to attend and give a talk here: http://-www.populationgeneticsgroup.org.uk/registration/ The deadline for abstract submissions is December 7th– or earlier if there are too many submissions, as selection is

on the basis of first come, first served. Please submit early to avoid disappointment.

And, while there is a modest fee of 50, we'd like to include those with limited conference funds as well. If the fee is a barrier, please email popgroup54@gmail.com and we'll sort it out.

Hope to see you there!

The Liverpool PopGroup54 organising committ

A.Betancourt@liverpool.ac.uk

GradStudentPositions

Barcelona EvoDevo

Title: Exploring the evolution of vertebrate early development using single-cell genomics

The role We are seeking a highly motivated candidate to join our teams to work on an interdisciplinary project (experimental and computational) involving single-cell genomics and chromatin profiling in different chordate species. The research program for this position focuses on elucidating the origin and evolution of the regulatory programs controlling vertebrate morphogenesis and cell differentiation. To this end, you will apply and analyse advanced functional genomics to characterize cell types and regulatory genome features in vertebrate and non-vertebrate chordate species. Specifically, this involves: (i) scRNAseq to define cell type-specific gene expression across multiple developmental stages, and (ii) bulk ChIP-seq and ATAC-seq to map chromatin states and regulatory element usage. The candidate will spearhead the analysis, integration, and interpretation of these comparative omics datasets.

This is a strongly collaborative project and, as such, it will involve visits to laboratories in different countries. Our laboratories have state-of-the-art single-cell infrastructure and the candidate will be trained in computational analysis of single-cell and chromatin data, as well as in advanced comparative genomics and phylogenetics (synteny, sequence composition, gene family evolution, etc.). Furthermore, it will be possible to receive training and have regular access to a droplet-based single-cell platform (Indrops, 10x), as well as our liquid-handling robot.

The candidate will be part of a highly interdisciplinary, international and dynamic team composed by the Sebe-Pedros and Irimia groups, which include developmental, computational, evolutionary and molecular biologists.

About the teams Our groups study genome regulation from an evolutionary systems perspective. In particular, we are interested in deciphering the evolution of animal cell type developmental programs and the regulatory mechanisms underlying these programs. To this end, we apply advanced single-cell genomics and chromatin experimental methods to molecularly dissect cell types and epigenomic landscapes in phylogenetically diverse organisms. We also develop computational tools to integrate these diverse data sources into models of cell type gene regulatory networks and we use phylogenetic methods to comparatively analyze these models. Our recent work has provided the first whole-organism cell type atlases in different species and mapped key regulatory features underlying both development and cell diversity in non-model invertebrate organisms and the origin of vertebrates (see "Relevant Publications" below). By analysing the development of chordate species at single-cell resolution, we now aim at dissecting the evolution of vertebrate cellular ontogenies and their underlying gene regulatory networks.

For further information you can directly email the PIs of the groups: arnau.sebe@crg.eu, manuel.irimia@crg.eu

Previous experience

Must have:

§Experience in computational biology, in particular genomics and transcriptomics data analysis.

§Experience working in Unix/Linux environments.

§Experience in R statistical language.

Desirable:

§Hands-on experience in basic molecular biology.

§Hands-on experience in basic genomics workflows (e.g. library preparation).

§Experience in chromatin experimental methods (e.g. ChIP-seq, ATAC).

Education and trainng:

§Master degree in Biology, Bioinformatics or similar

Competences

§Highly developed organization and coordination skills.

§Creativity and intellectual independence.

§Dedication, motivation, and rigor in scientific pursuits.

§Capacity to work as part of a collaborative team.

Arnau Sebe Pedros <arnau.sebe@crg.eu>

ConcordiaU 2 EvolutionaryTradeoffs

One has a phylogenetic component and the other one relates to ecological and evolutionary tradeoffs.

MSc/PhD position on the phylogenetic scaling of specialization https://drive.google.com/file/d/-1LlVlYGv2kad0oD40VVygoSye7WLaOpYc/view?usp=-sharing PhD on the scaling of functional trade-offs and biodiversity maintenance https://drive.google.com/-file/d/1zKH7KoL8TemCjms6ocp9tfgW6gYTIOdx/view

Thanks a lot,

JP

Jean-Philippe Lessard

Associate Professor and ConcordiaResearch Chair Department of Biology Concordia University Montreal, QC, H4B-1R6

Email:jp.lessard@concordia.ca Website:www.jeanphilippelessard.com Jean-Philippe Lessard <jp.lessard@concordia.ca>

DurhamU SkinMicrobiomeEvolution

Dear EvolDir

We have a NERC doctoral training partnership studentship available on the role of the skin microbiome inprimate communication and we're keen to recruit a good candidate. We'd be very grateful if you could advertise this:

The project combines microbial and behavioural ecology to examine key questions in animal behaviour, including how animals recognise kin, how theyidentify potential mates, and the costs and benefits of sociality. The full details arehere, with links to the wider competition:https://www.iapetus2.ac.uk/-studentships/mandrills-and-microbes-the-role-of-the-skin-microbiome-in-primate-communication/ I'm very happy to discuss the project and how to apply with potential candidates.

Best wishes Jo

Prof Joanna (Jo) M Setchell (she/her) Department of Anthropology,Durham University, UK

Behaviour, Ecology and Evolution Research (BEER) at Durham President,Primate Society of Great Britain

Editor-in-Chief,InternationalJournal ofPrimatology

New book:Studying Primates: How to Design, Conduct and Report Primatological Research

"SETCHELL, JO M." <joanna.setchell@durham.ac.uk>

Edinburgh InsectEvolutionSexdetermination

Dear all,

I am looking for enthusiastic evolutionary/molecular biologists or entomologists for a 4-year PhD position in my lab http://lauraross.bio.ed.ac.uk at the Institute of Evolutionary Biology, University of Edinburgh. I advertise three possible project (see below). There are funding options for both UK and international students. If you are interested please contact me directly (laura.ross@ed.ac.uk) to discuss. Deadline 6th of January, but please contact me as soon as possible if interested!

1) Sexual conflict in a fly with unusual sexdetermination In organisms with separate sexes, sex determination is among the most important early developmental processes for fitness. Despite its importance, in many groups of organisms sex determination is remarkably dynamic, with the specific gene, chromosomal location, and parent of origin of the sex determining gene showing rapid turnover. This dynamism has been proposed to reflect conflict between genes and between parents.

A clear case of conflict occurs in a group of small flies, which exhibit so-called paternal genome elimination, in which males eliminate the genome they inherit from their fathers. This system puts extremely strong selection on fathers to produce daughters, since sons do not transmit their genes. Theory predicts adaptation in both sex determination mechanism in behavior. Consistent with molecular adaptation, frequent transitions in sex determination mechanism, with different chromosomes determining sex in different species and some species even exhibiting maternal sex determination, in which some mothers have only sons, others only daughters. Behavioral adaptation is expected since males are expected to evolve to prefer to mate with mothers more likely to bear daughters, particularly in the case of maternal sex determination.

The project involves, bioinformatic, behavioral and theoretical studies of this group to understand the causes and consequences of maternal sex determination and paternal genome elimination. At the bioinformatic level, bioinformatic analyses of genomes and transcriptomes of related species will illucidate the population-genetic processes driving sex determination evolution. At the behavioral level, studies of mating behavior will probe

adaptations to maternal sex determination. At the theoretical level, there are opportunities to develop new models to generate predictions to regarding the origins and consequences of maternal sex determination and paternal genome elimination.

This project will be co-supervised by Scott Roy (San Francisco State University and there will be opportunities for the candidate to visit his lab.) https://www.findaphd.com/phds/project/sexual-conflict-in-a-fly-with-unusual-sex-determination/?p126016 2) Sex, males, and hermaphrodites in the scale insect Icerya purchasi

Organisms reproduce in diverse ways. Yet it is unclear why and how new reproductive strategies evolve. This project focuses on the only case of hermaphroditism in insects: In species of the scale insect Icerya female-like hermaphrodites produce both sperm and eggs and self-fertilize.

Understanding why there is such variability in the way organisms reproduce is one the most important unsolved puzzles in evolutionary biology. This project aims to tackle this question by focusing on the unique and puzzling reproductive strategy of the scale insect Icerya purchasi. This species is the only insect unequivocally described as hermaphroditic; female-like hermaphrodites can produce both sperm and eggs and self-fertilize. But how can a female produce sperm? A recent hypothesis suggests that the sperm present in hermaphrodites seem to have originated from the individuals father "infecting" his future offspring with sperm-producing cells. However, although the data is suggestive, this hypothesis requires further scrutiny. It is also unclear why, while most offspring develop as hermaphrodites, a small number develop as males. Finally, it seems that while hermaphroditism is exceedingly rare in insects, it might have evolved independently in several close relatives of Icerya. This PhD project will explore how and why this unusual reproductive system evolved by using comparative methods across species as well as experimental and genomic analyses in the laboratory. Together this work will help us to better understand what evolutionary forces shape the ways animals reproduce.

The projects sets out to test a number of key questions to better understand the evolution of the only insect hermaphrodite: 1. What is the evolutionary and developmental origin of the sperm produced by female-like hermaphrodites? 2. Hermaphrodites can self-fertilize, so why and how do they occasionally produce male offspring? 3. How frequently did hermaphroditism evolved within the clade of

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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

GeorgeMasonU ReptileLongevity

An NSF-funded PhD position is available to start in Fall 2021 at George Mason University in Fairfax, Virginia. We are seeking a highly motivated prospective graduate student to investigate the molecular and cellular basis of longevity in reptiles. The project will use comparative genomics and gene editing to discover new genes or pathways that contribute to the incredible diversity in reptile lifespans.

The selected student will work jointly in the labs of Dr. Scott Glaberman (Dept. of Environmental Science and Policy; www.scottglaberman.com) and Dr. Ylenia Chiari (Dept. of Biology; www.yleniachiari.it). The Glaberman Lab uses evolutionary approaches to study the physiological diversity of animals and their response to environmental change. The Chiari Lab uses integrative approaches from molecular biology to behavior to computational modeling to study the causes and consequences of morphological variation in reptiles. This project is also in collaboration with Dr. Vincent Lynch (University at Buffalo).

Successful candidates will have some previous research experience and a strong interest in evolution and molecular biology. Candidates interested in longevity, cancer, and molecular evolution are encouraged to apply. Some background or experience in molecular laboratory techniques and/or bioinformatics is encouraged, but not required.

Full support will be provided for the first two years, support during the following years can be provided through a teaching assistantship. However, the successful candidate will be expected to apply for graduate fellowships during his/her PhD.

Prospective students should send a short description of their research interests and past research experience along with a resume or CV (including the names of three people who could serve as a reference on your behalf) to sglaberm@gmu.eduandychiari@gmu.edu. Selection of candidates will begin immediately, but letters of interest should be submitted no later than December 6, 2020.

The deadline for admission to the PhD program is January 1, 2021 https://catalog.gmu.edu/colleges-

schools/science/systems-biology/biosciences-phd/ Ylenia Chiari|Assistant Professor

a:George Mason University, Department of Biology|SciTech Campus, 10900 University Blvd., Colgan Hall 407|Manassas, VA 20110 e:ychiari@gmu.edu|w:www.yleniachiari.it p:(703) 993-4467

Ylenia Chiari <ychiari@gmu.edu>

GeorgeMasonU SeaTurtleConservation

M.S. Position in sea turtle conservation genetics at George Mason University

A Master's position is available to start in Fall 2021 in the lab of Dr. Ylenia Chiari at George Mason University in Fairfax, Virginia. We are seeking a highly motivated prospective graduate student to carry out a project on sea turtle conservation genetics.

The Chiari Lab (www.yleniachiari.it) uses integrative approaches from molecular biology to behavior to computational modeling to study the causes and consequences of morphological variation in reptiles. This project is also in collaboration with Dr. Scott Glaberman (George Mason University), Dr. Margaret Lamont (USGS), and Dr. Miguel Angel Reyes Lopez (Instituto Politécnico Nacional, Mexico).

Successful candidates will have a strong interest in conservation genetics and evolutionary biology. Some background or experience in molecular laboratory techniques is encouraged, but not required. The Chiari Lab is committed to promoting and supporting diversity and a multicultural environment and we encourage underrepresented students to apply.

Full support can be provided through a teaching assistantship. However, the successful candidate is also encouraged to apply for graduate fellowships.

Prospective students should send a short description of their research interests and past research experience along with a resume or CV (including the names of three people who could serve as a reference on your behalf) to Dr. Ylenia Chiari ychiari@gmu.edu . Selection of candidates will begin immediately, but letters of interest should be submitted no later than December 20th, 2020.

The deadline for admission to the MS program in Biology is March, 2021, although an earlier application is encouraged

https://admissions.gmu.edu/grad/application-deadlines-and-requirements/?academicUnit=SC Information about the program can be found here:

https://catalog.gmu.edu/colleges-schools/science/-systems-biology/biology-ms/#text Ylenia Chiari|Assistant Professor

a:George Mason University, Department of Biology|SciTech Campus, 10900 University Blvd., Colgan Hall 407|Manassas, VA 20110 e:ychiari@gmu.edu|w:www.yleniachiari.it p:(703) 993-4467

Ylenia Chiari <ychiari@gmu.edu>

GeorgiaTech Evolution

PhD positions studying social behavior, genetics, and living-systems physics

The Goodisman Lab at the School of Biological Sciences at Georgia Tech seeks PhD students interested in studying questions at the intersection of social behavior, evolution, epigenetics, and living-systems physics. The students would study the causes and consequences of the built environment on social behavior. The built environment, constructed by collectives of individuals, has been fundamentally important to the success of biological societies. This research program investigates the link between cognition, social behavior, and the built environment in insect societies.

This is a collaborative investigation which combines expertise in genetics, insect behavior, granular media physics, epigenetics, and the dynamics of collective actions. Students would work jointly in the labs of Michael Goodisman (https://www.goodismanlab.biology.gatech.edu/), Soojin Yi (https://yilab.gatech.edu/), and Dan Goldman (https://crablab.gatech.edu/). The research program is interdisciplinary. Students will be encouraged to develop an independent dissertation direction that aligns with general research programs in the labs.

Interested students are encouraged to contact Dr. Goodisman at mg225@gatech.edu. Students with interest in any or all of the core disciplines are welcome to apply to the PhD programs in Quantitative Biosciences (https://qbios.gatech.edu/) or Biology (https://biosciences.gatech.edu/graduate/-

prospective-students) at Georgia Tech. Application deadline is December 15, 2020.

Michael A D Goodisman

Associate Professor, Associate Chair for Undergraduate Education School of Biological Sciences, Georgia Tech Cherry Emerson Bldg A124, 310 Ferst Drive Atlanta, GA 30332-0230, United States Email: michael.goodisman@biology.gatech.edu Lab webpage: http://www.goodismanlab.biology.gatech.edu/ "michael.goodisman@biology.gatech.edu"

HarperAdamsU CoffeeBiodiversity

Four year BBSRC funded UK based PhD studentship to study the "Drivers of chemical diversity, niche-partitioning and insect resistance in cultivated and wild species of Coffee".

Coffee is an important commodity crop with an origin in the wet tropics of Africa and is attacked by a range of herbivorous insects throughout both its native and introduced range. Our project seeks to understand population level variation in chemical defences and resistance to insects in several of the hundred plus wild relatives of commercial species. We will focus on East African species.

More details on the wider PhD programme and specific project can be found here:

https://warwick.ac.uk/fac/cross_fac/mibtp/pgstudy/-phd_opportunities/plantandcrop2020/coffee Come and join a friendly and dynamic department based in the glorious Shropshire countryside, and work alongside a great set of international collaborators.

Contact Dr Simon Segar (ssegar@harper-adams.ac.uk) for more details.

Simon Segar <simon.t.segar@gmail.com>

ISTAustria EvolutionaryBiology

The Graduate School at IST Austria invites applicants from all countries to its PhD program. The program covers a wide range of fields, with a strong component from evolutionary biology. Current faculty include Nick Barton (evolutionary theory/hybrid zones), Sylvia Cremer (disease in social insects), Fyodor Kondrashov (experimental evolution/evolutionary genomics), Calin Guet (bacterial genetics), Matthew Robinson (human genomics) and Beatriz Vicoso (sex-chromosome evolution). For details, see https://phd.pages.ist.ac.at/ The PhD program includes a first year of cross-disciplinary coursework and rotations, followed by 3-4 years of research. The language of the Graduate School is English. IST Austria offers internationally competitive PhD salaries. Applicants must hold either a Bachelor's or a Master's degree, or equivalent.

On December 3rd, there is an on-line Open Day: see https://phd.pages.ist.ac.at/student-open-day For students wishing to enter the program in the fall of 2021, the deadline for application is January 8, 2021.

Nick Barton www.ist-austria.ac.at Nick BARTON <nick.barton@ist.ac.at>

KansasStateU PlantGenomics

Graduate Student Opportunities in Plant Ecological Genomics

The Johnson Lab in Plant Ecological Genomics (lorettajohnsonlab.weebly.com) in the Division of Biology at Kansas State University is recruiting graduate students for summer 2021 for funded projects on 1) plant host-ecotype and soil microbiome co-adaptation and 2) physiological and genetic response to drought in an ecologically dominant Great Plains grass. The successful applicants will have an opportunity to join collaborative teams with interests in the soil microbiome, population genomics and transcriptomics of plant physiological response to drought, and bioinformatics. Research will benefit from long term reciprocal gardens of grass ecotypes cross-transplanted across the Great Plains rainfall gradient and experimental manipulation of rainfall. The successful applicants will benefit from interaction within a wider group of ecologists, evolutionary biologists, geneticists, and bioinformaticists as well as taking advantage of outstanding genomics facilities. Details about current and new research at lorettajohnsonlab.weebly.com. Please send inquiries to Loretta Johnson at johnson@ksu.edu. Interested applicants should submit a cover letter describing interest, relevant experience, and career goals and a CV. Application deadline to the Division of Biology is Dec 15. GRE scores not required. These positions offer competitive salary, ben-

efits, and tuition. These positions are located in the Division of Biology at Kansas State University in Manhattan, KS, a vibrant university town in the heart of the Flints Hills tall grass prairie.

Loretta Johnson Professor Director,Ecological Genomics Institute http://ecogen.ksu.edu/ Division of Biology

Kansas State University Manhattan KS 66506-4901 Lab website:lorettajohnsonlab.weebly.com Skype: Loretta.Johnson.2011 Office Phone: 785-532-6921

Loretta Johnson <johnson@ksu.edu>

LehighU EvolutionaryBiology

Lehigh University's PhD program in Biology is accepting applications for the 2021-2022 academic year! We offer a research-oriented program, with concentrations in Biochemistry, Cell & Molecular Biology, Neuroscience, and Evolution & Behavior. Students are funded through research assistantships, teaching assistantships, and fellowships. See < https://www.lehigh.edu/~inbios/Grad/-Grad_General.html> for more information.

Research areas for faculty serving the Evolution & Behavior concentration include: Behavioral and Evolutionary Ecology Comparative Genomics Evolution and Development Experimental Evolution Genome Evolution Molecular Ecology and Genetics

To find out more, attend our virtual Graduate Open House on MONDAY, NOVEMBER 23, 2:00-3:30 PM EST! Attendees receive a $75 APPLICATION FEE WAIVER!

For more information and to register for the open house, visit: < https://www.lehigh.edu/~inbios/Grad/-Grad_OpenHouse2020.html> – Amber M. Rice, Ph.D. (Pronouns: she, her, hers)

Associate Professor Co-Director of Graduate Program

Department of Biological Sciences Lehigh University 111 Research Drive, B217 Bethlehem, PA 18015 USA

Lab website: https://wordpress.lehigh.edu/amr511/ Follow us on Twitter: @amberricelab

"amr511@lehigh.edu" <amr511@lehigh.edu>

McMasterU EvolSexualDifferentiation

Graduate positions: Evolutionary Genetics of Sexual Differentiation in Amphibians:

We are actively recruiting graduate students that are interested in studying sex determination in amphibians to start in the Fall of 2021. We hope to better understand genetic mechanisms of sex determination in African clawed frogs (Xenopus), including what genes trigger sexual differentiation, why these genes evolve rapidly and vary among species, and how these genes influence evolution of sex chromosomes and sex-related genetic pathways. A major effort in the lab is to use bioinformatics and gene editing to test function of putative genetic triggers for sex determination. In this way, our work aims to better understand "how important things evolve". For additional information on our research, please check out some of our recent papers: https:/-/benevanslab.wordpress.com/publications/ Qualifications:

Applicants should hold a bachelor's degree in science, math, or computer science before the fall of 2021. Applicants with a M.Sc. degree are generally eligible for entrance into our Ph.D. program.

Funding:

Financial support is provided through a combination of teaching assistantships and existing research funds from the Evans lab. Canadian citizens and permanent residents are eligible to apply for provincial (Ontario Graduate Scholarships) and federal funds (Natural Science and Engineering Research Council of Canada), and encouraged to do so. Other opportunities are available as well for international students (e.g., Vanier Award)

Environment and Diversity:

The Biology Department at McMaster University is a wonderful intellectual environment with strengths in Evolutionary Genetics, Bioinformatics, and Computational Biology. We have an excellent graduate program in the Biology Department with ~100 students. The Evans lab holds joint lab meetings with the Golding lab, and we interact extensively with several other groups (Dworkin, Bolker, Quinn, Dushoff, Poinar, Wilson). Geographically, we are situated within a network of vibrant urban centres (Hamilton, Toronto) and we have easy access by foot or bike to green spaces (Cootes Paradise,

Dundas Valley Conservation Area, and the Niagara Escarpment with dozens of waterfalls) and a modest commute to some of Canada's most iconic wonders (Bruce Peninsula, Niagara Falls).

The strengths of our graduate program stem from its diverse focuses, approaches, and people. The Evans lab is very strongly committed to equity, diversity, and inclusion in the workplace. We foster a work environment where everyone is treated with fairness and respect.

To apply:

Interested candidates should please email Ben Evans (evansbenj@gmail.com). Please include "Graduate Work" in the subject line, a brief description of your research interests, a description of your experience (if any) with R, python, perl, or other computer languages, bioinformatics, and/or lab work, a curriculum vitae, and names and email addresses of 2-3 references.

– Ben Evans Biology Department McMaster University Life Sciences Building room 328 1280 Main Street West Hamilton, Ontario L8S4K1 Canada phone (office/lab) : 905-525-9140 x 26973 <905-525-9140;26973>/27261 fax: 905-522-6066 Lab Website: http://benevanslab.wordpress.com/ Ben Evans <evansbenj@gmail.com>

MEME UGroningen EvolutionaryBiology

MEME Application Cohort 2021 open

Please alert your students to this great opportunity!

MEME (Erasmus Mundus Master in Evolutionary Biology) is a two-year research oriented master program for talented and motivated students who are interested in understanding evolution in all its facets. It intends to provide an optimal preparation for subsequent doctoral studies and eventually a career in academic research.

The MEME program addresses the driving forces of evolution at all levels of organismal organization (from cells and individuals to populations and ecosystems), and allows students to study all kinds of organisms (microorganisms, plants, animals) in all kinds of habitats (marine as well as terrestrial) with a diversity of approaches (field, lab, theory). The focus of the program is not only on how evolution shaped life on our planet in the past, but also on how understanding the principles underlying evolution can provide new insights and help to cope with present-day challenges in a variety of fields, including ecology, epidemiology, physiology, immunology, genetics/genomics, bioinformatics, economics and the social sciences.

To offer a program of such broad scope, four European universities (University of Groningen, Netherlands; University of Montpellier, France; Ludwig Maximilians University of Munich, Germany; Uppsala University, Sweden), have joined forces with Harvard University (USA) and the University of Lausanne (Switzerland) as associate partners. Together, this consortium has put together an attractive multidisciplinary program that meets the highest standards. All students have to study at (at least) two partner universities, and they will receive a double degree from two partner universities they have attended.

A limited number of EMJMD scholarships are available for the highest ranked students. Details on the program and the selection procedure can be found on www.evobio.eu . Starting date: 1 September 2021 Application deadline: 15 January 2021

Questions about the contents of the program: Leo Beukeboom (l.w.beukeboom@rug.nl)

Questions about the requirements and the application procedure: Femke Schouten (f.a.schouten@rug.nl)

Femke Schouten MEME Administrative coordinator Groningen Institute for Evolutionary Life Sciences (GELIFES) University of Groningen Linnaeusborg, Nijenborgh 7, room 05-08 Phone +31 50 363 8462 Working days: Wednesday to Friday 9.00 - 17.00 hr

"Schouten, F.A." <f.a.schouten@rug.nl>

MichiganStateU FishEvoDevoGeno

PhD Positions in Fish Evolutionary Developmental Genomics The Fish Evo Devo Geno Lab (PI: Ingo Braasch) at Michigan State University is recruiting highly motivated PhD students interested in working on the genomic basis of vertebrate evolution and development to start in Summer/Fall 2021.

The Braasch Lab focuses on genomic and developmental changes that contribute to major transitions during the course of vertebrate evolution and studies evolutionary novelties at the levels of genome structure, gene family evolution, and gene regulation. We combine sequencing and comparative analyses of fish genomes with analy-

ses of molecular evolution and functional genetic and developmental approaches (CRISPR genome editing, transgenics, gene expression analyses, epigenomic profiling) in a variety of model species (zebrafish, spotted gar, medaka, killifish, and others). Graduate projects fall within the following broader research areas of the group: 1. Genomic and morphological evolution of fishes: How do morphological differences among fish and other vertebrate lineages arise from diversification of gene repertoires? What is the role of gen(om)e duplications and gene losses in generating phenotypic diversity? How do changes in gene regulation contribute to evolutionary novelties and key innovations? We study a number of gene families that are of particular importance for the evolution of the vertebrate body plan, e. g. genes involved in development of the vertebrate-specific neural crest cells.

2. Conquest of land and 'fish-out-of-water': We are studying genomic changes and their functional consequences leading to the evolution of tetrapods from fishes and other 'fish-out-of-water' scenarios, including the evolutionary loss of genes at the water-to-land transition and the gene regulatory basis of hatching. 3. Evolutionary genomic analyses of zebrafish and other biomedical fish models: Combining genomic sequence comparisons, gene expression analyses and epigenomic profiling, we aim to improve connectivity of teleost biomedical fish models such as zebrafish, medaka, killifishes, etc. to human biology and disease.

We are highly committed to diversity and equity and to foster an inclusive and accessible work environment.

Qualifications: Applicants should hold a bachelor's degree in biology, genetics, genomics, molecular biology, bioinformatics, developmental biology, zoology or related fields. Suitable candidates should be enthusiastic about working in an interdisciplinary manner and have a passion for fish/vertebrate biology and evolution. Previous research experience in a relevant area is desired, but not required.

Admission: Students will be admitted through the MSU IBIO Graduate Program and the MSU Ecology, Evolution, and Behavior (EEB) Program. Another possible route of admission is through the MSU Genetics and Genome Sciences Graduate Program within the MSU BioMolecular Science Gateway.

Application deadlines for the MSU IBIO and Genetics Graduate Programs are December 1, 2020. Note that GRE scores are not required for application.

Funding: Financial support is provided through research and teaching assistantships and the PI's external funding from NSF and NIH. Competitive applicants will be eligible for university fellowships and supported in applying for graduate fellowships from NSF, NIH, and other agencies.

Interested candidates should email Ingo Braasch (braasch@msu.edu) in advance of the application deadlines on December 1.

Please include the following in your email:

1. Brief description of your research interests and how they align with a PhD/Masters in vertebrate Evo-Devo and genomics

2. Curriculum Vitae

3. Names and email contacts of 2-3 references

We are looking forward to your application! Ingo Braasch Assistant Professor Department of Integrative Biology College of Natural Science Michigan State University braasch@msu.edu Twitter: @fishevodevogeno http://www.fishevodevogeno.org/ braasch@msu.edu

Muenster PlantMicrobiomeHerbivoreEvolution

The Institute for Evolution and Biodiversity at the University of Münster, Germany, invites applications for a Doctoral Research Position Wissenschaftliche/r Mitarbeiter/in (Salary level TV-L E13, 65%)

in the Plant Adaptation-in-Action group, headed by Prof. Shuqing Xu (https://www.uni-muenster.de/-Evolution/plantadapt/people/shuqingxu.shtml).

The successful candidate may start as soon as possible, preferably before March 2021. The salary will be provided for three years.

In this DFG funded project, the candidate will work together with the Plant Adaptation-in-Action group to study how herbivores and microbes affect plant evolution using an experimental evolution approach.

During the course of the project, the candidate will learn new scientific skills and methods, gain didactical proficiencies and additionally will get experience in project planning and management. The position serves the purpose to acquire a PhD degree and to facilitate a successful career development. The candidate will also join the MuÌnster Graduate School of Evolution (MGSE, https://www.uni-muenster.de/Evolution/mgse/), which offers a stimulating studying environment and opportunities to get in touch with excellent researchers in the

fields of biology, medicine, geosciences, mathematics, and philosophy.

Requirements: We are looking for a highly motivated researcher of any nationality with the equivalent of a MSc degree in biology or related fields. The successful candidate is expected to design, conduct and analyse both field and lab experiments, with a high degree of independence. Thus a strong background in plant-microbe interactions is required. Applicants must demonstrate their experience and knowledge in working with plants and microbes, as well as skills in data analysis and statistics. Experience with field work, plant-herbivore interactions, evolutionary biology and analytical chemistry are advantageous. Our group consists of people of various nationalities and teamwork is essential for all projects in the group. Therefore, excellent communication skills, as well as proficiency in spoken and written English are expected. Good knowledge in German is a plus.

The University of Münster is an equal opportunity employer and is committed to increasing the proportion of women academics. Consequently, we actively encourage applications by women. Female candidates with equivalent qualifications and academic achievements will be preferentially considered within the framework of the legal possibilities. The University of Münster is committed to employing more staff with disabilities. Candidates with recognized severe disabilities who have equivalent qualifications are given preference in hiring decisions, although some restrictions related to specific project- related tasks may apply. Applications must be in English and include: (1) a motivation letter stating the research interests with reference to the stated requirements in no more than 2 pages, (2) a detailed CV including academic and extracurricular achievements, as well as details of all research experience, (3) abstracts of both the BSc and MSc thesis, and (4) contact details of at least two referees.

Applicants should send their documents in one single PDF file to Prof. Shuqing Xu (shuqing.xu@uni-muenster.de) with title of "PhD position - Your name". The application review will commence on 15th December 2020. The position will remain open until filled.

Prof. Shuqing Xu Institute for Evolution and Biodiversity University of Münster Hüfferstraße 1 D-48149 Münster E-mail: shuqing.xu@uni-muenster.de Phone:+49 251 83-21090

Shuqing Xu <shuqing.xu@uni-muenster.de>

NCopernicusU Poland Phylogenomics

The Department of Ecology and Biogeography at Nicolaus Copernicus University in Torun, Poland is recruiting highly motivated individual for a 3-year PhD position in phylogenomics. Our lab is broadly interested in phylogenetic and evolution of ecological strategies in Diptera.

Job Description: The main objective of this PhD project is to reconstruct the phylogenetic relationships within highly diversified group of higher flies, Oestroidea, at various taxonomic levels using state-of-the-art phylogenomic methods. Using an approach involving hybridization capture (AHE and UCE), genome skimming and RAD-seq methods we aim to generate phylogenomic data for hundreds of species from the group to build the robust, dated phylogenetic hypothesis. This hypothesis will be used for answering questions concerning the evolution of larval feeding strategies in higher Diptera. This project is funded by a grant from the Polish National Science Centre, in partnership with Prof. Brian Wiegmann (NC State University) and Prof. James Wallman (University of Technology Sydney, Australia). The position requires admission to Nicolaus Copernicus University's Doctoral School Academia Copernicana.

Requirements: We search for a candidate who has completed a MSc degree (or other education equivalent) of high quality in molecular biology, evolutionary biology, phylogenetics, bioinformatics, traditional taxonomy or a field relevant to the project description. The candidate should be able to document experience in standard laboratory techniques. Experience with analytical or theoretical evolutionary biology/population genetics or bioinformatics will be considered positively. We seek a highly motivated, enthusiastic person with the ambition to gain insight and publish papers in leading, international journals, in possession of good interpersonal skills and willing to collaborate with other researchers.

Salary: 4 500 PLN per month (app. 1 000 Euro)

Interested individuals should email a CV/resume to Prof. Krzysztof Szpila (szpila@umk.pl), as well as a short description of how your interests and the research topics of our research group complement each other (no more than one page) before 15 January 2021. The best candidates will be asked to provide copies of educational

certificates and 2-3 names of references. The starting date is flexible and will strongly depend on COVID situation in EU countries.

"Marcin.Piwczynski@umk.pl"
<Marcin.Piwczynski@umk.pl>

NHM UOslo VertebrateHybridization

Applications are invited for a 4-year PhD Research Fellowship at the Natural History Museum, University of Oslo, Norway.

The PhD project will focus on the role of hybridization in vertebrate diversification. This role has recently seen increasing attention as genomic studies have led to the identification of vertebrate species produced through homoploid hybridization, hybridization has been linked to some of the most explosive adaptive radiations, and even highly divergent species have been found to hybridize and backcross. Beyond these case studies, however, the role of hybridization as a potentially more general driver of diversification remains unclear.

In this project, available and newly produced genome data will be used to assess and characterize rates of hybridization and introgression widely across vertebrates, which will allow comparisons with speciation rates and patterns, and thus conclusions about the general impact of hybridization on vertebrate diversification. A particular focus will be placed on hybridization among highly divergent taxa to determine the decline of introgression as a function of the divergence time. The selection of the focus groups can take into account the interests and the background of the candidate. Participation in field work to sample specimens from the selected focus groups for genome sequencing will be possible and is encouraged.

The project will include molecular lab work in the modern DNA laboratory of the Natural History Museum, but most of the work will be computational. In this computational work, state-of-the art tools will be used for population genomic and phylogenomic analyses, and new tools may be developed. All computational work will be performed on the powerful Norwegian Supercomputer facilities.

The position includes 12 months of duty work. The purpose of the inclusion of duty work is to provide diverse training in transferable skills related to research in a museum environment. A wide range of activities can count as duty work, including participation in field work, teaching, outreach, collection curation, and gardening; the total of the duty work performed should consist of a mix of two or more of these activities to ensure the training of a diverse set of skills.

The candidate will be supervised by Michael Matschiner (Associate Professor of Vertebrate Zoology) at the Natural History Museum.

The deadline for applications is 11 December 2020.

More detailed information about the position and how to apply is provided on https://www.jobbnorge.no/-en/available-jobs/job/196145/phd-research-fellow-in-evolutionary-genomics michaelmatschiner@mac.com

NorthCarolinaStateU WildlifeGenomics

The Kierepka laboratory is recruiting a PhD student for Fall 2021. This position is a located at the North Carolina Museum of Natural Sciences and North Carolina State University in the Department of Forestry and Environmental Resources. Dr. Kierepka?s laboratory is part of the Biodiversity Laboratory at the museum where guests can view ongoing research.

Research in the Kierepka Laboratory focuses on wildlife conservation genomics, and combines laboratory, limited field, and computational methods. I have several potential research projects, namely urban and disease adaptation in raccoons and eastern woodrat genomics. There is some flexibility in projects, but those interested in the raccoon project are especially encouraged to apply. Please check my website for further details of the research interests within the Kierepka laboratory (lizkierepka.com). This position will largely be lab and computer-based with limited field work.

Successful applicants will have a unique opportunity for collaborations and outreach in addition to research within the Kierepka Lab. The museum provides numerous opportunities for outreach, science communication, and potentially exhibit design. Both federal (USGS, USDA) and state (North Carolina Wildlife Resources Commission) are located in Raleigh. There is also considerable potential to work in museum collections, the Museum of Natural Sciences has an extensive vertebrate collection from the Southeastern United States and growing international acquisitions.

The North Carolina Museum of Natural Sciences is the premier natural science museum in North Carolina, boasting four floors, a caf?, science theatre, live animal exhibits, and the Nature Research Center. North Carolina State University is an R1 land-grant university located in the Research Triangle of Raleigh, North Carolina. Raleigh is a thriving city in the foothills of the Appalachians with many attractions including bikeways, large state parks, museums, college sports, night life, 20+ craft breweries, and more.

This position offers a competitive salary, benefits, and tuition remission with multiple opportunities for research fellowships at NCSU. Two are available upon entry: the Genetic and Genomic Scholars program (http://ggscholars.org/) and the Global Change Fellowship program (https://secasc.ncsu.edu/home/about/people/global-change-fellows/). I plan to nominate the successful candidate to both programs, but applications are due in January and February. Both programs are designed for early PhD students (first and second year) to provide collaborations, research support, and training.

Qualifications and How to Apply

I prioritize inclusion and diversity within my lab, and welcome interested candidates from all backgrounds. I do have a marginal preference for students that have a Masters degree, but advanced undergraduates are also encouraged to apply. Previous experience in genetic research, R programming, and bioinformatics is desirable, but not essential. To apply, please use the Google Form below. This form has a series of questions about your skillset, previous experience, and future goals, which will help streamline the process for interested candidates. Please note that the Google Form asks about all relevant skills, I do not expect everyone to have multiple years in every category. Please do not exclude yourself from applying if you have little experience in multiple skillsets, they are all important skills that this position will use and I will provide training for the successful candidate. I will request a short cover letter (1 pg), CV, and contact information for references from top candidates by the end of November-early December. I do welcome email inquiries (emkierep@ncsu.edu) from interested candidates, but please fill out the Google Form prior to contacting me. I plan to interview in early December, with a decision before Christmas.

Google Form: https://forms.gle/ADg3tnJLwP4Thkwj7
Liz Kierepka <emkierep@ncsu.edu>

NSF BPRI LocustPhenotypicPlasticity

Behavioral Plasticity Research Institute is looking for 12 graduate students to start Fall 2021!

Interested in pursuing a PhD or MS focused on integrative animal behavior, from molecules to landscapes? Come take a look at the Behavioral Plasticity Research Institute (BPRI)! One of four inaugural NSF Biology Integration Institutes, the BPRI is a virtual institute that offers prospective graduate students stimulating and diverse research opportunities focused on understanding the mechanisms underlying phenotypic plasticity. Specifically, the BPRI will examine locust phase polyphenism through ten integrative research activities. We are pleased to announce the availability of fully-funded graduate fellowships, each with support for up to 5 years.

Students will be primarily based in the laboratory of their main PI, but will collaborate with other BPRI research groups.

Participating Institutions: Arizona State University (1 PhD; Cease, Overson) Baylor College of Medicine (4 PhD; Dierick, Gabiani, Zong) Texas A&M University (4 PhD; Behmer, Song, Sword) University of Washington at St. Louis (2 PhD; Raman) Southern Illinois University Edwardsville (1 MS; Peterson)

Research Topic Overview: Phenotypic plasticity'Xthe ability of a genotype to produce different phenotypes in response to environmental variation'Xis observed across all living organisms and scales of biological organization. However, to fully understand its mechanisms, maintenance, and evolution, complete biological integration is needed. One of the most striking examples of coordinated phenotypic plasticity in nature is found in locusts. Locusts comprise a handful of species in the grasshopper family Acrididae capable of forming dense migrating swarms through an extreme form of density dependent phenotypic plasticity. Cryptically colored, shy individuals (solitarious phase) can transform into conspicuously colored, gregarious individuals (gregarious phase) in response to increases in population density. This phenomenon, referred to as locust phase polyphenism, affects a myriad of locust traits, including molecular biology, physiology, behavior, morphology, and ecology. Locust swarms occur worldwide and can

affect the livelihood and well-being of one in ten people on Earth. Thus, locust phase polyphenism is a powerful comparative system for understanding how gene expression and epigenetic regulation scale up to behavioral, physiological, and ecological interactions resulting in outbreaks, collective movement, and mass migration, with major food security implications. Intriguingly, the syndrome of locust phase polyphenism has evolved multiple times within grasshoppers, with varying sets of mechanisms contributing to phase polyphenism between lineages. The BPRI will characterize, compare, and integrate this phenomenon in a phylogenetic framework.

Vision Statement: The vision of the BPRI is predicated on integration through collaboration. We recognize the scientific and societal impacts are maximized when groups of people with diverse backgrounds and experiences come together to work towards shared goals and the common good. This philosophy will inform all BPRI activities.

Research Activities, plus Associated Faculty: The overall research goal of the BPRI is to integrate (i) suborganismal processes of locust phase polyphenism, which will be investigated from genomic, epigenomic, transcriptomic, and neurophysiological perspectives using powerful genome-editing tools, with (ii) organismal biology and ecology, which will be investigated using manipulative lab-based and field-based experiments, (iii) in a phylogenetic framework. The BPRI aims to investigate three locust species and three grasshopper species in the genus Schistocerca (Orthoptera: Acrididae) that vary in their degrees of density-dependent phenotypic plasticity. The desert locust, S. gregaria, has been extensively researched during the last 25+ years and its newly sequenced genome, as well as our preliminary quantification of density-dependent phenotypic plasticity of the other five species (based on behavior and transcriptome data) serve as a basis for formulating our research projects.

We have 10 integrative research activities (R1-10) to achieve our goal. In all cases we will generate data for all six Schistocerca species:

(R1) Whole genome sequencing and assembly: Associated Faculty (Liberman Aiden, Childers, Dudchenko, and Richards) (R2) Tissue-specific transcriptomes during phase change: Associated Faculty (Song) (R3) Time-resolved and tissue-specific epigenomic profiling during phase change: Associated Faculty (Zong)

Research activities R1, R2, and R3 will provide foundational knowledge on the molecular basis of density-dependent phenotypic plasticity. This information will be used to identify key ' Â¥plasticity' Â genes and epigenetic regulation mechanisms.

We will study phenotypic plasticity using a functional genetics approach.

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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

OxfordBrookesU EvolutionOfMaleGenitalSize

Project title: Integration of shape and function: identifying the genetic and neural circuitry underlying rapid male genital evolution

3 Year, full-time PhD studentship Eligibility: Home UK/EU and International students Closing date: 11 December 2020 Start date: September 2021 Bursary p.a.: Bursary equivalent to UKRI national minimum stipend plus fees (2020/21 bursary rate is 15, 285) University fees and bench fees at the UK will be met by the University for the 3 years of the Studentship.

Supervisors: Dr. Daniela Nunes (Oxford Brookes University), Carolina Rezaval (University of Birmingham), Casper Breuker (Oxford Brookes University) and Saad Arif (Oxford Brookes University) Fees: Tuition fees up to UK level will be paid by the University. Any EU and international students awarded the studentship would need to cover the difference between international, EU and UK fees. Please note, fees increase by 4% annually.

Project Description: Background The size and shape of male genitalia are remarkably diverse in animals with internal fertilization and this phenomenon is long thought to be driven by sexual selection. Changes in genital morphology could impact reproductive success by directly changing the function of the evolved organ and/or through behavioural modification of either or both sexes, for example through effects on female choice. However, causal links between morphological and behavioural changes have been difficult to establish because these components have often been addressed separately from a genetic, developmental and neural perspective.

Aims This project aims to determine how genes known to contribute to the divergence in male genitalia between two closely related species, Drosophila simulans and Drosophila mauritiana, affect genital coupling, mating behaviour and reproductive success in these species.

To obtain a better understanding of the mechanisms driving behavioural changes we will also conduct genetic screens to identify CNS neurons that are able to modulate the mating choices of both males and females as a response to the changes in the morphology of the male genitalia.

The results of this project will provide unprecedented insights into the mechanisms through which morphological changes affect behavioural phenotypes and the evolution of reproductive isolation between species and speciation more generally.

Training Training will be provided in genomic engineering using CRISPR/Cas9, Molecular biology, Drosophila genetics, Behavioural assays, Bioimaging, Optogenetics, Thermogenetics, Neurogenetics and neural circuit bashing using the state-of-the-art facilities available Oxford Brookes University and at the University of Birmingham.

For informal inquiries about the project please contact Dr Daniela Nunes: msantos-nunes@brookes.ac.uk

Funding Notes

Requirements: Applicants should have a first or upper second class honours degree from a Higher Education Institution in the UK or acceptable equivalent qualification in biological science or related discipline. EU Applicants must have a valid IELTS Academic test certificate (or equivalent) with an overall minimum score of 7.0 and no score below 6.0 issued in the last 2 years by an approved test centre.

How to apply: Applications should be sent to hlsapplications@brookes.ac.uk and should include the application form which you can download from: https://www.findaphd.com/common/clickCount.aspx?theid=125716&type=184&DID=1231&url=https%3a%2f%2fwww.brookes.ac.uk%2fDocuments%2fResearch-Opportunities%2fPhD-studentship-application-jan-14%2f – Dr. M. Daniela S. Nunes Senior Lecturer in Evolutionary and Developmental Biology

Phenotypic Evolution and Adaptation Group Department of Biological and Medical Sciences Faculty of Health and Life Sciences Oxford Brookes University Sinclair SNC 1.01 Gipsy Lane, OX3 0BP Oxford, UK

Tel. +44 (0)1865 488629 https://www.brookes.ac.uk/-BMS/Research/Groups/Evolution-Ecology-Environment-and-Conservation/Evolutionary-Genetics/Phenotypic-evolution-and-adaptation/ twitter: @Nunes_Lab

Daniela Santos Nunes <msantos-nunes@brookes.ac.uk>

Oxford EvolutionaryBiology

PhD Position available in the Department of Zoology, University of Oxford

Title: Are species boundaries adaptive? Linking speciation with contemporary evolution.

Supervisor: Prof Tim Barraclough

All organisms live in diverse communities with hundreds of other species. Understanding what species are, where they come from, and how they interact is therefore vital for predicting how living systems will evolve in response to contemporary changes. You will join a group using a wide range of approaches 'V genomics, experimental evolution with bacteria, and long-term time-series of wild communities 'V to tackle these challenges in a range of animal, microbial and plant systems. Designed to blend your interests with the group'Âs expertise, your project will build new theory, methods and/or evidence for understanding the dynamics of evolution of diverse systems, ranging from speciation and origins to contemporary evolution and management. Previous students have often worked with organisations such as CABI and the Royal Botanic Gardens Kew and several have conducted fieldwork in the UK and in Africa, South East Asia and the American tropics.

The project will investigate whether species boundaries are adaptive. You will test whether mechanisms for controlling gene flow between populations evolve to optimise fitness in fluctuating environments. You will choose either a wild or lab system linked to existing projects. In the wild, you could develop new approaches for tracking eco-evolutionary dynamics from genomic time-series of whole communities, with the aim of monitoring, predicting and managing evolution in changing environments. How can we build resilience for beneficial organisms while reducing impacts of harmful ones? You would generate and analyse data on fungal and insect communities associated with agricultural crops in collaboration with non-academic partners. In the lab, you could test these ideas with experimental evolution and speciation with bacteria. For example, do barriers to gene transfer evolve differently in static versus fluctuating environments. You could design bacteria with different kinds of barriers to gene transfer and investigate the effects on subsequent adaptation to uniform, divergent and fluctuating selection. Results could prove extremely useful, for example, in bio-engineering systems that either do

or do not exchange genes, or exchange DNA just under restricted conditions.

For more information, please send a brief outline of your interests and copy of your CV to Tim Barraclough at tim.barraclough@zoo.ox.ac.uk

Funding is available through a Leon E and Iris L Beghian Graduate Scholarship scholarship in Zoology (Evolutionary Biology) at Magdalen College, through the Environmental Research or Oxford Interdisciplinary Bioscience Doctoral Training Partnerships or other scholarships according to eligibility. More information and how to apply at www.zoo.ox.ac.uk/graduate-study. All deadlines midday 22nd January 2021.

Prof Tim Barraclough Department of Zoology, University of Oxford, Tutorial Fellow, Magdalen College, https://www.zoo.ox.ac.uk/people/professor-tim-barraclough https://sites.google.com/view/barralab Timothy Barraclough <tim.barraclough@zoo.ox.ac.uk>

QueensU Belfast EvolParentalCare

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.—

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:—How To Apply - QUADRAT

How To Apply - QUADRAT

We are now accepting applications for entry 01 October 2021. Please refer to our Funding and Eligibility informa...

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Funding and Eligibility:—Funding and Eligibility - QUADRAT

Funding and Eligibility - QUADRAT

QUADRAT PhD projects are competition funded by QUADRAT NERC Doctoral Training Partnership https://www.quadrat.ac.. . Funding and Eligibility - QUADRAT

QUADRAT PhD projects are competition funded by QUADRAT NERC Doctoral Training Partnership https://www.quadrat.ac.. . References 1. Furness A. & Capellini I. (2019).—How diversity in parental care evolves: a phylogenetic comparative study in amphibians. Nature Communications, 10: 4709.—

The evolution of parental care diversity in amphibians

Parental care can take many forms but how this diversity arises is not well understood. Here, the authors compil...

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RutgersU TransposableElementEvolution

The Ellison Laboratory in the Department of Genetics at Rutgers University is looking for PhD students with an interest in coevolution and conflict between transposable elements (TEs) and their host genomes. The research involves using cutting-edge functional and comparative genomic approaches in Drosophila. Candidates should have experience or interest in learning genomic analysis in Unix/Linux environments, and programming in Python and/or R. The research is primarily computational although there are opportunities for wet lab work. Previous experience working with Drosophila is beneficial but not necessary.

Rutgers-New Brunswick is a leading national research university and the preeminent public institution of higher education in the state of New Jersey. The campus offers a vibrant and diverse research community and is close to New York City and Philadelphia.

Interested applicants should contact Dr. Ellison directly and also apply through the Molecular Biosciences PhD program: https://molbiosci.rutgers.edu . Applications are due Dec 1st.

Ellison Laboratory Department of Genetics Rutgers University New Brunswick, NJ chris.ellison@rutgers.edu www.ellisonlab.website Christopher Ellison <cee53@hginj.rutgers.edu>

SGN Frankfurt AvianSeedDispersal

Job offer ref. #11-20022

The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. SGN conducts natural history research with almost 800 employees and research institutions in six federal states. Within SGN, the Senckenberg Biodiversity and Climate Research Centre (BiK-F) explores the interactions between biodiversity, climate, and society. Senckenberg BiK-F invites applications for a

PhD position (m/f/d) in the project

“Avian seed dispersal movements and trait-depended plant regeneration”

(65 %)

We are seeking a candidate with a strong background in ecology and a keen interest in plant-animal interactions. You will join the DFG-funded project “The role of intraspecific variation in seed dispersal, traits, and genetic diversity for the response capacity of plants to climate change”. The project links community ecology, movement ecology, and population genetics. The main research questions revolve around the role of the Spotted nutcracker in shaping the regeneration of Swiss stone pine. You are expected to conduct fieldwork in the Swiss Alps that will involve nutcracker captures and GPS tracking as well as transplant experiments of Swiss stone pine. You will conduct synthetic analyses linking animal movement to trait-depended plant regeneration and plant genetic diversity. The project team consists of many collaboration partners including the working groups of Thomas Mueller (movement ecology, SBiK-F, Frankfurt) and Felix Gugerli (population genetics, WSL, Birmensdorf, Switzerland).

Your profile:

§Master degree in Ecology or a related field

§Strong quantitative skills and statistical programming skills in R

§Experience in fieldwork and field experiments

§Broad interest across ecological fields (community-, movement ecology, population genetics)

§Previous experience with bird captures and GPS tracking, transplant experiments, or genetic data analyses are advantageous

§Excellent oral and written communication skills in English

Salary and benefits are according to a full-time public service position in Germany (TV-H E13, 65 %). The contract should start on May 1st, 2021 and will initially be limited to three years.

The Senckenberg Research Institutes support equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment is in Frankfurt am Main, Germany.

Please send your application, mentioning the reference of this job offer (ref. #11-20022) before December 18th, 2020 by e-mail (attachment in a single pdf document) and including a cover letter describing your motivation to apply, a detailed CV including a list of your publications, names of two references and a copy of your most important publication (if available) to:

Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25

60325 Frankfurt am Main

E-Mail: recruiting@senckenberg.de For scientific enquiries please contact Dr. Eike Lena Neuschulz, eike-lena.neuschulz@senckenberg.de.

– Mit freundlichen Grüßen / Best Regards

Jessica Helm Personalsachbearbeiterin

Senckenberg Gesellschaft für Naturforschung (Rechtsfähiger Verein gemäß ç22 BGB) Senckenberganlage 25 60325 Frankfurt am Main

Besucheradresse: Mertonstraße 17-21, 60325 Frankfurt am Main (1. OG)

Telefon/Phone: 0049 (0)69 / 7542 -

Leiterin Personal & Soziales - 1458 Loke, Uta

Stellv. Leiterin Personal & Soziales - 1319 Elsen, Carina

Team Recruiting - 1564 di-Biase, Maria - 1313 Helm, Jessica - 1478 Gajcevic, Isabel

Fax: 0049 (0)69 / 7542-1445

Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Andreas Mulch, Jan-Henning Fahnster (komm.), Prof. Dr. Katrin Böhning-Gaese, Prof. Dr. Karsten Wesche

Präsidentin: Dr. h. c. Beate Heraeus Aufsichtsbehörde: Magistrat der Stadt Frankfurt am Main (Ordnungsamt)

Mitglied der Leibniz-Gemeinschaft

www.senckenberg.de Recruiting <recruiting@senckenberg.de>

StAndrews NewCaledonianCrow

StAndrews.NewCaledonianCrow.PhD

PHD STUDENTSHIP: TOOL CRAFTING IN NEW CALEDONIAN CROWS

DEADLINE

13 December 2020

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 a completely different technique, they cut a variety of tool shapes from the barbed edges of screw-pine 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, including some with marked crow populations. 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

Informal enquiries, with CV and a letter of interest, can be addressed to Professor Christian Rutz (christian.rutz@st-andrews.ac.uk), but all applications must be submitted via the university's online portal.

FUNDING NOTES

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

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

FULL ADVERT ON FINDAPHD

https://www.findaphd.com/phds/project/tool-crafting-in-new-caledonian-crows/?p125512 Christian Rutz <cr68@st-andrews.ac.uk>

StockholmU EvolutionaryEcology

PhD student position in Evolutionary Ecology at the Department of Zoology, Stockholm University, Sweden

Closing date: December 15, 2020

We are inviting applications for a four-year, fully-funded, Ph.D. position in the research group of Karl Gotthard that is focusing on the evolution of life history and plasticity in seasonal environments, using primarily natural populations of butterflies as model organisms.

The new PhD student will work within the project "Evolutionary ecology of life cycle regulation" and will focus on the evolution of life cycle timing in situations where insect species show shifts in the number of annual generations, i.e. when there are shifts in voltinism. The phenomenon of voltinism shifts is relatively common in insects and means that a given species shifts from having two full generations per year in southern or low altitude locations, to have only one annual generation in northern or high altitude locations. Selection is likely to change significantly across voltinism shifts as they lead to a dramatic change in optimal life history strategy.

The project aims at testing the general prediction from life history theory that there are phenotypic and genetic footprints of selection for a change in life cycle regulation in these situations. In particular the new project aims at exploring Ecological genetics and genomics of seasonal life cycle regulation and will explore the genomic background and genetic architecture of adaptations for seasonal plasticity across several different points of the life cycle. Moreover, we will aim to test fitness effects of this genetic variation in both field and laboratory experiments. In this way the project will provide novel insights into ecological and evolutionary consequences of climate change on traits that are central for the persistence of natural populations.

The project will contain aspects of both field and laboratory work to study the ecology, genetics and genomics of life cycle timing in several species of temperate butterflies. The prospective student will sample replicated populations and do controlled laboratory studies of how phenotypic adaptations and associated genetic variation is changing across shifts in voltinism.

The genetics will be studied by quantitative genetic methods, selection experiments as well as functional genomics, including the use of CRISPR/Cas9 to manipulate already established candidate genes. Finally, we plan to do use reciprocal transplant experiments in outdoor cages to test the adaptive significance of local difference in these adaptations.

We are looking for candidates with a strong interest in evolutionary ecology, genetics and life history theory, with excellent analytical ability and experience with quantitative analyses of life history traits and genetics. Experience in working with insects in the lab and in the field, as well as having a valid drivers license, is especially meriting.

See the full add and instructions on how to apply at:

https://www.su.se/english/about-the-university/-work-at-su/available-jobs/phd-student-positions-1.507588?rmpage=job&rmjob410&rmlang Karl Gotthard Associate Professor Department of Zoology Stockholm University Sweden

karl.gotthard@zoologi.su.se

https://www.su.se/english/profiles/gotth-1.183261 Carl Gotthard <Karl.Gotthard@zoologi.su.se>

TexasAMU CorpusChristi CetaceanReproBiol

The Functional Anatomy and Behavioral Ecology of Marine Mammals (FABEMM!) lab at Texas A&M University- Corpus Christi seeks a PhD student to use innovative techniques to explore the biomechanics of genital and sperm interactions in cetaceans. The P.I., Dr. Dara Orbach, is a leader in the functional anatomy of marine mammal genitalia. More information about the FABEMM! Lab's research interests can be found at https://daraorbach.weebly.com/. The selected student will be based in Corpus Christi, Texas, with frequent travel to collaborating institutions, particularly throughout Florida. The student will work in aquariums and laboratory settings with live and post-mortem marine mammals and will also have opportunities to mentor interns and engage in boat-based research.

Applicants should: 1) be highly driven, intellectually curious, detail-oriented, willing to learn, and team-oriented, 2) have a MS or DVM degree (completed by May 2021), and 3) have evidence of research productivity (e.g., papers, presentations, grants). Students with a research background in histology, immunohistochemistry, biomechanics, sperm biology, OR functional anatomy are particularly encouraged to apply. Applicants must meet the minimum requirements for admission to the Marine Biology Program (https://sci.tamucc.edu/departments/life-sciences/marine-biology/). Interested applicants should contact Dr. Dara Orbach (dara.orbach@tamucc.edu) and include: 1) a cover letter describing your research interests, how they relate to the research project, and your relevant qualifications, 2) a cv with reference contacts listed, 3) an unofficial transcript(s), and 4) a sample of your writing (e.g. publications, thesis). All applications received before December 10th, 2020 will receive first consideration, and the position will remain open until filled. The required start date is no later than Fall 2021, with a preferred start in Summer 2021.

Texas A&M University- Corpus Christi, also known as The Island University, is the only university in the USA located on its own island. As a Minority Serving Institution, cultural diversity and an inclusive atmosphere are core values. Located is South Texas on the Gulf of Mexico and less than 3 hours from the Mexican border, Corpus Christi boasts a semi-tropical climate, a thriving industrial sector, rich marine biodiversity, and a low cost of living. The Department of Life Sciences is one of the largest and most productive departments at TAMU-CC, with research specializations in marine biology and biomedical sciences. The Department of Life Sciences relocated to a brand new state-of-the-art building last year a few feet from the ocean, where free-ranging dolphins can regularly be observed. Facilities include an automated histology laboratory, 2 additional dedicated laboratories for the FABEMM! lab, and all new equipment. The MARB program offers students experience in data collection, grant writing, and statistical analysis, in addition to annual travel funding and several prospective fellowships. Stipends are competitive.

Dara Orbach, PhD

Assistant Professor of Marine Biology Department of Life Sciences Texas A&M University- Corpus Christi

dara.orbach@tamucc.edu

"Orbach, Dara" <Dara.Orbach@tamucc.edu>

TexasAMU EvolutionaryBiology

Please consider the Interdisciplinary Ecology and Evolutionary Biology PhD Program at Texas A&M University! To learn more, visit: eeb.tamu.edu

Contact information:

Nick Jacobsen, Program Coordinator Wildlife, Fisheries, and Ecological Sciences Building 218 Email: njacobsen@tamu.edu

Degree Program:

The Interdisciplinary Degree Program in Ecology and Evolutionary Biology (EEB) at Texas A&M University offers a Ph.D. in the field of Ecology and Evolution. We offer a world-class training program that incorporates fields relevant to EEB, spanning evolutionary genomics to animal behavior to landscape ecology. Our faculty and students are associated with 11 departments and 7

colleges across Texas A&M University, bringing together a diverse array of perspectives.

Application:

Applications to the Doctoral Program in EEB should be submitted by December 11th, 2020 to ensure full consideration. Applicants will be evaluated based on their personal statement, grade point average, letters of recommendation, and previous research experience. International applicants must also submit TOEFL and GRE scores. Prospective students should fill out a pre-application indicating which EEB core faculty members share similar interests. We also encourage prospective students, as they are putting together their application package, to reach out to these faculty members. Travel grants to visit Texas A&M, meet with the faculty and graduate students, and explore available resources and facilities are available to outstanding prospective students (subject to safety restrictions).

World-class Faculty:

The Doctoral Program in EEB Faculty includes over 60 core faculty members and approximately 30 associate members, from diverse backgrounds and a multitude of research interests. In our Program, students are exposed to an international community of scholars, allowing them to explore different perspectives in the field of Ecology and Evolution. Our faculty's primary goal is to guide students on their journey to research independence, and they are committed to excellence in education and science.

Unparalleled Research Environment

Texas A&M University is a long-established research university with a 21st century research infrastructure. As the country's best-funded land- grant university, Texas A&M possesses an ample and effective life-sciences research infrastructure. EEB doctoral students have access to core facilities for genomics, molecular biology, stable isotopes, and microscopy. They may also take advantage of the world-renowned herbarium, insect collection, and vertebrate collection, as well as the network of affiliated experimental stations around Texas and the world. Our high-performance computing resources and GIS labs enable cutting-edge research at all scales.

Job Prospects

The EEB Doctoral Degree Program prepares students for career prospects beyond individual disciplines by positioning them on research trajectories that lead to excellent opportunities in academia, state and federal government research laboratories, and industry, among others. Most importantly, our doctoral students leave committed to a lifetime of learning.

Mentoring a Step Above the Rest

An important part of graduate training involves interacting and participating in the scientific community. Our faculty guides EEB doctoral students as they develop into productive members of the research community, which starts with a series of EEB core courses, ranging from physiological ecology to evolutionary genomics, taught by experts in each field. Additionally, first year students travel to our Mexico research station as part of our winter field course experience. EEB also offers numerous opportunities for professional and social interactions. A seminar series permits students to learn about the latest research and meet scientists from around the globe. The Journal Club is an opportunity to discuss scientific articles in relevant disciplines with peers and faculty. Scientific events, such as the nationally-recognized annual Ecological Integration Symposium and the Open Source for Open Science Workshop provide an excellent opportunity for professional development. Finally, Texas A&M University has a vibrant campus with numerous opportunities for social interactions and the EEB Interdisciplinary Student Organization hosts social events in the fall and spring to promote integration among students in the life sciences with EEB interests.

Financial Support

The Doctoral Program in EEB offers ample funding opportunities for graduate studies, and students can benefit from a full stipend while in the Program. Support comes from nationally competitive funding packages consisting of teaching assistantships, research fellowships, and internal merit fellowships. Doctoral students are eligible for medical insurance and in-state tuition, which is waived for students with

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TexasAMU MosquitoBehavioralGenomics

A PhD position is available in the lab of Michel Slotman (https://slotmanlab.tamu.edu/) in the Department of Entomology at Texas A&M. The Slotman lab is broadly interested in the genetic basis of mosquito behavior, mosquito speciation/population genetics and the impact

of vector control on mosquitoes. The successful candidate will work on the genetic basis of host seeking or mating behavior in the African malaria mosquitoes of the Anopheles gambiae complex.

The dept of Entomology at Texas A&M has a strong focus on vector biology, with outstanding expertise and resources in this area.

A background in genetics, genomics and/or insects is preferred. A MS degree is preferred as well but not required.

If you are interested in joining our team, please contact Michel at: maslotman@tamu.edu

Michel Slotman <maslotman@tamu.edu>

TexasTechU EvolutionaryGenomics

The Manthey lab in the Department of Biological Sciences at Texas Tech University is recruiting highly motivated individuals for graduate studies (PhD) in evolutionary genomics to begin in Fall 2021. We use computational biology, fieldwork, and labwork to answer fundamental questions in evolution, ecology, and conservation biology.

The major themes of our current research are: (1) evolutionary genomics and transposable element evolution in woodpeckers, (2) ant and microbe co-evolution, genomics, and genome evolution, and (3) population genomics of wild organisms (from birds to insects). Graduate students would be expected to develop novel research questions under these broad themes. For more information about the lab's research and opportunities, please check our site: https://mantheylab.org/ We have financial support for multiple students through research and teaching assistantships, including additional summer support and research funds. We are particularly interested in recruiting student(s) interested in working on ant genomics projects.

Interested individuals should email a CV/resume to Dr. Joseph Manthey (jdmanthey@gmail.com or joseph.manthey@ttu.edu), as well as a short description of how your interests and the research topics of our research group complement each other.

The Department of Biological Sciences has a strong and dynamic group of scientists with a focus in ecology and evolutionary biology. The department has strengths in multiple areas of genomics, bioinformatics, and specialized disciplines of ecology and evolutionary biology. The departmental website can be found here: http://www.depts.ttu.edu/biology/ ˜Deadline for applications˜ Our department has year-long open admissions but has deadlines to be considered for scholarships and fellowships. For Fall 2021, this deadline is early January, 2021. Please find all application details here: http://www.depts.ttu.edu/biology/academics/-graduate/prospective-students/ All qualified applicants are encouraged to contact me and apply. While academic scores have a role in admissions, motivation, passion, and research experience are highly valued. Texas Tech University is an Equal Opportunity Employer, and we welcome applications from all qualified persons and will ensure that all applicants are treated fairly, equally, and respectfully.

Joseph D. Manthey, Ph.D.

Assistant Professor, Biological Sciences

Texas Tech University

Email: jdmanthey@gmail.com | joseph.manthey@ttu.edu

https://mantheylab.org/ jdmanthey@gmail.com

UAberdeen 2 EvolutionaryBiol

Applications are invited for a competitively funded PhD position (Evolutionary Biology) in the School of Biological Sciences at the University of Aberdeen to start fall 2021.

Immune systems are influenced by environmental conditions and in turn pathogenic landscapes vary across geographic regions. There is a need to better understand the selective landscape of immune genes because this provides important information about adaptive genetic variation that is especially relevant in the face of a changing climate. Selection for diversity in immune genes may also vary among wild and captive populations since environmental conditions and pathogen exposure differ among them, but little work has been dedicated to investigating this. Farmed salmonids dominate the aquaculture industry in the UK (worth over pounds 1 billion), while their wild counterparts play a vital ecological role as keystone species in aquatic ecosystems, making this an ideal system for investigating the effects of environment and domestication on immunity. With environmental change driving salmonid declines across the globe, understanding how selection shapes the im-

mune repertoire of this group is of critical importance.

This PhD will examine immune gene diversity in wild and captive salmonid populations to determine the effects of environment and domestication on genes involved in immune function and defence to pathogens, with a focus on Arctic Charr (Salvelinus alpinus) and Atlantic Salmon (Salmo salar). There is also the potential to examine links between life history and immune gene diversity since wild salmonids have both migratory and non-migratory ecotypes. Given the broad phylogenetic and environmental diversity across this system, there is strong potential for comparative research. The major histocompatibility complex (MHC) is an ideal candidate for this work since variation at these genes is shaped by both historical and ongoing selection. The results of the project will inform wild and farmed population management and sustainable genetic improvement in salmonid aquaculture.

The project will be supervised by Dr. Kara Layton and Prof. Samuel Martin (Scottish Fish immunology Research Centre) in the School of Biological Sciences, University of Aberdeen and by Prof. Ross Houston at the Roslin Institute, University of Edinburgh. A large collection of samples and data are already available for this work but there may be an opportunity for the student to collect additional samples through field work in the UK, Europe and Canada, expanding both the taxonomic and geographic scope of this work. The student will gain skills in molecular data generation and analysis, bioinformatics, science communication and writing, among other transferrable skills.

Candidates should have (or expect to achieve) a minimum of a 2:1 UK Honours degree, or the equivalent qualifications gained outside the UK, in a relevant subject. This position is open to both domestic and international students.

DEADLINE: January 6th, 2021

Application details can be found here: http://-www.eastscotbiodtp.ac.uk/how-apply-0 —

Applications are invited for a competitively funded PhD position (Marine Molecular Biology) in the School of Biological Sciences at the University of Aberdeen to start October 2021.

Coastal ecosystems play a key role in combating the climate crisis by storing and sequestering carbon, but many of these blue carbon ecosystems face ongoing threats from environmental change and human activities. Maintaining biological diversity in these habitats is essential for proper carbon cycling but many marine taxa that contribute to this process remain undocumented. Marine invertebrates play an especially important role in long-term carbon storage because many produce calcareous shells, but genetic data is lacking for well over 50% of the marine invertebrate fauna in the UK.

The first step in increasing our knowledge and protecting blue carbon habitats is to document and monitor biodiversity. Molecular methods for monitoring biodiversity (i.e. metabarcoding) have been shown to be more efficient than traditional monitoring approaches, but only when used alongside a complete reference database. As such, the lack of a reference database for taxa inhabiting blue carbon ecosystems across the UK limits our ability to protect these habitats.

You will help address these knowledge gaps by establishing a marine invertebrate DNA barcode reference library for priority blue carbon habitats in the UK and testing environmental DNA methods to support the future monitoring of these vulnerable habitats.

Specifically, you will: Synthesize our current understanding of the role of marine invertebrates in carbon sequestration and storage; Collect and identify marine invertebrates from diverse blue carbon habitats across the UK, with a focus on priority littoral and sublittoral habitats

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UAberdeen 2 PlantEvolution

Competitive fully-funded PhD position available at the School of Biological Science, University of Aberdeen, UK, within the NERC DTP QUADRAT (https://-www.quadrat.ac.uk/).

Title: Evolution and consequences of mating systems for range dynamics and species' responses to environmental changes.

Supervisors: Dr Greta Bocedi (www.gretabocedi.com), Dr Isabella Capellini and Dr Lesley Lancaster

Application Deadline: 18 January 2021

Project description: Understanding the ecological and evolutionary processes that shape species' geographic ranges and affect their dynamics such as expansions, contractions and shifts, is of fundamental importance to

understand, predict and manage species' responses to ongoing global environmental changes. Many challenges that biodiversity is facing, including climate change, habitat fragmentation and invasions, involve changes in species' geographic ranges. Conservation biologists are therefore increasingly faced with the tasks of either facilitating or hinder these dynamics.

Fundamental to species' range dynamics are traits and processes affecting species' reproductive success and genetic diversity. The mating system, defined as suite of physiological, morphological and behavioural traits involved in obtaining and choosing mates, is key. As one of the main driver of gene flow, together with dispersal, it is crucial in determining a species' evolutionary potential by influencing maintenance of genetic variation and individuals' fitness variation. However, we still know very little, especially for animals, about how mating system and the associated fundamental processes of inbreeding and sexual selection: a) evolves during environmental change, b) varies across species' ranges and c) affects species' range dynamics and persistence during environmental changes.

This project has two main broad objectives:

understanding how mating systems evolve during range expansions and shifts; understanding the consequences of mating systems ecology and evolution for range dynamics such as expansions, invasions and shifts. These two fundamental questions will be addressed on two main fronts. First, by generating new eco-evolutionary theory through the development of genetically-explicit models for mating system evolution (e.g.1) coupled with spatially-explicit range dynamic models that integrate population dynamics and dispersal (e.g.2). These models will allow generating theoretical predictions on how the spatial processes of expansion and shifting, together with different ecological and environmental conditions (e.g. different rates of climate change or degrees of habitat fragmentation), impact on the evolution of traits such as mate choice, inbreeding avoidance or tolerance, number of mates. They will further allow asking how changes in mating system feed-back to maintenance of genetic diversity, evolutionary potential, population viability and invasion success. Second, hypothesis and theoretical model predictions will be tested through large scale phylogenetic comparative analyses (e.g.3) that will leverage global datasets of animal (e.g. mammals, birds, freshwater fish and insects) life-history and behaviours, invasions and climate-driven range-shifts. It will be possible to investigate changes in the mating system by, for example, using data from populations at the core vs expanding edge of the range, or by comparing native vs alien spreading populations of the same species. Another potential question would be asking how different mating systems, across taxa, might affect expansion success.

Depending on the student interests there will be the possibility of establishing a field system to empirically test how mating system traits change during range shifts, by sampling across the rapidly shifting northern range margin of the female-polymorphic damselfly Ischnura elegans, and conducting behavioural observations, mating trials and paternity analyses (using genetic approaches) to assess mating system shifts. Evidence already exist of changes in sex ratio and patterns of sexual selection and sexual conflicts at the expanding range front.

The project is deliberately broad, leaving plenty of scope for the student to develop their own line of research. For example, we decided to focus on animals, but plants are not excluded a-priori as the same questions apply. The student interests will determine the balance between theoretical modelling, data analyses and field work. The student will work closely with the PIs and receive excellent training in cutting-edge eco-evolutionary modelling, data collection and management of large datasets, and phylogenetic comparative approaches in R. The student will further benefit from the presence of strong groups in the department working on related topics with a spatially- and genetically-explicit theoretical and modelling approach, and from being embedded in a strong

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UArkansas 2 GenomicsGeneticsBioinformatics

PhD student positions with full financial support are available in Fall 2021 in the Zhuang Lab (https://fulbright.uark.edu/departments/biology/directory/index/uid/xz036/name/Xuan+Zhuang/), Department of Biological Sciences, University of Arkansas.

Research interests in the Zhuang Lab include Evolution of genetic novelty and diversity; Genetic basis of variation for complex traits and diseases; Molecular mechanisms of gene formation and gene loss. Investigations involve genomics, molecular evolution, and bioinformatics, in model (fruit flies) and non-model or-

ganisms (polar fishes). More information is available on our website (https://zhuangxuan.wixsite.com/home/-research-blog).

We are looking for highly motivated students who are willing to tackle fundamental questions in both basic evolution and biomedical research. We invite interested and highly qualified candidates to apply. Please contact Dr. Zhuang (xz036@uark.edu) (1) CV (with GPA and required test scores), (2) a cover letter outlining research interest and experience, (3) contact information for two references.

Minimum Requirements - B.S. or M.S. in Biology or related fields. - Highly motivated individual and commitment to scientific rigorousness.

Desirable Qualifications (preferred but not required) - Hands-on experience from working with genomic data. - Experience from working in a Linux/Unix environment.

Application Information - Department of Biological Sciences https://fulbright.uark.edu/departments/biology/-prospective- students/apply-for-graduate.php - Cell and Molecular Biology Program https://cell.uark.edu/info-for- applicants/index.php - Graduate School https://-catalog.uark.edu/graduatecatalog/admissions/ About the University Founded in 1871, the University of Arkansas is a land grant institution, classified by the Carnegie Foundation among the nation's top 2 percent of universities with the highest level of research activity (R1 University). The University of Arkansas campus is located in Fayetteville, a welcoming community ranked as one of the best places to live in the U.S. The growing region surrounding Fayetteville is home to numerous Fortune 500 companies and one of the nation's strongest economies. Northwest Arkansas is also quickly gaining a national reputation for its focus on the arts and overall quality of life. Arkansas is a natural wonder of forests, mountains and lakes framed by picturesque rivers and streams. Some of the best outdoor amenities and most spectacular hiking trails are a short drive from campus.

"Xuan (Shaine) Zhuang" <xz036@uark.edu>

UCalifornia Irvine GenomeEvolutionTEs

Graduate Student in Evolutionary Epigenomics Lab

The Lee lab at the University of California, Irvine is looking for prospective PhD students to join us. Our group works on the interplay between transposable elements and genome evolution by combining population genomics, computational biology, epigenomics, and cell biology. Current projects in the lab include the unique roles of transposable elements in reshaping epigenome and 3D genome organization, empirical and theoretical population genomics of transposable elements, and broadly how epigenome shapes genome evolution. Candidates will ideally have interests broadly relevant to these topics, and will have opportunities to pursue their own research interests in evolutionary genetics/epigenetics. More information can be found at http://grylee.science/ Interested applicants should apply directly to one of the following three graduate programs: - Ecology and Evolutionary Biology (https://ecoevo.bio.uci.edu/graduates/-admissions/, deadline Dec 1st, 2020) - Cell and Molecular Biology - Genetics, Epigenetics, and Genomics track (https://cmb.uci.edu/admissions/, deadline Dec 1st, 2020) - Mathematical Cellular and Systems Biology (https://ccbs.uci.edu/education/mcsb/admissions/, deadline Dec 15th, 2020) graduate programs.

It is strongly recommended that interested applicants contact Dr. Lee (grylee@uci.edu) beforehand to directly discuss which graduate programs may be the best to apply to. Please use the subject line $B!H(BGraduate student position inquiry.$B!I(B

Grace Yuh Chwen Lee Assistant Professor Department of Ecology and Evolutionary Biology University of California, Irvine grylee@uci.edu

Grace Yuh Chwen Lee <grylee@uci.edu>

UCollege London OriginsOfLife

Three 2-3 year post-doc positions in "Origins of Biology: How energy flow structures metabolism and heredity at the origin of life", in the Department of Genetics, Evolution and Environment, University College London

The project is funded by a BBSRC sLoLa grant. Two post-doc positions will focus on experimental work related to the origins of metabolism as observed in life, ranging from microfluidic work on CO2 fixation and the growth of fatty acid protocells, through to nucleotide synthesis and polymerization via prebiotic equivalents of biochemical pathways. The third position will involve mathematical modelling, considering the origin of the genetic code within this prebiotic scenario, and will interact closely with the two experimental fellows, aiming for synergy between modelling and experiment.

The project is led by Prof Nick Lane works on how energy flow structures metabolism and genetics at the origin of life and over evolution. He uses both experimental and computational methods to address these questions. This project is an ambitious attempt to develop a framework for the origin of life grounded in energy flow that stretches from CO2 fixation to the origin of the genetic code. It is highly cross-disciplinary and involves co-investigators across three divisions. The UCL team includes Prof Andrew Pomiankowski (expertise in mathematical modelling of heredity and selection); Dr Amandine Maréchal (expertise in bioenergetics and analytical chemistry), Prof Finn Werner (expertise in chemistry and evolution of RNA polymerase); Prof Beppe Battaglia (expertise in protocells and amphiphile chemistry); Prof Jo Santini (expertise in anaerobic microbiology and redox metals); Prof Nicolas Szita (expertise in microfluidic engineering and process chemistry); Dr Stefanie Frank (expertise in FeS free-radical chemistry) and Prof John Ward (expertise in carbon-carbon bond formation).

The three posts are funded initially for 2 or 3 years with possibilities for extension. We will be looking for overlapping skill sets and an ability to collaborate effectively as part of a larger team bringing together collaborators from across three divisions at UCL.

Please contact Prof Nick Lane (nick.lane@ucl.ac.uk) for informal enquiries Job reference number UOS026571 For application details and submission, see: https://-tinyurl.com/y5oqp7v2 Application deadline: 6 Dec 2020 Preferred starting date: early 2021

a.pomiankowski@ucl.ac.uk

UConnecticut PlantComputationalGenomics

The Plant Computational Genomics lab in the Department of Ecology and Evolutionary Biology at the University of Connecticut seeks motivated MS and PhD students to join the lab in the Summer/Fall 2021. Our research focuses on the computational analysis of genomic and transcriptomic data generated by high throughput sequencing platforms from non-model plants. We implement this through analysis related to gene finding, gene expression, transcriptome assembly, and conserved element identification, through machine learning and computational statistics. We use these methods to address questions related to genome biology and population genomics. In addition, we develop web-based applications that integrate BIG data across domains to facilitate the forest geneticist or ecologist's ability to analyze, share, and visualize their data (http://treegenesdb.org). Such integration requires the implementation of semantic technologies and ontologies to connect genotype, phenotype, and environmental resources. We collaborate and contribute to the TRIPAL project (http://tripal.info).

We welcome students from both traditional biology backgrounds as well as more computational ones. Our team is very multi-disciplinary and we collaborate with forest tree biologists around the world. Learn more about our research here: http://plantcompgenomics.com/research Research Topics:Potential research topics, include 1) development of visualization tools and integration of high throughout environmental data to support genome-wide association studies in forest trees; 2) application of genomic and transcriptomic techniques to evaluate the impact of climate change on tree populations; 3) development of software solutions to improve the characterization of non-model plant genomes (and transcriptomes); 4) interrogation of natural genetic variation across populations in large, complex conifer genomes; 5) application of deep learning frameworks to improve genome annotation; 6) investigation of epigenetics in relation to disease resistance in complex genomes; 7) and your ideas here!

To Apply: Financial support for graduate students is available through research assistantships, teaching assistantships, and university fellowships. Excellent written and oral communication, as well as strong quantitative skills, are required. Backgrounds in genetics/genomics, evolutionary biology, bioinformatics, and computer science are desired. Interested candidates should send an email with a research interest statement (~2 pages), a CV/cover letter, and unofficial undergraduate/graduate transcripts to Jill Wegrzyn (jill.wegrzyn@uconn.edu). Qualified candidates will be contacted directly for Zoom interviews following review.

About UConn: The University of Connecticut (UConn) has been one of the nation's leading public institutions since its founding in 1881. Located in Storrs, UConn's main campus is situated in the picturesque rolling forests and fields quintessential of New England, yet is only 30 minutes from Hartford, and has close connections to Providence, Boston and New York. The Department of Ecology and Evolutionary Biology consists of over 30 faculty and 60 graduate students with research spanning nearly all major groups of organisms. The Department maintains close ties with the Departments of Physiology and Neurobiology, Molecular and Cell Biology, Marine Sciences, and Natural Resources Management and Engineering, as well as the Center for Environmental Sciences

and Engineering and the Institute for Systems Genomics, which together comprise one of the largest groups of biologists in the Northeast.

"Wegrzyn, Jill" <jill.wegrzyn@uconn.edu>

UDenver OriginSponges

Scott Nichols' lab (scottnicholslab.weebly.com) at the University of Denver, Department of Biological Sciences, is recruiting MS and/or PhD students for the 2021/22 academic year. The Nichols lab studies the molecular and cellular foundations of animal origins. Three main areas of research include 1) the evolution of epithelial organization, 2) the origin of novel animal cell types (current focus on muscle), and 3) the evolution of microbial recognition and response mechanisms in animals (innate immunity). We address these topics primarily through the study of (primarily) sponges, but with comparative work in cnidarians (sea anemones) and ctenophores (comb jellies). Students are welcome to work in any of these broad areas and encouraged to become the intellectual drivers of their own projects. Research in the lab is somewhat reductionist in that we focus on detailed cell and molecular mechanisms, but we are broad thinking organismal biologists at the core and strive to always interpret our results in the broadest evolutionary context, and at the whole-organism level.

The University of Denver is located minutes from downtown Denver Colorado, at the edge of the Rocky Mountains. The Department of Biological Sciences is currently composed of 21 tenure-track faculty and ˜35 graduate students. The application deadline is January 15th, 2021, the GRE exam is NOT required. Because the department is "direct admission," students are assigned to a specific lab at the point of admission rather than rotating between labs in their first year. Therefore, before applying, applicants should directly contact Scott Nichols (scott.nichols@du.edu) to discuss their interest in joining the lab. At point of contact, please provide some background about yourself, including stating your specific interests in the Nichols lab. Both MS and PhD students are offered full tuition remission and a living stipend. This applies to both domestic and international applicants.

The most competitive applicants will have taken undergraduate courses in cell and molecular biology and evolution. Experience with molecular biology techniques in a research lab setting is preferred but not required.

The Nichols lab has a philosophy and strong track record of inclusivity. Of 25 postdocs, graduate students, and undergraduate researchers, 50% have been women and 44% have been members of historically underrepresented racial groups.

Scott Nichols, Ph.D.

Associate Professor Department of Biological Sciences 2101 E. Wesley Ave SG Mudd #288 University of Denver Denver, CO 80208

email: sa.nichols321@gmail.com lab homepage: Nichols Lab Homepage phone: 303-871-5658

Scott Nichols <sa.nichols321@gmail.com>

UEastAnglia 2 Symbioses

TWO PhD positions open at the University of East Anglia, UK, for Oct 202 start.

1.ANIMAL-PLANT SYMBIOSES IN PEST INSECTS. Supervisors: Tracey Chapman and Philip Leftwich UEA Biological Sciences

Sequencing technologies have fueled a rapid rise in descriptions of microbial communities associated with hosts, but what is often harder to ascertain is the evolutionary significance of these symbioses. In recent research we found that mixed modes of microbial transmission play an underappreciated role in the establishment of animal host-microbe relationships. The goal of this project is to test this idea empirically and thus define fundamental rules governing such associations. https://www.traceychapmanresearch.com/ To apply:

https://biodtp.norwichresearchpark.ac.uk/projects/-animal-microbe-symbioses-in-pest-insects/ 2. SEX DIET AND LIFESPAN

Supervisors: Tracey Chapman, Wilfried Haerty and Alex Maklakov

UEA Biological Sciences and The Earlham Institute

The key question addressed in this project is to determine why each sex typically has a different length of life.

Males and females possess distinct morphological, physiological and behavioural characteristics, of which differences in lifespan are among the most striking, but perhaps the least well understood. Length of life can also be extraordinarily plastic 'V varying significantly with reproductive status and nutrient availability. How-

ever, the extent to which lifespan is plastic in each sex also differs markedly. For example, sex differences in male vs female lifespan in fruitflies can be completely reversed by manipulations of diet and mating status via dramatic effects on females.

The main aim of the project is to test the idea that differences in male and female lifespan arise because each sex chooses and require different nutrients to maximise their lifespan and fitness. The student will test this using the latest experimental and bioinformatic tools in the fruitfly system.

https://www.traceychapmanresearch.com/ To apply: https://biodtp.norwichresearchpark.ac.uk/projects/sex-diet-and-lifespan/ "Tracey Chapman (BIO - Staff)" <Tracey.Chapman@uea.ac.uk>

UEdinburgh 2 EvolutionaryBiol

PhD Positions available at the Institute of Evolutionary Biology, University of Edinburgh, UK

1) Dissecting the causes of reproductive mode variation in the plant Mimulus guttatus Supervisors: Matthew Hartfield, Mario Vallejo-Marin (University of Stirling).

Perennial plants exhibit a wide variety of reproductive modes, from exclusively sexual reproduction through seeds, to relying almost entirely on asexual propagation. Various theories exist to explain the evolutionary and ecological advantages of these reproductive modes, but testing theories can be hampered by a lack of empirical data. The facultative sexual plant Mimulus guttatus (yellow monkeyflower) is an exciting model system for investigating the evolution of different reproductive modes, as there is a large amount of variation in the relative contribution of sexual and asexual reproduction, with populations spanning different environments and ecological niches. By investigating genetic diversity across populations and linking it to the local reproductive mode across environments, we can ask: are different modes (sex or asex) associated with specific ecogeographic regions? To what extent is the reproductive mode affected by local ecological conditions, compared to large environmental factors such as climate? How does reproductive mode (sex, asex) and mating'Vsystem (selfing, outcrossing) interact?

The PhD project will use UK populations of Mimulus guttatus as a model system for investigating the evolution of reproductive modes, and how they interact with the mechanisms of natural selection. The student will generate new genomic data from previously'Vcollected samples to quantify the extent of self-fertilisation and clonal reproduction in natural populations. These data will allow us to investigate how the evolutionary history differs between regions exhibiting different reproductive modes. The project will put the student at the forefront of developing an exciting new model system for evolutionary genetics study.

Further details and application instructions: https://www.ed.ac.uk/e4-dtp/how-to-apply/our-projects?item=848 (E4 DTP, deadline 7th January 2021) https://www.findaphd.com/phds/project/eastbio-dissecting-the-causes-of-reproductive-mode-variation-in-the-yellow-monkeyflower/?p126276 (EASTBIO DTP, deadline 6th January 2021)

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2) What maintains genetic diversity in self'Vfertilising nematodes? Supervisors: Matthew Hartfield, Simon Martin, Alex Twyford.

Many species in nature are capable of self'Vfertilisation, where individuals create both male and female gametes that can fuse during reproduction. Although commonly associated with plants, it is also present in a number of animal species. It is expected that self'Vfertilising species harbour less genetic diversity than related outcrossing species, due to a lack of genome mixing with other parents. However, emerging genome data from three self'Vfertilising species of Caenorhabditis nematodes (C. elegans, C. briggsae, and C. tropicalis) have found punctuated regions that harbour surprisingly extensive genetic diversity. Various hypotheses have been proposed for why this diversity exists, including population admixture and balancing selection. These findings call for more extensive theoretical models to be developed, to fully test what is the likeliest cause of these elevated regions of diversity.

This project will first involve the creation of new mathematical models to determine what processes can maintain diversity in self'Vfertilising species, and over what time frame these processes hold. These models will then be compared to Caenorhabditis genome data to test theoretical predictions. This project will provide the student with important mathematical, statistical, and genomics skills that are prevalent in modern biology research, and will shed light on what forces influence the evolution of different reproductive modes.

Further details and application instructions: https://www.ed.ac.uk/e4-dtp/how-to-apply/our-projects?item=1323 (E4 DTP, deadline 7th January 2021)

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The expected start date for both projects is October 2021. Interested students can get in contact to ask for more details.

Matthew Hartfield m.hartfield@ed.ac.uk https://-matthartfield.wordpress.com The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

Matthew Hartfield <mhartfie@exseed.ed.ac.uk>

UEdinburgh 2 PopulationGenetics

PhD Positions available at the Institute of Evolutionary Biology, University of Edinburgh, UK

1) Dissecting the causes of reproductive mode variation in the plant Mimulus guttatus

Supervisors: Matthew Hartfield, Mario Vallejo-Marin (University of Stirling).

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Further details and application instructions: https://na01.safelinks.protection.outlook.com/?url=-https%3A//www.ed.ac.uk/e4-dtp/how-to-apply/our-projects%3Fitem%3D848&data%7C01%7Cbrian%40helix.mcmaster.ca%nxebCDI85WDXTgjO42/uPVNpaMmSp/-bpYA9yGlcSNLA%3D&reserved=0 (E4 DTP, deadline 7th January 2021) https://-na01.safelinks.protection.outlook.com/?url=-https%3A%2F%2Fwww.findaphd.com%2Fphds%2Fproject%2Feastbio-dissecting-the-causes-of-reproductive-mode-variation-in-the-yellow-monkeyflower%2F%3Fp126276&data%7C01%7Cbrian%40helix.mcmastFO7i52D2u79pjvgvTzQDgvYKJZSQoXewba%2BwEnec2pM%3D&rese0 (EASTBIO DTP, deadline 6th January 2021)

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UGeneva PaleogenomicsMammals

PhD Position in Paleogenomics at MuseumLab, University of Geneva

A 4-year PhD position is available at the MuseumLab, Department of Genetics & Evolution,

University of Geneva (Switzerland). The fellowship will be for a period of 4 years with a tentative starting date on 1 March 2021. Please send your full application to nadir.alvarez@unige.ch <mailto:nadir.alvarez@unige.ch>.

Job Description: The main objective of this PhD project is to investigate the evolutionary history of three large mammals, i.e., reindeer, bison, and horse, from different localities of southwestern France, from the late upper Pleistocene to the early Holocene, using ancient DNA retrieved from bone specimens collected in natural archives. Using an approach involving hybridization capture and high-throughput sequencing (HyRAD methods family), we aim to generate data on genetic variation across time in these three large mammals, in order to establish the demographic trajectory of their populations across this period of time, characterized by several sequences of large-scale climate change. Additional analysis will imply the search for adaptive genetic and epigenetic variants. This project is funded by a grant from the Swiss National Science Foundation, in partnership with Prof. Ludovic Orlando (University of Toulouse, France) and Dr. Jean-Christophe Castel (Geneva Museum of Nat ural History, Switzerland).

Requirements: The position requires admission to the doctoral program Ecology and Evolution (ECOVO) of the PhD School of Life Sciences at the Faculties of Medicine and Science, University of Geneva, which has a strategic ambition of being a leader in its field. Candidates for this PhD position will be selected accordingly, and are expected to be in the upper segment of their class with respect to academic credentials. We search for a candidate who has completed a MSc degree (or other education equivalent to a Swiss degree) of high quality in biology, paleontology, evolutionary biology, bioinformatics or a field demonstrably relevant to the project description. The candidate should have a background within population genomics and should be able to document strong analytical skills and first-hand experience in standard laboratory techniques. Experience with ancient DNA, analytical or theoretical, and bioinformatics will be considered positively. We seek a highly motivated, enthusiastic person with the ambition to gain insight and publish papers in leading, international journals, in possession of good interpersonal skills and willing to collaborate with researchers across disciplines. The chosen candidate is expected to spend part of his/her PhD both in Nadir Alvarez' team in Geneva and in Ludovic Orlando's lab in Toulouse; the possibility exists for a co-supervised doctorate ("doctorat en cotutelle") between Universities of Geneva and Toulouse. The applicant is expected to able to communicate fluently in English as staff in both laboratories have a strong international background.

Pay grade: CHF 47,040 to 50,040 per year (https://-bit.ly/3pcDUey)

The application must include 1) an application letter including a statement of interest, summarizing your scientific work and interests and describing how you fit the description of the person we seek; 2) a CV (summarizing education, positions, academic experience, and academic publications if relevant); 3) copies of educational certificates (bachelor and master), and transcript of records; 4) three names and contact details of references (full name, relation to candidate, e-mail and telephone number).

Deadline for sending your application: 15 December 2020

nadir.alvarez@gmail.com

UGeorgia EvolutionaryBiology

The University of Georgia is seeking graduate students to join a large community of ecology and evolutionary biology researchers through the Integrated Life Sciences (ILS) program.

Admission through the ILS program allows new graduate students to explore research across 14 participating Ph.D. graduate programs, including over 50 laboratories with diverse ecology and evolutionary biology interests. Over their first semester in the program, graduate students can choose rotations among laboratories from nearly all life science departments.

The application deadline for Fall 2021 admission to the ILS program is December 4, 2020. To learn more about the ILS program and research at the University of Georgia, please visit the website at:

http://ils.uga.edu Potential students are encouraged to explore the ecology and evolutionary biology research underway at UGA through the ILS program and to get in contact with faculty whose research they are interested in:

http://evolutionary.genetics.uga.edu/EvoEcol.html Athens, Georgia is a vibrant college town and is consistently ranked one of the top places to live.

Please contact us with any questions.

Michael White Evolution and Ecology ILS Group Representative Assistant Professor of Genetics

whitem@uga.edu

"whitem@uga.edu" <whitem@uga.edu>

UHull BeeNutritionalEcolGenomics

˜˜ Fully funded PhD: Nutrigenomics and the resilience of bees in a changing climate ˜˜

For details please contact Dr James Gilbert (james.gilbert@hull.ac.uk). To apply, and for more details: https://panorama-dtp.ac.uk/research/-nutrigenomics-and-the-resilience-of-bees-in-a-changing-climate/ Deadline: 5 Jan 2021 Eligibility: UK, EU and International, but with funding stipulations here: https://panorama-dtp.ac.uk/how-to-apply/ Funding: UK (NERC, Competition-funded)

A fully funded PhD position is now open for applications at the Universities of Hull and Leeds, UK, via NERC's Panorama Doctoral Tranining Partnership programme.

Bees, our foremost pollinators, are vital for ecosystem stability and global food security 'V providing pollination services worth hundreds of billions of pounds annually. The UK is home to ˜245 species of wild bees which collectively perform more pollination than managed honeybees and bumblebees. Unfortunately, wild bee populations are declining, under pressure from multiple causes 'V one key factor being nutrition.

All bees feed offspring with pollen gathered from the landscape. But human influences such as agricultural intensification are altering nutritional landscapes for bees [3,4], and fundamentally affecting gene expression, growth and reproduction. Most of what we know about bee nutrition comes from studies in social bees like honeybees or bumblebees [5,6], where nutrition influences caste determination, development, pathogen resistance and others. However, the nutritional ecology of other bees, particularly solitary bees, is largely unstudied.

Human activity is also changing climates and raising average temperatures. Temperature affects animals'Â metabolic rate, physiology, digestion, and nutrient assimilation, as well as gene expression. Dr Gilbert'Âs recent work [7] has identified the need to store enough carbohydrate and fat to survive the winter as potentially critical for solitary bees'Â nutritional ecology. But we know little about how this is regulated, how climate change will affect bees, and how bees will deal with changing nutritional landscapes in a future filled with uncertainty.

We are now, for the first time, in a position to understand not just whether but also how different nutritional landscapes and climates affect bees. This exciting cross-institutional project combines field ecology with cutting edge molecular approaches to address a crucial knowledge gap about how bees are being affected by human-altered nutritional landscapes. This project addresses issues relevant for pure ecological science, conservation biology, agriculture and crop science.

At Hull, Dr Gilbert'Âs lab has pioneered rearing protocols for the economically and ecologically important solitary bee, Osmia bicornis. This work is providing an unprecedented window onto bee nutritional ecology. At Leeds, Dr Duncan'Âs lab uses a variety of cutting-edge molecular tools to understand how bees are influenced by their environment. Dr Duncan has conducted groundbreaking work on how nutrition affects gene expression in developing bees, as well as recent work on the environmental and molecular control of reproduction in O. bicornis. The student will capitalise on this timely opportunity to synthesize the research interests of these two research groups and create collaborative links between institutions. The candidate will be integrated into both lab groups and will benefit from the infrastructure and connections at both universities.

Using careful manipulations within controlled laboratory environments, the student will first establish how dietary macronutrients affect the fitness of solitary bee larvae in response to changes in rearing temperature. Then, they will use high-throughput sequencing technology to examine genome-wide expression profiles of larvae receiving different diet and temperature treatments, to understand the molecular and physiological mechanisms underlying bees'Â responses to landscape and climate change. Nutritional cues are known to alter gene expression [8], but to date studies have focussed largely on a few genes, and only in honeybees. The student will compare larvae receiving different treatments in (1) choices larvae make about which nutrients to consume, (2) correlates of fitness such as body size and overwinter survival, and (3) expression of growth- versus diapause-related genes.

Outcomes: The findings will, firstly, shed light on the optimal nutrition for bees 'V both currently, and in a warmer future. They will help inform active measures such as wildflower strips to conserve and promote these vital pollinators as the climate changes. Secondly, results will also show the physiological effects of different nutritional

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

UIdaho ComparativeGenomics

Ph.D. Positions in Comparative Genomics

The Jones Lab at the University of Idaho is recruiting at least two Ph.D. students to study the comparative genomics of seahorses, pipefishes and seadragons (to start Fall 2021). The students will participate in two major NSF-funded research initiatives. The first is to use comparative genomics and population genomics to investigate genome-level effects of sexual selection. The second is to investigate the evolutionary developmental biology of the male's brood pouch and how its evolution shapes the male-pregnancy microbiome. This latter project is a collaboration between the Jones Lab and the Cresko Lab at the University of Oregon. Both projects will involve international field work, molecular bench work, and bioinformatics.

The University of Idaho is particularly strong in evolutionary biology and bioinformatics. In addition, it is located less than ten miles from Washington State University, which is home to another excellent group of evolutionary biologists. Scientists from the two universities collaborate and interact extensively.

The University of Idaho is located in Moscow, Idaho, which is a small college town situated in the Palouse region of Washington and Idaho. Moscow is known for its quaint downtown and its summer farmer's market. Thanks to its compact size, everything in Moscow is within walking or biking distance. In addition, Moscow's location on the Idaho-Washington border puts it within easy reach of abundant outdoor recreational opportunities.

Interested students should contact Adam Jones by email (adamjones@uidaho.edu) for more information about the projects and instructions on how to apply.

"Jones, Adam (adamjones@uidaho.edu)" <adamjones@uidaho.edu>

UJyvaskyla EvolutionCooperation

Headline: UJyväskylä_Natural and social selection on cooperation

The Department of Biological and Environmental Scienceis currently seeking to recruit candidates to the positions of DOCTORAL STUDENTinECOLOGY AND EVOLUTIONARY BIOLOGY The position starts onApril 1st, 2021or as soon as possible thereafter,contract length maximum of four years. TheSawfly-labstudiesempiricallyevolution of cooperative antipredator-strategies under varying ecological and social conditions in socially behaving haplodiploid pine sawflies. You can find more information about research questionshere. Qualifications we are looking for We are seeking a highly motivated person to studyexperimentally the maintenance of cooperation and cheating in a PhD project entitled"Natural and social selection on cooperative antipredator defence strategies of pine sawflies". Work will include both experimental work such as rearing experiments, behavioural experiments and field experiments as well as chemical analyses and molecular work.Expectedresults will provide important information onecological and evolutionary processes that shape the first steps of evolutionary transitions toward more complex sociality: group living and cooperation within a group. Expected results will also have applied importance asthey will be used to predict how variation in the social behavior and its consequences on individualfitness (e.g. immunology) can contribute for the population dynamics of forest pest insects under changingenvironmental conditions. Our lab will also support and provide opportunities to do outreach and develop science communication about the research topics depending on candidate's own interests. TheDoctoral Studentwill join an international team of researchers at theDepartment of Biological and Environmental Science,University of Jyväskylä. In addition, PhD-project will involve both national (University of Oulu and University of Eastern Finland) and international (University of Kentucky, USA) research collaboration.The project provides diverse training and experience in the fields ofecologyandevolutionarybiology,evolutionary genetics,behavioural ecology, andchemical ecology. You are the person we are looking forif youhave a Master's degree, or be about to obtain a Master's degree, inecology, evolutionarybiology, evolutionary genetics,entomology, zoology, or other relevant discipline.You areexpected to have excellent

written and oral communication skills andan abilityto work independently in the laboratoryand field. Preliminary experience withexperimental work with insectsis considered as an advantage, but is not necessary. The duties, qualification requirements and language skills of a postdoctoralresearcher and a doctoral studentare stipulated bythe University of Jyväskylä Regulations and language skills guidelines.A good command of English is required and a proficiency to teach in English will be considered beneficial. Doctoral Student has to be accepted as a student of post-graduate studies in the University of Jyväskylä. If the applicant does not have permission for post-graduate studies in the University of Jyväskylä, it must be applied with a separate application procedure from the faculty after the selection for the position. What does the University of Jyväskylä offer as an employer? At the University of Jyväskylä you are a recognized member of our community with a unique opportunity to influence international research. You get to participate in our international and multi-science community where the welfare of each individual is important. At Jyväskylä we offer a great and lively campus area with opportunities to maintain an active and healthy lifestyle. Finland has a high standard of living, with free schooling (also in English), affordable childcare, good family benefits, and healthcare. Jyväskylä is located in central Finland in the Finnish lakeland, and has excellent opportunities for different nature, outdoor, and sports activities. The city of Jyväskylä is a major educational center and the city has a large student population. As such there is a vibrant cultural scene in the city. To find useful information about the University of Jyväskylä, the City of Jyväskylä and living in Finland, see theUniversity's International Staff Guide. The annual salary range for a Doctoral Student in the beginning will be approximately 27,500 EUR (gross income, including holiday bonus). A trial period of six months will be used in the beginning of the employment. How to apply? The application documents that should be included in pdf format:

Curriculum vitae (CV), composed according to good scientific practice and considering, when possible, the template for a researcher's curriculum vitae by theFinnish Advisory Board on Research Integrityand includingcontact information of two academics who can provide

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UKentucky InsectSystematicsGenomics

PhD position in insect evolution, systematics, & genomics

I am seeking a highly motivated PhD student to join my research group at University of Kentucky in Spring 2020/Fall 2021. Work in my lab focuses on insect evolution, speciation, integrative taxonomy, and molecular systematics using genomic approaches. The exact research project topic for this potential student is somewhat flexible, but will ideally focus on the genomic architecture of speciation and hybridization in North American swallowtail butterflies. Other potential projects include investigating ways that machine learning can be used to facilitate species delimitation, evaluating ecological drivers of diversification in buck moths, and developing molecular diagnostic tools for species identification and pathway analysis in invasive insect pests. I am also open to ideas and encourage potential applicants to contact me directly to discuss their interests and suitability. For more information, see www.julianrdupuis.com . The Department of Entomology at University of Kentucky offers excellent graduate training in diverse areas of insect biology. The Entomology graduate program is ranked in the top 10 nationally and is consistently rated as one of the most productive programs at the University of Kentucky, measured by the total number of student publications and presentations. Students from our department go on to have successful careers in a variety of sectors, including academia, industry, government science, and extension, to name a few.

I am looking for a student with a strong background in biology, entomology, or ecology and evolution (BSc or equivalent, MSc preferred). Experience with field research, molecular biology/genomics, and bioinformatics is preferred, as well as demonstrated research experience through completion of a MSc or undergraduate research. This position includes a competitive stipend, tuition waver, and health coverage.

Interested applicants should submit 1) a cover letter detailing research experience, interests, and career goals, 2) a CV and unofficial transcript, and 3) name and contact information for three references to julian.dupuis@uky.edu. The successful applicant will be re-

quired to apply to the University of Kentucky Graduate School, although application to the graduate school can come a later time. See https://entomology.ca.uky.edu/-academics/graduate for more information on how to apply.

Julian R. Dupuis, Ph.D. Assistant Professor Department of Entomology University of Kentucky Lexington, KY 40546 (859) 562-2544 julianrdupuis.com

"Dupuis, Julian R." <Julian.Dupuis@uky.edu>

ULausanne Microbiome

PhD student position - The role of the soil microbiome in determining plant responses to the mycorrhizal symbiosis (Uni. Lausanne, Switzerland & collaboration with the ETH ZuÌrich)

We are re-advertising this unfilled position. If you applied previously, it is not necessary to apply again.

Job Description: A PhD student position is available in the Sanders' group to study the role of the soil microbiome in determining plant responses to the mycorrhizal symbiosis using experimental approaches. The research will build on previous work in the group showing that mycorrhizal fungi can shape soil microbial communities. We now want to know how the structure and composition of soil microbiomes influence how the plant responds to inoculation with mycorrhizal fungi.

It is intended that the results of this project will be combined with research in the field where our work is leading to real solutions to increase production of food in areas of the world where starvation is a major problem. More information about our work can be found at http://people.unil.ch/iansanders/ The project is part of a large collaboration at the new Swiss Centre for Excellence in Research on Microbiomes, between many research groups at the University of Lausanne and the ETH ZuÌrich https://nccr-microbiomes.ch . Your skills and qualifications: Candidates must be highly motivated, have am MSc (or very soon), and have a strong interest in community structure, coupled with microbial metagenomics and/or microbial communities. You must have a strong interest in investigating this topic using an experimental approach. An interest in using appropriate bioinformatics tools will be a clear advantage, as will, an interest in solving problems in an analytical way. The successful candidate will work on this project with a postdoctoral researcher. You should have good interpersonal skills and an ability to work well in a multicultural team.

Job information: The position is available as soon as possible. A PhD at the University of Lausanne takes between 3 and 5 years. The contract is initially for 1 year, renewable. Most of the PhD student's time will be dedicated to research, and there is the additional possibility of supervising master students.

Applications: You must apply online to the University of Lausanne job portal and upload a CV and motivation letter in English. The letter must include the names of 2-3 referees. The link to apply is:

https://bit.ly/2XTc2jq Applications must be received not later than 23rd December 2020. Informal enquiries may be made by email to ian.sanders@unil.ch but you MUST only apply online. You must NOT send your application to this email address.

Ian Sanders <ian.sanders@unil.ch> Ian Sanders <ian.sanders@unil.ch>

UMinnesota EvolutionInvasiveSymbioses

Evolution of Invasive Symbioses of Wood-Boring Beetles

Two graduate research assistantships are available at the Ph.D. level to investigate the evolution of microbes associated with invasive beetles (the emerald ash borer (Agrilus planipennis) and the red turpentine beetle (Dendroctonus valens). This NSF funded project will focus on the taxonomic, functional, and genetic biodiversity of microbes associated with these insects and their role in the invasive process in the U.S. and China, respectively. The overall goals of the project are to understand how microbial communities and their functions may evolve during biological invasions to aid the invasiveness of wood-boring beetles. The project will characterize the microbiomes associated with these beetles using both culture-dependent and culture-independent approaches, investigate potential functions of microbial associates using laboratory, greenhouse, and field experiments, and characterize the genetic mechanisms of evolution within fungal genomes that contribute novel metabolic adaptations to their beetle hosts. One graduate assistantship will concentrate on sequencing microbes that may function in degrading lignocellulose, detoxifying plant defense compounds, or facilitating pathogenesis on trees, while the other will investigate entomopathogenic fungi

associated with beetles and the arsenals of secondary metabolites they produce that are toxic to insects.

To apply: Questions regarding the position should be directed to Dr. Kathryn Bushley (kbushley@umn.edu) or Dr. Bob Blanchette (robertb@umn.edu). Informal inquiries are welcome. Please send an e-mail with your background and research interests and a CV. To be considered for these positions, you must apply through the Graduate School (http://www.grad.umn.edu/) (Deadline Dec. 1, 2020) to either the Departments of Plant and Microbial Biology (https://cbs.umn.edu/-academics/departments/pmb), Plant Pathology (https://plpa.cfans.umn.edu/graduate-program/-about-graduate-program), or Ecology, Evolution, and Behavior (https://cbs.umn.edu/academics/-departments/eeb/graduate/about-program) at the University of Minnesota. See links above for general information on each department's graduate program, application procedures, funding opportunities, current students, faculty and their research interests, and life in the Twin Cities in Minnesota. Positions available beginning in January or September of 2021.

Kathryn Bushley <kbushley@umn.edu>

UNottingham EvolutionaryEcology

The ecological and evolutionary significance of functional variation in mitochondria in three-spined stickleback.

NERC-funded Envision DTP studentship, based at the University of Nottingham in collaboration with Bangor University. Provides a tax-free stipend (15,285 in 2020/21) for 3.5 years, and UK university fees.

In this multidisciplinary, international project you will address novel and exciting questions about the ecological and evolutionary consequences of mitochondrial variation in wild animals. You will combine ecological fieldwork, fish-keeping and behavioural experiments with cutting-edge bioinformatics and physiological assays to examine differences between three-spined stickleback fish with different mitochondrial genetics. Ecological fieldwork will take place in the Scottish Outer Hebrides, and there will be opportunities for visits to collaborating labs in Germany and Canada.

Mitochondria, the powerhouse of complex life, are present in all cells of eukaryotes. They are unusual because they carry a complement of their own DNA, separate from the nucleus, which is inherited maternally. For many years it has been believed that the substantial variation in mitochondrial DNA between populations is neutral. More recently, in stark contrast, it has been suggested that mitochondrial variation may be fundamentally important for adaptation to environmental change, given that mitochondria contain perhaps the most critically important machinery of complex life, which converts nutrients into available energy. However, we know almost nothing about the functional consequences of mitochondrial variation in wild organisms, or its ecological and evolutionary significance.

The project will be based in the MacColl lab at the University of Nottingham, http://-ecology.nottingham.ac.uk/AndrewMacColl/index.php, a friendly, dynamic and well-funded group, embedded in a wider cohesive group of ecologists and evolutionary biologists http://ecology.nottingham.ac.uk/index.html . Applicants should have an interest in evolutionary biology, ecology, genetics, physiology and/or behaviour. They should hold a minimum of a UK Honours degree at 2.1 or equivalent in a biological or environmental subject. Candidates with additional (e.g. Masters) qualifications will be looked on favourably. A driving licence, experience of remote fieldwork and SCUBA/snorkelling would be valuable. Funding for international students *may* be possible.

Please contact Andrew (andrew.maccoll@nottingham.ac.uk) for further information. Apply online @ http://www.envision-dtp.org/projects/apply/ Further reading Barreto, F.S. et al. (2018) Genomic signatures of mitonuclear coevolution across populations of Tigriopus californicus. Nature Ecology & Evolution, 2: 1250-7.

Dean, L.L. et al. (2019) Admixture between ancient lineages, selection, and the formation of sympatric stickleback species-pairs, Mol. Biol. Evol., 36:2481-2497.

Greenway et al. (2020) Convergent evolution of conserved mitochondrial pathways underlies repeated adaptation to extreme environments. PNAS, 117: 16424-16430.

Hill, G.E. (2015) Mitonuclear Ecology. Mol. Biol. Evol., 32: 1917-1927.

Lane, N. (2016) The Vital Question. Profile Books.

Professor of Evolutionary Ecology School of Life Sciences University of Nottingham University Park Nottingham NG7 2RD, U.K. Tel: +44 115 951 3410 http:/-/ecology.nottingham.ac.uk/AndrewMacColl/index.php Andrew.Maccoll@nottingham.ac.uk

UPlymouth PollinatorGenomes

ARIES (Doctoral Training Partnership) PhD opportunity at the University of Plymouth, UK

Hard-wired for Success? Unravelling Genomic Signatures in Pollinators (KNIGHT_P21ARIES)

link to ARIES website advertisemnt: https://-www.aries-dtp.ac.uk/studentships/knight/ Supervisors - Professor Mairi Knight (School of Biological and Marine Sciences, University of Plymouth) contact mairi.knight@plymouth.ac.uk - Professor Andrew Bourke (School of Biological Sciences, University of East Anglia) - Dr Wilfried Haerty (The Earlham Institute) - Dr Jonathan Ellis (School of Biological and Marine Sciences, University of Plymouth) - Dr Vanessa Huml (School of Biological and Marine Sciences, University of Plymouth)

Project Background

Many pollinator species, recognised as essential for ecosystem function, are undergoing rapid declines. One recent exception is the Tree Bumblebee' Bombus hyponorum: expanding its range into and across the UK in <20 years, it is now one of our most common species.

Building on previous work from the supervisory team, and in collaboration with the Earlham Institute, this project will investigate key genomic differences between this and other bumblebee (Bombus) species to substantially improve our understanding of the factors contributing to its success, along with the declines of others. While focused on one taxonomic group, the project has much broader relevance in understanding organismal responses to environmental change.

The project's focus is a genomic comparison of Bombus species from within the UK and continental Europe. Initial work has identified genomic regions of interest in B. hypnorum that may be indicative of an enhanced ability to adapt to anthropogenically altered landscapes. However, current data are preliminary and lack essential phylogenetic comparison.

This is an exciting opportunity to generate a substantial and highly novel genomic dataset to test hypotheses as to whether the observed genomic differences are unique to B. hypnorum, or shared among Bombus species (some evidence suggests elevated resilience in the wider Pyrobombus sub-genus). In addition to fulfilling the specific aims, the data generated will offer the candidate significant scope to guide the project's further direction through characterisation of genomic signatures and differences across this important group.

Training

The project will equip the successful candidate with state-of-the-art genomic techniques as well as bioinformatic and modelling skills that are highly transferable and increasingly essential across a wide range of academic and applied biological disciplines. Full training will be provided by the supervisory team. The candidate will also gain important soft skills (e.g. communication, team working, problem solving). He/she will be based in Plymouth, spending short periods at partner Institutions as relevant.

Person Specification

The successful candidate will have a biology-based degree, an academic interest in evolutionary ecology, and be enthusiastic about pursuing a laboratory- and computer-based project. Ideally, he/she will have some basic molecular ecology experience (e.g. DNA extraction, PCR) and knowledge of, and interest in, genetic and evolutionary analysis. Experience of genomic sequencing and bioinformatics is not essential, although experience/interest in programming (e.g. Python) would be an additional benefit.

References

1. Huml JV, Ellis JS, Lloyd K, Benefer CM, Kiernan M, Brown MJF, Knight ME (in review, MS available) Bucking the trend of pollinator decline: the population genetics of a range expanding bumblebee. 2. Crowther LP, Wright DJ, Richardson DS, Carvell C, Bourke AFG (2019) Spatial ecology of a range-expanding bumble bee pollinator. Ecology and Evolution 9: 986-997. 3. Crowther LP, Hein P-L, Bourke AFG (2014) Habitat and forage associations of a naturally colonising insect pollinator, the tree bumblebee Bombus hypnorum. PLOS ONE 9(9): e107568 4. Theodorou P, Radzeviciute R, Kahnt B, Soro A, Grosse I, Paxton RJ (2018) Genome-wide single nucleotide polymorphism scan suggests adaptation to urbanization in an important pollinator, the red-tailed bumblebee (Bombus lapidarius L.). Proceedings of the Royal Society B, 285, 20172806. 5. Arbetman MP, Gleiser G, Morales CL, Williams P, Aizen MA (2017) Global decline of bumblebees is phylogenetically structured and inversely related to species range size and pathogen incidence. Proceedings of the Royal Society B, 284, 20170204.

Key Information

This project has been shortlisted for funding by the

ARIES NERC DTP and will start on 1st October 2021. The closing date for applications is 23:59 on 12th January 2021. Successful candidates who meet UKRI's eligibility criteria will be awarded a NERC studentship, which covers fees, stipend (15,285 p.a. for 2020-21) and research funding. For the first time in

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USheffield AvianSpeciation

PhD: Mating signals and avian speciation

We invite applications from excited and enthusiastic students for a PhD position in Dr Chris Cooney's research group (https://www.christophercooney.co.uk/) in the Department of Animal and Plant Sciences at the University of Sheffield (https://www.sheffield.ac.uk/biosciences/aps).

— THE ROLE OF MATING SIGNAL EVOLUTION IN AVIAN SPECIATION —

PROJECT SUMMARY:

Explaining the diversity of life is among the greatest challenges in biology. A particularly dazzling component of this diversity concerns the spectacular array of animal mating signals found in nature. Such traits (e.g. colour patterns, songs) play a key role in reproductive processes including mate choice and species recognition, and evolutionary divergence in signalling traits has long been recognised as a powerful mechanism for triggering reproductive isolation and speciation. However, important questions concerning the role of mating signal evolution in determining large-scale patterns of speciation and species richness have never been thoroughly addressed.

Focusing on the global radiation of birds (>10,000 species), this project will combine new, high resolution datasets of plumage colouration and song structure for thousands of bird species with cutting-edge phylogenetic comparative methods to answer three unresolved questions at the core of speciation research:

I. How and why do mating signals diverge? II. What is the role of mating signal divergence in speciation? III. How does mating signal evolution influence the build-up and maintenance of species richness?

The successful applicant will become familiar with the use of natural history museum collections for data collection and will acquire advanced computer and communication skills that are highly transferable. Additionally, there will be ample opportunity for the student to develop and pursue their own research interests over the course of the project, in collaboration with co-supervisors Dr Gavin Thomas and Prof Ben Hatchwell.

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

FUNDING:

This competition-funded PhD project is part of the NERC/UKRI 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 please visit: https://acce.shef.ac.uk/phd-opportunities/sheffield/ UKRI provide the following funding for 3.5 years: - Research Council Stipend - at least 15,285 (UKRI rate for 2020/21) - Tuition Fees at the UK fee rate (2020/21 rate (B4,406) - Research support and training grant (RTSG)

Please note that international and EU fee rate candidates would need to cover the remaining amount of tuition fees by securing additional funding. International and EU tuition fees for 2021 entry 23,750.

GRADUATES AT SHEFFIELD:

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.

HOW TO APPLY:

To apply, and for further information, visit https://acce.shef.ac.uk/phd-opportunities/sheffield/. The closing date for applications is 15th January 2021.

Shortlisted applicants will be invited for an interview to take place in the w/c 22nd February 2021, with decisions made shortly after.

Dr Chris Cooney NERC Independent Research Fellow Dept. Animal and Plant Sciences, Univer-

sity of Sheffield Email: c.cooney@sheffield.ac.uk Personal webpage: https://www.christophercooney.co.uk/ c.cooney@sheffield.ac.uk

UTasmania PlantEvoBiol

A PhD scholarship (AUD$28,092/year for 3.5 years full-time) is currently available at the University of Tasmania to investigate the molecular basis for stomatal responses to low humidity.

The position is open to Australian and New Zealand candidates and to international candidates who are already located in Australia.

Applicants who hold a first-class Honours degree or equivalent qualifications and experience in molecular biology, bioinformatics, plant physiology and/or genetics are encouraged to apply.

For more information visit the website: https://www.utas.edu.au/research/degrees/available-phd-projects/phd-projects/college-of-sciences-and-engineering/school-of-natural-sciences/biological-sciences/characterising-the-molecular-basis-for-stomatal-responses-to-low-humidity2 . Interested students who meet the eligibility criteria should contact Frances Sussmilch by email at Frances.Sussmilch@utas.edu.au including a CV and cover letter.

"frances.sussmilch@utas.edu.au" <frances.sussmilch@utas.edu.au>

UTexas ElPaso AvianPopGenomics

The Lavretsky Lab at the University of Texas at El Paso (https://www.utep.edu/science/lavretskylab/) is currently recruiting a graduate student to start in the Fall of 2021 (negotiable)! The NSF funded PhD position will unravel genomic consequences when domesticated individuals interbreed with their wild sister taxa in natural settings. The student will join a vibrant and growing research body in the Department of Biological Sciences, Ecology and Evolutionary Biology Program, at The University of Texas at El Paso (UTEP).

In short, the student will work to uncover the genomic and morphological consequences from a century of interbreeding between domestic and wild mallard ducks. The student will join a multi-institutional research team, and will apply a comprehensive set of molecular techniques to geographically broad species-wide sample sets from contemporary populations, where they will work with >100 full genomes of genetically vetted pure wild mallards, domestic mallards, and their hybrids. Genetic sampling will be extended 100 to 150 years into the past using ancient DNA approaches with museum specimens. Moreover, using 3D morphometric analysis of museum specimens, as well as feeding trails with live wild and domesticated mallards, we will examine how the movement of traits associated with domesticated birds (e.g., bill morphologies that affect feeding efficacy) into wild populations may affect the adaptability of wild populations. The PhD student will have the opportunity to live in Washington D.C. for several summer months where they will work alongside Smithsonian collaborators to collect ancient DNA and 3D morphometric data.

MINIMUM QUALIFICATIONS:

- B.S. Degree in evolutionary biology, molecular biology, conservation genetics, bioinformatics or a related field

- Highly self-motivated, independent, and creative thinkers that are enthusiastic about pursuing a career in population, conservation, and evolutionary genetics.

DESIRED QUALIFICATIONS:

- M.S. Degree in evolutionary biology, molecular biology, conservation genetics, bioinformatics or a related field

- Experience in population genetics, evolutionary genetics, or molecular evolution and with molecular data

- Experience with programing language such as Perl or

Python

- Experience with analysis of NGS sequence data

APPLICATION PROCESS:

To apply, please submit: a cover letter describing research interests, career goals, and experience related to, or interest in, a current CV; unofficial academic transcript; and, the name and full contact information for three references to Dr. Philip Lavretsky (plavretsky@utep.edu). Review of applications will begin December 15, 2020 and continue until the position is filled.

"plavretsky@utep.edu" <plavretsky@utep.edu>

UZurich EvolutionPrimateBehaviour

3 PhD positions to study cooperation in common marmosets and vervet monkeys, starting date 01.04.2021

The positions are linked to a collaboration between Carel van Schaik, Judith Burkart (both University of Zurich) and Redouan Bshary (University of Neuchâtel). One position is financed by the University of Neuchâtel, the other two by a 4-year grant from the Swiss Science Foundation, which also covers all field and lab work. The title of the grant is "Acts of Assistance: Solving the riddle of stable cooperation among non-relatives in nonhuman primates". The aim is to test experimentally 'shared stake models' and 'competitive altruism models' on two monkey species with rather different social systems. The first thesis will focus on wild and captive marmosets (based in Zurich), the second on wild vervet monkeys, and the third one will link social behavior and physiological correlates in both species (latter two based in Neuchâtel).

We seek highly motivated team players who are interested in proximate and ultimate aspects of cooperation. Applicants need a master degree in Biology or equivalent. Other criteria for our choices will be a candidate's knowledge of animal behavior, evolutionary theory, previous field research experience, publication record, and (for the 3rd position) skills in physiology.

The application needs to contain copies of certificates, a full CV, the names of 3 potential referees (no need for reference letters at this stage!), and a letter of motivation (2 pages max) that should include your view on animal cooperation. You can specify a preference for one of the three PhD topics but this point will be largely clarified during interviews.

Time line: please submit your application until 7.12.2020 to Carel van Schaik vschaik@aim.uzh.ch. We will inform candidates before Christmas, and conduct online interviews in the second half of January. The project will start in April, 2021. If you have any questions please contact Carel van Schaik, Judith Burkart judith.burkart@aim.uzh.ch, or Redouan Bshary redouan.bshary@unine.ch.

Best wishes, carel van schaik

Carel van Schaik <vschaik@aim.uzh.ch>

Vienna PopulationGenetics

Call for PhD students in Population Genetics is open: apply by Jan 17, 2021 Start date: Sept 2021 (or earlier)

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.

Available topics include:

- Evolution from de novo mutations - influence of elevated mutation rates. - Evolution of sex-specific neuronal signaling. - Genomic architecture of reverse selection. - Inference of selection signatures from time-series data. - Long-term dynamics of local Drosophila populations. - Temperature adaptation in Drosophila: phenotypic adaptation. - Understanding polygenic adaptation.

Only complete applications (application form, CV, motivation letter, university certificates, indication of the two preferred topics in a single pdf) received by January 17, 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 students will receive a monthly salary based on currently EUR 2.205,60 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 fÃ Â $\frac{1}{4}$r Populationsgenetik Veterinärmedizinische Universität Wien (Vetmeduni Vienna) Veterinärplatz 1, 1210 Wien

Current home office contact via Skype: julia.hosp Office: +43 1 25077 4338 (currently unavailable)

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

VirginiaCommonwealthU InsectSymbioses

The Boyd lab at Virginia Commonwealth University is currently seeking a graduate student to start in the fall of 2021. My research group studies the evolution of insect-microbial partnerships. Over the last 480 million years, insects have repeatedly formed partnerships with microbes to gain novel and adaptive functions. The gain of beneficial partners has been particularly important for the evolution of vertebrate parasitism by insects. My lab is currently focused on understanding the roles of beneficial microbes in parasitic insects, with multiple lines of research on both blood and feather feeding lice. The successful applicant will have opportunities to study one or more elements of the louse microbiome and how each element has contributed to the evolution of parasitism.

The successful applicant will receive training in bioinformatics; phylogenetics and phylogenomics; comparative phylogenetics; genome sequencing, assembly, and annotation; comparative genomics; entomology; and molecular biology.

The lab is located in the heart of the VCU Monroe Park Campus in Richmond, Virginia, USA. The VCU campus is integrated into the downtown area, with close access to restaurants and the James River.

PhD students will apply through the Integrative Life Sciences program and Masters students will apply through the Bioinformatics program.

Integrative Life Science PhD: https://-lifesciences.vcu.edu/academic-programs/phd-in-integrative-life-sciences/ Masters in Bioinformatics: https://cbds.vcu.edu/academics/graduate/ To learn more about my research, please visit the lab page at https://rampages.us/bboydlab/ Interested applicants should submit a cover letter describing your interest, relevant experience, and career goals and a CV to boydbm@vcu.edu.

Bret Boyd <boydbm@vcu.edu>

WageningenU UValencia InsectEvolution

Within the EU-funded INSECT DOCTORS program, we have a vacancy for a PhD candidate. The INSECT DOCTORS network trains promising young scientists to develop the knowledge, technical skills and tools to diagnose and manage disease problems in commercial insect production systems. INSECT DOCTORS is a European Joint Doctorate (EJD) Programme funded in the framework of the H2020 Marie Sklodowska-Curie ITN programme. In total, 15 PhD candidates participate in this programme, covering a wide range of topics from pathogen diagnostics to experimental evolution. To learn more about the training network please visit our website: https://na01.safelinks.protection.outlook.com/?url=-http%3A%2F%2Fwww.insectdoctors.eu%2F&data%7C01%7Cbrian%40X1TFCKYvjm17wSirl%2BAP2mei2i%2BrA1GoLMcUTcM7j3o%3D&r0 Vacancy for PhD candidate (intended start date January 2021): The recent revolution of large-scale sequencing technologies has unveiled a vast amount of viruses in insects, including also DNA viruses. In addition to pathological 'overt' infections, many viruses produce silent or 'covert' infections in their hosts, which are often vertically transmitted from parent to offspring. Under certain conditions, such covert infections can switch to overt, lethal, infections. Here we aim to determine the mechanism by which large dsDNA viruses are maintained as covert infections in insects. In addition, the conditions and mechanism facilitating a transition from covert to overt infections will be studied. Furthermore, the effect of covert viruses on host fitness are investigated. Understanding these processes is needed to predict, prevent and control diseases in insect mass rearing, enabling sustainable rearing of insects. The knowledge obtained will be fundamental to develop tailored detection methods and to optimize insect mass rearing methods.

The PhD candidate will work under the supervision of Dr. Vera Ros (Wageningen University & Research) and Dr. Salvador Herrero (University of Valencia, Spain). The candidate will be based at Wageningen University & Research, and will perform a secondment for a minimum of 9 months at the University of Valencia.

For more information, and for the eligibility rules, see:

https://na01.safelinks.protection.outlook.com/-?url=https%3A//www.wur.nl/en/show/-PhD-position-Covert-DNA-virus-infections-in-insects.htm&data%7C01%7Cbrian%40helix.mcmaster.ca%7C57365d8ff8b8f4f9c804e08d8011782282%7C44876307b42942ad8c2528cd4U8zOGTw5MC6D8nsPNBdUTtZSyrZV2afhNBkDi4LrSD8%3D&reserved=0 Only applications through the WUR portal are accepted. Note that the last day to apply is Nov 26!

Dr. ir. Vera I.D. Ros Associate Professor

Laboratory of Virology | Plant Sciences Group | Wageningen University | Droevendaalsesteeg 1 | 6708 PB Wageningen, The Netherlands |

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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

WashingtonStateU PlantMicrobeMutualism

The Porter Lab at Washington State University, Vancouver is accepting applications from prospective PhD students. We study how mutualisms'Vcooperative interactions between species'Vimpact evolutionary processes and ecological dynamics. We work with plants and their beneficial microbial associates to test fundamental theory about cooperative interactions. Our research projects range from the field, to the lab to the greenhouse and integrate a variety of approaches from ecological genetics, ecology, quantitative genetics, and genomics. The student would have the opportunity to join current projects in the lab investigating how the domestication of legume crops like soybean, pea, and chickpea has altered symbiosis with nitrogen-fixing rhizobium bacteria:

https://labs.wsu.edu/stephanie-porter/ Applicants should have a bachelor's degree in a field relevant to lab research. We look for strong communication skills, research experience, and/or quantitative skills or an interest in learning them. Students will receive a stipend, tuition, and travel and research support via a mix of research assistantships, teaching assistantships, departmental funding, and university fellowships. Students will also be supported to seek external fellowships through the NSF, USDA, and other sources. Students in the lab have access to equipment and supplies for research in lab, the WSUV greenhouse, and/or WSU's Central Ferry Research Farm. WSU has a large and dynamic community of scientists working on cutting-edge questions about plants and microbes in natural and agricultural ecosystems. Students in the Porter lab apply to the WSUV Biology or Plant Biology Graduate Program! https://cas.vancouver.wsu.edu/science-graduate-programs/biology-and-plant-biology-ms-and-phd WSU Vancouver is an inclusive, innovative, non-residential research university dedicated to offering premier undergraduate and graduate educational and research experiences. Situated on 351 scenic acres, WSU Vancouver is in the homeland of the Chinookan and Taidnapam peoples and the Cowlitz Indian Tribe. WSU Vancouver is located in Vancouver, Washington in the southwest region of Washington state. A part of the Portland, Oregon metro area, Vancouver offers a wealth of social justice, cultural and recreational interests including identity-specific community events, visual and performing arts, professional sports teams, farmers markets and nature trails. In addition to its celebrated quality of life, the Pacific Northwest boasts a fruitful climate for scientific collaboration, with opportunities at numerous medical, environmental, research and teaching institutions throughout the region.

Interested prospective students should explore the lab website and email stephanie.porter@wsu.edu with:

1) "Prospective student" in email subject line 2) Brief cover letter describing accomplishments, research interests, and career goals 3) CV 4) Unofficial transcripts 5) Sample of your scientific writing (eg. a manuscript or a class paper you've written)

Applicants who email by November 20th will be given preference. This will allow time for me to schedule virtual meetings with top candidates to discuss potential projects before they apply to the graduate program (application deadline January 10th).

Stephanie Porter <stephanie.porter@wsu.edu>

WesternWashingtonU EvolutionaryBiol

The Biology Department at Western Washington University has openings for graduate students starting Fall 2021. Faculty members in the department offer a wide range of expertise, from molecular biology to ecology. Graduate students are eligible for teaching assistantships, which fund the majority of tuition and provide a stipend of $12,411 per academic year. WWU is located in Bellingham, WA, a coastal city north of Seattle at the base of Mt. Baker in the northwestern part of the state. We strongly advise interested students to contact potential advisors in their area of specialty to get more details about individual labs.

APPLICATION DUE DATE: Feb. 1, 2021

More information can be found with the following resources: - The Biology Dept: https://cse.wwu.edu/-biology/biology-graduate-program - The WWU Graduate School: https://wp.wwu.edu/arellanolab/ Jim Cooper: The Cooper Evo-Devo lab focuses on aspects of development that have shaped long-term evolutionary patterns. We are particularly interested in how changes in skull morphogenesis alter the cranial mechanics of fishes in ways that allow them to invade new feeding niches. To do this we combine several different approaches that include studies of wild- caught marine fish larvae from the Salish Sea, experimental work with genetically modified zebrafish, using high-speed video to collect biomechanical data, transcriptomic studies of fish skull development, genetic mapping, and evolutionary studies of cranial form and function. Because our work is highly integrative, our lab group can accommodate students with a diverse range of interests. cooperw5@wwu.edu

Lina Dalberg: The Dahlberg Lab uses the model organism C. elegans to probe the neurobiological, cellular, and behavioral role for proteins involved in a ubiquitin-dependent processes called Endoplasmic Reticulum Associated Degradation (ERAD). Student projects will use a variety of techniques, including fluorescence microscopy, behavioral assays, and biochemical characterization to investigate how ERAD targets neural receptors for degradation. A second, NSF-funded project focuses on improving metacognitive skills in undergraduate Biology students; students interested in this project should have experience (via coursework or research) in education and pedagogy research. http://faculty.wwu.edu/-dahlbec/ Nick Galati: Cilia are evolutionarily ancient, hair-like projections that generate hydrodynamic force and process extracellular information. The goal of our lab is to understand how cells build cilia, with a specific focus on how individual proteins traffic to and from a structure at the base of cilia, called the basal body. Much like traffic cameras and GPS illuminate vehicular traffic patterns, we aim to create a spatial map of protein movement to and from cilia as they assemble and sense the environment. To do this, we combine high-resolution fluorescence microscopy with digital image analysis to detect and quantify ciliary protein trafficking in space and over time. Our analyses are primarily conducted in mammalian cells and in the protist Tetrahymena.

https://biology.wwu.edu/people/galatid David Hooper: Plant Community and Ecosystem Ecology: effects of riparian restoration on nutrient retention in mixed use watersheds. I will be accepting one graduate student in fall 2021 to work on a modeling project to understand how to better prioritize riparian restoration. Student work would combine GIS analyses and modeling of riparian buffers with field work assessing nutrient runoff to validate modeling results. This project is linked to the Nooksack Fraser Transboundary Nitrogen Project and the International Nitrogen Management System. Please see a full description of the project and desired grad student characteristics at my web site below. I strongly recommend contacting me prior to applying if you are interested in working in my lab. https://wp.wwu.edu/-hooper/ Suzanne Lee: A fascinating discovery in the early 2000s was that many more regions of eukaryotic genomes are expressed than previously thought, producing a variety of RNAs whose functions, if any, are unclear. Current research in the Lee Lab is focused on understanding the biological impacts of these mysterious RNAs, with the broad goal of elucidating the underlying molecular mechanisms that govern RNA production, function, and degradation to maintain optimal cellular health. Key questions that intrigue us include: What are the molecular mechanisms that control the expression of non-protein coding and non-functional RNAs? What are the biological functions of uncharacterized non-protein coding RNAs? What happens to a cell if pathways normally responsible for processing or

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ZFML Bonn BumbleBeeEvolution

PhD student position in Evolutionary Genomics in bumble bees (f/m/d)

German salary scale for the public sector TV-L E 13

(65% of a full-time position), fixed term (36 months)

The Zoological Research Museum Alexander Koenig in Bonn, Leibniz Institute for Animal Biodiversity (ZFMK) invites applications for this position, which is available from January 1st, 2021, and it is a fixed-term position for a period of 36 months. The research will be conducted as part of a DFG-funded project on evolution and developmental regulation of convergent phenotypic traits in bumble bees.

This project combines Population Genomics and Developmental Genomics of multiple bumble bee species in an EvoDevo framework to study repeatability of evolution and the genomic basis of specific phenotypic changes in populations and species.

Applicants should have a graduate academic university degree (Master or equivalent) in natural sciences with a background in genomics, molecular ecology, bioinformatics/computational biology, entomology and/or related disciplines.

Applicants should have a strong interest to work in an interdisciplinary team so that excellent knowledge of English is required. While this project also includes field and wet lab work, it is very computation-heavy. Therefore, previous (basic) knowledge of command-line (Linux) and "R" is required. Ideally, the candidate is familiar with the basis concepts of genome assembly, population genomics and transcriptomics. Training for specific approaches will be given. The successful applicant will collect specimens in the field, perform DNA and RNA extractions and analyse data on with a variety of cutting edge bioinformatics approaches.

The ZFMK is an equal opportunity employer and is committed to increasing the proportion of women in academics. Consequently, we actively encourage applications by women. We also welcome applications from candidates with severe disabilities. Disabled candidates with equivalent qualifications will be preferentially considered.

Applications should be written in English and compiled into a single PDF file. The application should include a cover letter (including the date on which the applicants could start the position, their motivation for this position and future research interests), curriculum vitae and copies of university degrees.

Application material should be submitted no later than 22nd of November, 2020 as a single PDF file to Ms. Sandra Middelhoff: s.middelhoff@leibniz-zfmk.de

In case of questions concerning the position please send an email to Dr. Eckart Stolle (e.stolle@leibniz-zfmk.de).

For more information about the museum see http://-www.leibniz-zfmk.de .

Dr. Eckart Stolle Head of Section Insect Comparative Genomics

Center of Molecular Biodiversity Research Zoological Research Museum Alexander Koenig Leibniz Institute of Animal Biodiversity Adenauerallee 160, 53113 Bonn, Germany

e.stolle@leibniz-zfmk.de, www.zfmk.de/en/zfmk/eckart-stolle Room N 115, tel: +49 228 9122-421

Eckart Stolle <E.Stolle@leibniz-zfmk.de>

ClemsonU GenomicsLabPosition

Genomics Lab Technician The Clemson University College of Science Genomics and Bioinformatics Facility (CUGBF) is searching for a wet lab technician. This is an initiative started by the College of Science to support the research programs of our faculty, postdocs and graduate students. The researcher will assist in day-to-day lab management duties, carryout DNA/RNA isolations, NGS library construction, run our Illumina NextSeq, carryout basic bioinformatic analyses, and conduct other genomic-related research activities. Additionally, we envision that the idividual will help train students/postdocs in genomics-related wet lab skills. This facility will support our NIH COBRE funded EPIC center (https://www.clemson.edu/centers-institutes/epic/) and multiple faculty carrying out genomic level research in all aspects of life sciences.

Job site: http://ow.ly/XBkT50CqaZn Please contact Chris Parkinson (viper@clemson.edu) with any questions.

Department of Biological Sciences and

Department of Forestry, andEnvironmental Conservation 190 Collings St., 157b Life Sciences Facility, Clemson University, Clemson, SC 29634 (864) 656-3058

Christopher L Parkinson <viper@clemson.edu>

ColoradoStateU PlantBiologist

The Department of Biology at Colorado State University requests applications for a Plant Biologist at the rank of Assistant Professor to enhance a growing group of plant scientists and join a department of diverse faculty whose research spans from the subcellular to ecosystem levels in both animal and plant systems.

We seek a creative and collaborative plant biologist who applies new technologies and/or integrative approaches to answer biological questions. We are broadly interested in applicants who use genetic, genomic, molecular, cellular, physiological, systems biology, and/or synthetic biology approaches to enhance knowledge about plant biology. Examples of potential research interests include studies of plant molecular genetics, plant synthetic biology, plant physiology, plant metabolism, plant development, plant functional traits, and plant interactions with biotic or abiotic environments.

This tenure-track position involves undergraduate and graduate teaching (approximately 45 percent), research involving undergraduates and graduate students (approximately 45 percent), and service/outreach (approximately 10 percent). The applicant will be expected to develop a strong extramurally funded and collaborative research program. Colorado State University provides a highly supportive environment with opportunities to interact with faculty in other colleges on campus and to participate in the Graduate Degree Program in Cell and Molecular Biology (https://-

cmb.colostate.edu/), the Graduate Degree Program in Ecology (https://ecology.colostate.edu), and other interdisciplinary programs. For more information about CSU in general and the Biology Department in particular, please visit the Biology Department website: https://www.biology.colostate.edu . RESPONSIBILITIES: The successful candidate will develop an extramurally funded and innovative research program that interfaces with synthetic biologists, geneticists, molecular biologists, physiologists, evolutionary biologists, and/or ecologists within the department and across the CSU community. Teaching may include courses in plant physiology, plant development, cell biology, and/or other related courses. Candidates who can enhance the department's commitment to diversity through research, teaching, and outreach are strongly encouraged to apply.

The Department of Biology at Colorado State University is advertising for a Plant Biologist in our Department at CSU (https://jobs.colostate.edu/postings/81473).

"Alissa.Williams@colostate.edu"
<Alissa.Williams@colostate.edu>

ColoradoStateU VertebratePhysiologist

This is a general search for an integrative vertebrate physiologist, but we especially encourage researchers taking evolutionary approaches to apply.

The Department of Biology at Colorado State University requests applications for an Integrative Vertebrate Physiologist at the rank of Assistant Professor, to add to a growing group of integrative biologists. We seek a broadly trained vertebrate physiologist who addresses fundamental and integrative questions about the mechanisms underlying organism function. Examples of potential research interests could include studies of energetics/metabolism, biochemical adaptation, behavioral endocrinology, neuroethology, eco-immunology/disease ecology, thermal physiology/global change biology, or other areas that seek to understand the mechanistic basis of how organisms interact with their physical and biological environments. Competitive candidates would perform interdisciplinary research using cutting edge methodologies to answer questions of broad interest.

This tenure-track position involves undergraduate and graduate teaching (approximately 45 percent), research involving undergraduates and graduate students (approximately 45 percent), and service/outreach (approximately 10 percent). Colorado State University provides a highly collaborative and supportive environment with opportunities to interact with faculty in other colleges on campus and to participate in the Graduate Degree Program in Ecology (https://ecology.colostate.edu), Molecular, Cellular and Integrative Neurosciences program (http://mcin.colostate.edu/) and the Graduate Degree Program in Cell and Molecular Biology (https://cmb.colostate.edu/). CSU is also home of the Natural Resource Ecology Laboratory (http://www.nrel.colostate.edu/). For more information about CSU in general and the Biology Department in particular, please visit the Biology Department website: https://www.biology.colostate.edu/ . The Department of Biology at Colorado State University is committed to creating and sustaining an accessible and inclusive culture that values cultural and academic diversity. To maintain an inclusive environment for faculty, staff, and students, we seek to hire faculty who will represent our inclusive values in classrooms, labs, and work environments, and that recognize the need for a diverse and inclusive department as well as the essential role of faculty in that effort.

RESPONSIBILITIES: The successful candidate will develop an extramurally funded and innovative research program that interfaces with evolutionary biologists, ecologists, geneticists, molecular biologists and/or physiologists within the department and across the CSU community. Teaching may include courses in comparative animal physiology, mammalogy, and organismal animal biology.

The Department of Biology at Colorado State University is advertising for an Integrative Physiologist in our Department at CSU (https://jobs.colostate.edu/postings/81377). < https://jobs.colostate.edu/postings/81377 > Integrative Vertebrate Physiologist Assistant Professor jobs.colostate.edu

Shane B. Kanatous, PhD Department of Biology/1878 Colorado State University Fort Collins, Co 80523-1878 Phone: 970-491-0782 Fax: 970-491-0649

What you PERMIT, you PROMOTE. What you ALLOW, you ENCOURAGE. What you CONDONE, you OWN. What you IGNORE, you're RESPONSIBLE for. It is time for change! We must be better!!!

"Kanatous,Shane" <Shane.Kanatous@ColoState.EDU>

EasternMichiganU EvolutionaryPhysiology

The Department of Biology invites applications for a tenure-track position in Animal Physiology at the Assistant Professor level, beginning August 2021. We seek an individual with a Ph.D., research experience in animal physiology, and a demonstrated ability and interest to teach at the college level. We value an inclusive environment, and the successful candidate will be expected to establish an active research program that engages a diverse student population in undergraduate and Master's-level research. The successful candidate will be expected to teach and develop courses, including Human Physiology, Concepts in Physiology, and an upper level course in their area of expertise. Human Physiology is a popular course, and the candidate will be expected to help coordinate the lecture and lab components of this course with other instructors.

The Department of Biology is situated in a renovated science complex with shared resources needed for a research program, including a vivarium. The Department of Biology hosts 21 faculty members with diverse teaching and research interests and offers undergraduate programs in Biology and Biology teaching, as well as graduate programs in Biology, Ecology and Organismal Biology, and Cellular and Molecular Biology. Eastern Michigan University has an enrollment of ˜18,000 students and is located in Ypsilanti in southeastern Michigan, in between Ann Arbor and the Detroit metro area.

Application packages should include a cover letter, a curriculum vita, a one-page research statement, a one-page teaching statement, and up to three reprints or preprints. The research and teaching statements should include a description of your experiences, goals, and strategies for mentoring and engaging students at a primarily undergraduate institution. Eastern Michigan University is an institution of opportunity with a diverse student population including under-represented, non-traditional, and working students. We value applicants that demonstrate their plans to support and make welcome minoritized students in the classroom and in research.

Letters of reference will be requested later in the application process. Please upload materials to: http://-www.emich.edu/jobs under Assistant Professor of Biology (Animal Physiology). Review of applications will begin January 5 and continue until the successful candidate is hired. For additional information, contact Dr. Tom Mast (tmast@emich.edu), 441 Mark Jefferson, Eastern Michigan University, Ypsilanti, MI, 48197, telephone (734) 487-4242. Department web site: http:/-/www.emich.edu/biology/ .Eastern Michigan University is an affirmative action/equal opportunity employer. Women and members of minority groups are encouraged to apply.

To apply: http://www.emich.edu/jobs "hseidel@emich.edu" <hseidel@emich.edu>

Halle Germany EvolutionBiodiversity

A tenure-track junior professorship in 'evolution and biodiversity' is offered at the Institute for Biology of Martin Luther University Halle-Wittenberg (https://www.uni-halle.de/?lang=en), starting as soon as possible. We seek to appoint an outstanding early career scientist who is internationally recognized in the field of evolution and biodiversity of animals, preferentially with a focus on insects. The successful candidate should also strengthen well-established research areas at the German Centre for Integrative Biodiversity Research (iDiv; https://www.idiv.de/en/index.html), Halle-Jena-Leipzig. Teaching undergraduates in German is an integral component of the position.

Through this position, the Martin Luther University aims to encourage young scientists with excellent potential to attain an independent scientific career with long-term career perspectives. Though the junior chair is fixed for 6 years, following positive evaluation the position can become permanent (W1/W2 chair). In general, applicants should have been maximally employed for 6 years at a university prior to appointment so that they do not overstep the national laws relating to fixed-term academic employment (WissZeitVG).

Applications, which should include the usual documentation (cv, a complete list of publications and academic teaching activities, evidence of successful acquisition of third-party funding, and copies of certificates of the highest academic degree obtained, office and home addresses), should be sent as a single pdf file via email by 6 December 2020 to:

dekanat.bpnb@natfak1.uni-halle.de

Prof. Dr. Dietrich H. Nies Dean of the Faculty of Natu-

ral Sciences I - Life Sciences Martin Luther University Halle-Wittenberg 06099 Halle/Saale Germany

Further details can be obtained from: robert.paxton@zoologie.uni-halle.de

Robert Paxton <robert.paxton@zoologie.uni-halle.de>

HarvardSchPubHealth EvolutionMalaria

The Neafsey Lab at the Harvard T.H. Chan School of Public Health is seeking a Research Associate to contribute to our research program in the evolutionary genomics of malaria (https://sites.sph.harvard.edu/-neafsey-lab/). The successful candidate will develop a personal research program as well as manage experimental laboratory processes, including high throughput DNA extraction and multiplexed PCR assays to perform targeted Illumina sequencing. Our lab generates and analyzes large genomic datasets from malaria parasites and vector mosquitoes to understand mechanisms of disease evolution, transmission, population dynamics, drug resistance, immune evasion, and host/vector/pathogen interactions.

Ideal applicants will have a PhD in a relevant field, with strong background in molecular biology and/or molecular genetics, ideally in the context of malaria or other infectious diseases. The successful candidate will join a diverse group with expertise that spans molecular epidemiology, computational biology, and evolutionary genomics.

Basic Qualifications:

Candidates are required to have a Ph.D. in biology/molecular biology/molecular parasitology or equivalent, as well as at least three years of postdoctoral experience. Strong molecular biology laboratory skills are essential, previous experience with in vitro culture and manipulation of Plasmodium or other eukaryotic parasites strongly desired. Experience supervising research assistants, negotiating with vendors, managing project/protocol budgets, and administering lab safety protocols strongly desired.

Additional Qualifications:

Candidates should demonstrate a track record of consistent publication, have strong organizational, written, and oral communication skills, and should be able to work both independently and as part of a team. Spanish language proficiency is a plus.

Contact Information:

Please contact Professor Neafsey by email: neafsey@hsph.harvard.edu with CV, letter of interest, and names of three references.

Contact Email: neafsey@broadinstitute.org

Equal Opportunity Employer:

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.

neafsey@broadinstitute.org

IBE Barcelona Bioinformatician

Application deadline: 20th December 2020

Contract: Full-time, 12 months (with possibility of yearly renewal up to 5 years)

Location: Institute of Evolutionary Biology (CSIC-UPF), Barcelona, Spain

Starting date: March 2021

The Metazoa Phylogenomics Lab at the Institute of Evolutionary Biology (IBE) is seeking to hire a Bioinformatician/Computational Biologist.

About IBE:

The Institute of Evolutionary Biology (IBE) was founded in 2008 as a joint Institute of the Spanish National Research Council (CSIC) and the Pompeu Fabra University (UPF). It is located in Barcelona (Spain), in front of the Mediterranean.

The mission of the IBE is to address biodiversity studies describing functional and evolutionary genomics at all levels of observation: molecular, biochemical, physiological, and morphological. The IBE is the only research center in Catalonia and Spain which completely devotes its research to evolutionary biology, and it is currently a reference in Southern Europe. Nowadays, IBE activity involves more than 130 people and 24 research groups distributed in 5 scientific programs related to Evolutionary Biology research. Our employees enjoy access to state-of-the-art technology and a diverse range of

specialist training opportunities, including support for leadership and management.

About the Metazoa Phylogenomics Lab:

The overarching goal of the lab is to understand how animals reshape their genomes to generate their vast diversity and to adapt to the different environments. For that, we generate and interrogate genomic and transcriptomic data through the lens of phylogenomics. Our favorite creatures are arthropods and annelids, but our interest often transcends the level of phylum to understand animal genome evolution at a macroevolutionary scale. We are committed to maintaining a respectful, inclusive, and friendly working environment for all staff and students, as well as promoting your personal and career development.

Rosa FernÂ'ndez joined IBE as a Group Leader in January 2020, so this is a chance to help build a lab from the ground up and contribute your knowledge and passion to the group and its culture. The lab is a part of the Animal Biodiversity and Evolution Program at IBE. This position is funded by an ERC Starting Grant to understand the genomic basis of terrestrialization across animals.

About the role:

- Lead efforts in the lab to develop methods and resources for non-model organisms, and use these resources and pipelines to address novel questions in genome assembly and annotation, phylogenomics and comparative genomics.

- Work closely with the other team members to advise and help on analysis of sequencing data and other biological 'big data'.

- Manage the computational resources of the lab, including data storage, computing resources and databases.

About you:

- PhD in evolutionary biology, computational biology, bioinformatics or a related field, or a Masters degree with at least 3 years of experience with bioinformatics methods.

- Excellent programming skills in languages commonly used in bioinformatics (such as Python or R).

- Fluency with Linux shell scripting and high performance computing.

- Strong background in computational and evolutionary biology.

- High motivation and efficiency; ability to work independently and as part of a team.

- Proficiency in English (oral and written).

Additional information:

The position is available for 12 months, with the possibility of further renewal for several consecutive years. Starting date is expected in March 2021 or as soon as possible afterwards.

Interviews will be held in early January either in person or via video conference depending on travel needs and current restrictions; no particular preference will be given to candidates who are able to interview in person. We are committed to diversity and especially encourage women and members of underrepresented communities to apply.

If you are interested in the position, please send your CV and motivation letter to this link: https://forms.gle/-SvZR4VWUdAFJquwj9 IMPORTANT: Please name your documents as follows: 'ÂCV_your_name.pdf'Â and 'ÂMotivation_letter_your_name.pdf'Â

Questions? Feel free to contact Rosa Fernandez (rmfernandezgarcia00@gmail.com).

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Rosa Fernandez, PhD

Group Leader

Metazoa Phylogenomics Lab

Institute of Evolutionary Biology (CSIC-UPF)

Barcelona, Spain

Rosa FernÂ'ndez <rmfernandezgarcia00@gmail.com>

MississippiStateU MicrobialEvolution

Microbial Ecologist Position

The Department of Biological Sciences at Mississippi State University (MSU) invites applicants for a 9-month, tenure-track Assistant Professor position in Microbial Ecology. We seek a microbial ecologist whose research addresses fundamental questions in ecology with any microbial taxa (including, but not limited to, bacteria, viruses, protists, and fungi). Ideal applicants will complement existing strengths in the department by contributing to advances in systematics, cell and molecular biology, host-microbe interactions, biogeography, evolution, or environmental sciences. We encourage applicants with bold new perspectives and 'outside the box' approaches to research and teaching; particularly

those focused on interdisciplinary and collaborative research. The successful candidate will be expected to establish an externally funded research program, teach courses for the undergraduate and graduate programs (M.S. and Ph.D.), and contribute to the service mission of the department. Appointment will be at the rank of Assistant Professor, with an anticipated start date of August 16, 2021. Minimum requirements include a Ph.D. in a relevant area of Biology, with post-doctoral experience, evidence of sustained scholarly productivity, and evidence of teaching competence. Applications from members of groups that are typically under-represented in science are strongly encouraged.

The Department of Biological Sciences is housed in Harned Hall on the MSU-Starkville Campus, which was recently renovated providing modern facilities for cutting-edge research, including new imaging and high performance computing resources. The department offers degrees at the B.S. (Biological Sciences, Medical Technology, and Microbiology), M.S. and Ph.D. (Biological Sciences, Computational Biology) levels.

Mississippi State University is a comprehensive land-grant university that serves more than 22,000 students. Faculty in the Department of Biological Sciences have diverse research interests in bioinformatics, cell biology, developmental biology, ecology, evolutionary biology, genetics, microbiology, and systematics, and are funded by the NIH, NSF, DARPA, USDA, and DOJ, as well as numerous state and private organizations. Campus research infrastructure includes a High Performance Computing Collaboratory (http://www.hpc.msstate.edu/), proteomics and genomics equipment at the Institute for Genomics, Biocomputing & Biotechnology (http://www.igbb.msstate.edu/), computational and statistical expertise at the Center for Computational Sciences (http://www.ccs.msstate.edu/), Center of Biomedical Research Excellence , remote sensing and GIS expertise in the Geosystems Research Institute (http://www.gri.msstate.edu/), and microscopy and imaging through the Institute for Imaging and Analytical Technologies (http://www.i2at.msstate.edu/). Faculty in the Department of Biological Sciences have diverse research interests and active collaborations with MSU faculty in the Departments of Anthropology, Chemistry, Computer Science, Forestry, Wildlife, Geosciences, Biochemistry, Molecular Biology, Plant Pathology & Entomology, Biological Engineering, and the College of Veterinary Medicine.

Applicants must apply online at http://explore.msujobs.msstate.edu (search job 500610 under Careers tab). Attach (in a single pdf file) a cover letter, a CV, a statement of research expertise and goals (2-page maximum), a statement of teaching interests and competency (2-page maximum), a statement of your contributions and commitment to inclusivity (2-page maximum), contact information for three references, and reprints of up to three publications. Screening of applications will begin November 20, 2020.

Equal Employment Opportunity Statement: MSU is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, ethnicity, sex (including pregnancy and gender identity), national origin, disability status, age, sexual orientation, genetic information, protected veteran status, or any other characteristic protected by law. We always welcome nominations and applications from women, members of any minority group, and others who share our passion for building an inclusive community that reflects the diversity of our student population.

Mark E. Welch, Ph.D.

Professor Dept. of Biological Sciences Mississippi State University 295 E. Lee Blvd. Rm. #219 P.O. Box GY Mississippi State, MS 39762

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welch@biology.msstate.edu

NHM London InvertebrateOmics

We have a wonderful new opportunity at the Natural History Museum 'V a two-year fellowship for an -omics expert in non-insect invertebrates. There is a possibility that if funds allow at the end of the two years, that for a truly exceptional candidate, this post could be made permanent.

We are looking to bring key genomics skills and expertise into the museum's Invertebrates Division of the Life Sciences Department at a critical juncture. You will provide a timely opportunity to make use of NHM taxonomic and organism-based expertise, our enormous Invertebrate collection and new genomes being produced as a result of the Darwin Tree of Life project - a collaborative project between the NHM and Sanger and a number of other institutions, which plans to sequence entire genomes of all UK eukaryotic species.

Focusing on genomic studies in the fields of evolution, phylogenetics and development involving non-insect invertebrate groups, you will carry out independent

projects and collaborate with other researchers in the Invertebrate Division, within Life Sciences and externally. You will also lead and contribute to individual and collaborative grant proposals and publish original research in appropriate high impact journals.

This post is available to all nationalities.

More details can be found here:https://-/careers.nhm.ac.uk/templates/CIPHR/-jobdetail_1964.aspx Best wishes,

Suzanne

Dr Suzanne Williams Head of Invertebrate Division Dept of Life Sciences Natural History Museum Cromwell Rd London SW7 5BD United Kingdom Tel: + 44 (0) 207 942 5351

http://www.nhm.ac.uk/research-curation/staff-directory/zoology/s-williams/index.html Suzanne Williams <s.williams@nhm.ac.uk>

NHM UOslo MarineInvertebrateEvolution

Principal Engineer in ArtsDatabanken project

About the position A part-time position as Principal Engineer (80%) is available at the Natural History Museum (NHM), University of Oslo for two years. The expected starting date is 01.04.2021.

The Prinicipal Engineer will be part of the recently founded ArtsDatabanken-project "Assessing biodiversity in the marine algae belt". The marine algae belt comprising kelp forests, seagrass meadows and rocky reefs with coralline red seaweeds is one of the most active primary producing environments in the sea. It also harbors are great diversity of animals including sea squirts, ribbon worms, nick worms, serpulid worms, spionid worms and ghost shrimps. The species of these groups occupy important ecological functions as herbivores, predators and filter-feeding organisms and can be sessile or agile as well as solitary or colonial. Globally these taxa comprise more than 7,000 species with around 250 species documented from Norwegian waters. Despite this the knowledge about their taxonomy and distribution in Norway is at best poor and in dire need of improvement. Specimens in museum collections are often quite old material, which additionally is often wrongly determined due to unresolved taxonomic issues including the high degree of cryptic species in these groups. Besides cryptic species, many of these taxa include invasive species causing among others high economic damage in aquaculture and ship transportation due to biofouling. This is why we will conduct a field inventory in this habitat and collect species of these taxa in Norway (from the Skagerrak up to 70Â°N). With morphological and molecular methods, we will determine the species and learn more about their distribution (including reports from history and now) and their association with Norwegian nature types. Therefore, we also want to revise the existing museum collections in Norway. Through the project, we will contribute to basic biosystematics and species distribution research in general, and more specifically and importantly to red lists or other nature conservation management actions (e.g. updated information on distributions of invasive and native species including cryptic ones and their preferred habitats). The Natural History Museum has a modern DNA laboratory as well as microscopic infrastructure needed for the project. The position will be associated with the research group "Frontiers in Evolutionary Zoology", specifically Torsten Struck (Professor of Evolutionary Genomics).

Work tasks - Sorting and identifying specimens from the different habitats to the required taxonomic level - Photographic documentation of the species - Cataloguing and curating the species for the scientific collections - Determination of molecular barcodes for the different species - Compilation of research results into reports and publications - Field sampling (by boat, snorkeling, diving)

Qualification requirements - Applicants must hold at least a Bachelor's degree or equivalent in biology. - We seek a person with strong motivation for research in marine invertebrates. - The candidate must be skilled in sorting, identifying and curating of invertebrates, preferably marine ones. - Experience with molecular-biological methods is preferable. - Taxonomic knowledge in one the projects groups (i.e., Tunicata, Nemertea, Kamptozoa, Serpulidae, Spionidae or Caprellidae), possession of a diving licence and/or work experience in a museum is advantageous. - Communication skills (including written and spoken English)

We offer salary NOK 416 400 - 482 200 per annum in full time position (100%) depending on qualifications in a position as Principal Engineer (position code 1085) A friendly working environment, which is close to both the city center of Oslo, a vibrant and international city, which)is nice to live in, and to nature parks and mountains Full funding of the project-related activities, including molecular lab work and participation on field trips Training in the different animal groups including stays with our international cooperation partners

Flexibility with the arrangement of the working hours Membership in the Norwegian Public Service Pension Fund Attractive welfare benefits

How to apply - The application must include: - cover letter statement of motivation - CV (summarizing education, positions and academic work) - copies of educational certificates (academic transcripts only) - list of reference persons: 2-3 references (name, relation to candidate, e-mail and phone number) - The application with attachments must be delivered in our recruiting system. (see here https://www.jobbnorge.no/en/available-jobs/job/-195709/principal-engineer-in-artsdatabanken-project)

Formal regulations According to the Norwegian Freedom of Information Act (Offentleglova)

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OccidentalCollege LabManager DNA

The Moore Laboratory of Zoology at Occidental College in Los Angeles is seeking a full-time LAB MANAGER for the Fletcher Jones Genomics Center. The Lab Manager will carry out DNA-based projects, many using modern and historical specimens from the Moore Lab's natural history collections (see www.instagram.com/-mlzbirds). Current projects include an NSF-funded effort to compare DNA of modern and historical specimens and hybridization genomics of introduced Los Angeles parrots.

The successful applicant will have at least two years' experience working in or managing a molecular lab focusing on DNA and experience collecting and analyzing next-generation sequence data. Experience with an Illumina MiSeq and sequence capture techniques is a plus but not required. Duties include ancient and modern DNA extraction, library preparation for next generation sequencing, and training and coordinating a talented and diverse group of undergraduates in these activities. The applicant should have good leadership, organizational, and interpersonal skills. Project design and direction will be collaborative and co-authorship on resulting publications is a given. There are opportunities for project development, grant-writing, and teaching in the Biology department.

The position is renewable each year and includes a competitive benefits package with health, dental, and life insurance and eligibility for retirement benefits after 1 year. The position is paid at an hourly rate of $24/hour, scaling to ~$50,000/year. Access the full job ad here: https://www.oxy.edu/sites/default/files/assets/HR/-Hourly/mlz_genomics_center_manager_11.18.2020.pdf

Applications must include a two-page CV, a cover letter describing experience and interest, and contact information for three references (in the cover letter or CV). Please send applications to resumes@oxy.edu with subject line "Lab Manager Genomics Center". Inquires can be directed to John McCormack at mccormack@oxy.edu. Applications should arrive by December 2. The ideal start date for this position is mid-January.

The Moore Laboratory of Zoology is a world-renowned natural history collection featuring the largest Mexican bird collection in the world and over 65,000 bird and mammal specimens. The MLZ has close ties to nearby institutions such as UCLA, Huntington Library, and the L.A. County Natural History Museum. Occidental is a liberal arts college located in the culturally-rich Los Angeles neighborhood of Eagle Rock near Pasadena. Occidental is well-situated close to many outdoor recreational activities: the ocean, mountains, and desert can all be reached in 45 minutes or less. The neighborhood surrounding Occidental College is family friendly, walkable, and home to a wealth of urban amenities.

– John McCormack Director/Curator Moore Laboratory of Zoology -and- Associate Professor Biology Department Occidental College

Instagram: www.instagram.com/mlzbirds Twitter: www.twitter.com/laevolving Website: moore.oxy.edu

"mccormack@oxy.edu" <mccormack@oxy.edu>

OhioStateU MolluscCurator

The Ohio State University Department of Evolution, Ecology, and Organismal Biology seeks a curator for the Mollusc collections of the OSU Museum of Biological Diversity.This is a staff position within the College of Arts and Sciences. The Mollusc collections are especially strong in their holdings of freshwater Molluscs and are part of ongoing, state-funded research programs for conservation. Duties include those related to the accession

and maintenance of the collection, service to professional societies and within the university, and outreach to the general public. Required qualifications include taxonomic expertise in Molluscs, a MS or more advanced degree in Biology or a related field, and experience with museum collections. Applications are accepted through 11/15/2020. Details, including the portal for application, are here http://www.jobsatosu.com/postings/-103882 . Questions about the position can be directed to Marymegan Daly, Director of the Museum of Biological Diversity daly.66@osu.edu

Marymegan Daly, PhD Associate Dean of Undergraduate Education Professor of Evolution, Ecology & Organismal Biology The Ohio State University Columbus OH 43210

"Daly, Marymegan" <daly.66@osu.edu>

SGN Frankfurt CuratorOfEntomology

Job offer ref. #01-20045 For over 200 years the Senckenberg Gesellschaft für Naturforschung (SGN) represents one of the most relevant institutions investigating nature and its diversity. Currently, scientists from more than 40 countries across 11 locations in Germany conduct research in the fields of biodiversity, earth system analysis and climate change. Following its mission to "analyze and document biodiversity in earth system dynamics - to serve science and society" Senckenberg stands for curiosity-driven and application-oriented collections-based research. To strengthen and innovate the collections-based research in the Department of Terrestrial Zoology at the Senckenberg Natural History Collections in Frankfurt, the Senckenberg Society for Nature Research seeks to fill a position of

Curator of Entomology (m/f/d)

(full time)

We are looking for an internationally recognized entomologist with an excellent track record in integrative taxonomy, systematics, and evolutionary or ecological research of Coleoptera, Diptera or Lepidoptera. With this position we aim to strengthen our collections-based research through integration of innovative, non- or minimally invasive methods for harvesting scientific information from museum specimens, e.g. through innovative imaging approaches (hyperspectral imaging, ÂµCT, MRI, environmental SEM), chemical analyses, or microbiome/pathogen analysis. Collections-based research and curatorial duties will be associated with either the Coleoptera (1.7 mio specimens; 6542 primary types), Lepidoptera (1.2 mio specimens; 2300 types) or Diptera (0.5 mio specimens; 232 primary types) collections of the Senckenberg Research Institute and Natural History Museum Frankfurt are among the most extensive and scientifically important collections of Senckenberg. All three collections date back to the early 19th century and comprise dry-pinned and ethanol materials. Your tasks:

§Curate and develop one of the above mentioned collections and associated libraries

§Foster the Coleoptera, Lepidoptera or Diptera collections as important international research tools through development and growth

§Conduct innovative collections-based research on the taxonomy, systematics, evolution and/or ecology of Coleoptera, Lepidoptera or Diptera

§Acquisition of external funds

§Actively publish results of your research in international scientific journals

§Contribute to Senckenberg's Research Program through internal/external collaborations, e. g. with the Senckenberg Deutsches Entomologische Institut Müncheberg

Your profile:

§Doctoral degree in biology/zoology or a related field

§Excellent knowledge of Coleoptera, Lepidoptera or Diptera systematics

§Experience in curation and management of entomological collections

§Experience with modern research infrastructure and innovative methods, e.g. imaging, chemical analysis and/or microbiome/pathogen analysis

§Outstanding research record in systematics, morphology, evolutionary biology or ecology of Coleoptera, Lepidoptera or Diptera, documented by international peer-review publications

§Fluency in English both spoken and written; good knowledge of German

What is awaiting you?

§A vibrant, international team of scientists with collections-based research programs

§Excellent infrastructures and collaboration opportunities, e.g. in morphology, biodiversity genomics, evolutionary biology, ecology

§An attractive and challenging position in a research institution of international standing

§Opportunities to participate in teaching and outreach activities, e.g. in our museum

§A salary that reflects the tasks and responsibilities of the position based on the collective agreement for public service in the state of Hesse (TV-H E 13)

§Flexible working hours - annual special payment - company pension scheme - 30days holidays - discounted job-ticket for public transportation in the Rhein-Main area

The contract should start as soon as possible - ideally on March 1st, 2021. The Senckenberg Research Institutes support equal opportunity of men and women in management positions and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment will be Frankfurt am Main.

You would like to apply? Please send your application documents (CV, certificates and references, letter of motivation and future visions for research and collections), mentioning the reference of this job offer (ref.#01-20045) before December 31st, 2020 by e-mail (attachment in a single pdf document) to:

Senckenberg Gesellschaft für Naturforschung

Senckenberganlage 25 60325 Frankfurt am Main E-Mail: recruiting@senckenberg.de

For more information, please contact Prof.Dr.SteffenPauls, steffen.pauls@senckenberg.de,

phone: +49 (69) 7542-1222

– Mit freundlichen Grüßen / Best Regards

Jessica Helm Personalsachbearbeiterin

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SouthWesternOklahomaStateU OrganismalGenetics

The Department of Biological Sciences at Southwestern Oklahoma State University is searching for a faculty with expertise in organismal genetics. To learn more about the position visit https://swosu.csod.com/ux/ats/careersite/1/home/requisition/33?c=swosu . Rickey Cothran Associate Professor & Chair Department of Biological Sciences Southwestern Oklahoma State Univ. https://rdcothran.wixsite.com/hyalella "Cothran, Rickey" <rickey.cothran@swosu.edu>

StEdwardsU Austin EvolutionaryEcol

St. Edward's University in Austin, Texas, USA, invites applications for a Terrestrial Ecologist to serve as a tenure-track Assistant Professor in the Department of Biological Sciences, beginning in August 2021.

Required Qualifications include aPh.D. in Biological Sciences.

Position descriptionis at https://stedwards.applicantpro.com/jobs/1574355.html William J. Quinn Professor,Department of Biological Sciences St. Edward's University Austin, Texas 78704

512-448-8457

William Quinn <billq@stedwards.edu>

TexasAMU EducationCoordinator

Education Coordinator - Behavioral Plasticity Research Institute

We are seeking a full-time Education Coordinator for the Behavioral Plasticity Research Institute (BPRI), a newly established Biology Integration Institute funded by the U.S. National Science Foundation (https://www.nsf.gov/news/special_reports/announcements/090120.03.jsp). This position will provide leadership and administrative support to facilitate all aspects of training and educational activities at the BPRI. The successful candidate will be a central communicator and facilitator for faculty and trainees of the BPRI, and work closely with various member institutions of the BPRI (Baylor College of Medicine, Texas A&M University, Washington University in St. Louis, Arizona State University, and University of California,

Davis). This position offers a unique opportunity to develop a career as an education specialist who can work with scientists, postdoctoral researchers, graduate and undergraduate students across different biological disciplines. There are also opportunities to develop leadership skills through shared governance. The position is based at Texas A&M University. We are especially interested in candidates who can contribute to the BPRI'Âs diversity through their service. Women, minorities, people with disabilities, and veterans are encouraged to apply.

The BPRI focuses on understanding locust phase polyphenism, one of the most striking examples of coordinated phenotypic plasticity. This phenomenon provides a powerful comparative system for understanding how gene expression patterns and epigenetic regulation are linked to shifts in behavior, physiology, and ecology that result in outbreaks, collective movement, and mass migration. The BPRI has been established to comprehensively dissect this phenomenon and use it as a model system to transform the study of phenotypic plasticity. With a commitment to improving diversity, inclusion and equity, the BPRI will train the next generation of integrative biologists who can efficiently navigate across different disciplines.

The vision of the BPRI is predicated on integration through collaboration. We recognize the scientific and societal impacts are maximized when groups of people with diverse backgrounds and experiences come together to work towards shared goals and the common good. This philosophy will inform all BPRI activities.

About the Community 'X Texas A&M University main campus is located in College Station, which is part of a metropolitan community of 200,000 people, including the city of Bryan. In addition to excellent health, education, and recreation services, the community affords a rich variety of cultural activities typical of a major university environment, including museums, music, art, and theatre. College Station is within easy reach of some of the most cosmopolitan cities in the US 'V about 90 minutes from Houston and its major international airport, and under 2 hours from Austin. The Department of Entomology (https://entomology.tamu.edu/) at Texas A&M University is one of the top entomology departments in the United States. Additionally, the interdisciplinary program in Ecology and Evolutionary Biology (https://eeb.tamu.edu/) offers an excellent opportunity to interact with a large community of ecologists and evolutionary biologists across different departments and colleges.

To apply, visit: https://-tamus.wd1.myworkdayjobs.com/-AgriLife_Research_External/job/College-Station-AL-RSCH/Program-Coordinator-I-P9_R-033592 Hojun Song <hsong@tamu.edu>

UAE RENECO ConservationGenomics

We are looking for a highly motivated researcher to integrate our Conservation Genetics team, with a focus on Conservation Genomics. Our genetic research interests are genetic management of conservation programs (both in- and ex-situ), population genetic structure, sexual selection, aging and behaviour. The successful candidate must have proven academic background in Conservation Genomics. She / he will participate to ongoing research projects in Conservation Genomics in order to support RENECO's diverse conservation efforts; and will report to the head of the Conservation Genetics Division.

Duties will include: - Molecular laboratory techniques (e.g. DNA extraction, PCR, genotyping, ...) - Bioinformatic analyses of non-model species whole-genomes sequencing data (i.e. de-novo assembly, annotation, SNP identification, etc.) - Contribute to the management of the genetic laboratory - Mentoring undergraduate and graduate students - Genetic data management and analyses - Contribute to publication in peer-reviewed scientific journal - Participate in sampling collection in the field

Essential qualifications/skills include: - PhD and a Post-Doc in Conservation genomics or related subjects - Experience in conducting population genomics studies in non- model species - Experience in molecular biology - Solid data analysis skills and bioinformatics background are required. - Demonstrated ability to work independently, and as part of a team - Demonstrated ability to work on multiple assignments with overlapping deadlines - Demonstrated record of research productivity and publications

This is a full-time permanent position located in Abu Dhabi (United Arab Emirates) but willingness to travel in different countries is essential. Interested candidate can apply/inquire at hr-sourcing@reneco-hq.org. Please mention the reference RSCG/202012/RHQ as the subject of your email. Application materials include a cover letter describing your interest in the position and qualifications, a CV, and the names and contact information for at least two references.

Further information on RENECO research activities can

be found at: https://www.researchgate.net/institution/-Reneco_International_Wildlife_Consultants LESOBRE Loïc <llesobre@reneco.org>

UAlabama MarineEvolution

The Department of Biological Sciences at The University of Alabama, Tuscaloosa invites applications for a full-time (9 month) tenure-track Assistant Professor position in Marine Biology to begin Fall 2021. This position will be based at the Dauphin Island Sea Lab (DISL; www.disl.org) on the Alabama Coast near Mobile. DISL offers excellent research facilities and support. We seek a highly innovative and collaborative scientist with a strong academic background in Marine Biology. 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. Candidates whose research addresses marine ecosystem dynamics such as biodiversity, invasive species, climate change and anthropogenic activities, evolutionary or adaptive mechanisms, and biotic interactions are especially encouraged to apply. The successful candidate will be a highly motivated individual with the ability to interact with other faculty members in the Department of Biological Sciences and at the DISL. Minimum qualifications include a PhD in biology or related discipline, post-doctoral experience, and a strong record of publishing in peer-reviewed journals. Teaching responsibilities will include an undergraduate course in Marine Biology, as well as specialized undergraduate and graduate courses in the successful candidate's area of expertise.

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/47554, 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 (including contact information). The search committee will request letters of reference as needed. Consideration of applications will begin December 1, 2020, and will continue until the position is filled. There will be a preliminary Zoom screening of selected applicants, after which top candidates will be informed whether the following interviews will proceed virtually or in-person, depending on how the present coronavirus pandemic has evolved by that time. Prior to hiring, the final candidate will be required to pass a pre-employment background investigation. The start date is August 16, 2021. Additional information about the Department of Biological Sciences and this position can be found on our website at http://bsc.ua.edu. Applications from women and members of underrepresented groups in Biology are especially encouraged. The University of Alabama is an Equal Opportunity/Equal Access Employer and actively seeks diversity among its employees.

Kevin M. Kocot he/him/his Assistant Professor & Curator of Invertebrates Department of Biological Sciences & Alabama Museum of Natural History The University of Alabama < https://www.ua.edu/- > 307 Mary Harmon Bryant Hall Box 870344 Tuscaloosa, AL 35487 phone 205-348-4052 | fax 205-348-4039 kmkocot@ua.edu | www.kocotlab.com https://-/uasystem.zoom.us/j/3755490727 kmkocot@ua.edu

UBritishColumbia ConservationScientist

The University of British Columbia seeks applicants for a tenure-track position in conservation and restoration, part of major cluster hire initiative (https://-biodiversity.ubc.ca/cluster-hire).

Apply here: https://academicjobsonline.org/ajo/jobs/-17171 We seek a Conservation and Restoration Scientist to be jointly appointed in the Departments of Botany, and Forest & Conservation Sciences, with opportunities for strong interaction with UBC's Beaty Biodiversity Museum and Biodiversity Research Centre. Applicants must have completed their Ph.D. degree by June, 2021, show evidence of potential to develop a strong research program, and contribute to teaching and mentoring at graduate and undergraduate levels. In evaluating candidates, we may also consider evidence of leadership within the candidate's community, contributions to fostering diversity, equity and inclusion, and the social or policy impacts of the candidate's work.

The Conservation and Restoration Scientist will conduct research broadly investigating how to conserve and protect biodiversity, and restore functioning ecosystems in a changing world. Applicants should have an interest in integrating fundamental research on restoring biodiversity, ecosystem functions or adaptive capacity,

with applied research on conservation and restoration strategies that involve engagement with communities, industry or governments. Their expertise will be in ecology (including applied ecology), conservation, evolutionary biology, forestry, geography, or related disciplines. We encourage applicants who use a range of empirical or theoretical approaches, applying them to real-world problems from local to global scales, in terrestrial or aquatic ecosystems, and working in plant, animal or fungal systems. —

The successful candidate will be expected to develop an independent research program and contribute to undergraduate and graduate teaching and training, and academic service in their departments. They will also work collaboratively with other members of the Biodiversity Solutions (https://biodiversity.ubc.ca/cluster-hire) team to develop approaches to solving social-ecological challenges related to biodiversity conservation. Applicants should demonstrate a strong interest or experience in conducting collaborative, interdisciplinary work, through existing or proposed research, teaching, leadership, service, community engagement, outreach or other relevant activities.

We recognize that candidates may have had diverse trajectories that could include interruptions and leaves, for example related to care-giver responsibilities, and we value this diversity.

Equity, inclusion and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We particularly encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Métis, Inuit, or Indigenous person.

All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority. Review of applications will begin 30th November 2020 and continue until the position is filled. The anticipated starting date for positions is July 1, 2021, or as soon as possible thereafter, dependent on immigration and travel restrictions.

"j.davies@ubc.ca" <j.davies@ubc.ca>

UConnecticut EvolutionaryBiology

Job Posting Title: Endowed Chair in Ecology or Evolutionary Biology (Associate/Full Professor) https://-academicjobsonline.org/ajo/jobs/17474 The University of Connecticut (UConn) invites applications for a faculty position in the Department of Ecology and Evolutionary Biology (EEB). The successful candidate will be named to a five-year term as the inaugural recipient of a rotating endowed Chair in Ecology and Evolutionary Biology. We encourage applications from biologists working in all areas of ecology and evolution. Specific areas of interest include, but are not limited to, quantitative or theoretical ecology, plant biodiversity and systematics, global change biology, and population genetics/genomics. We value both theoretical and empirical work as well as the unique insights that can emerge from organism-centered research programs.

The successful candidate will have an internationally recognized research program in ecology and/or evolutionary biology with a record of publication and funding success. They will have developed innovative courses and instruction methods for undergraduate and graduate teaching levels, and mentored students in research, outreach, and professional development. The successful candidate will demonstrate commitment to fostering diversity, equity, and inclusion through research, teaching and/or public engagement, including broadening participation among members of under-represented groups; and developing pedagogical techniques designed to meet the needs of diverse learning styles, backgrounds and intellectual interests. Evaluation of candidates will be made by assessment of 1) research accomplishments, productivity and extramural funding; 2) statement of research objectives; 3) statement of teaching objectives; 4) statement on diversity, equity and inclusion; and 5) professional references.

The EEB Department is one of the top Ecology and Evolutionary Biology departments in the nation. The Department offers a highly collaborative environment at a leading public research university committed to fostering a diverse and inclusive academic community. EEB has 25 tenured/tenure-track faculty members whose work spans systematics, evolution, ecology, organismal biology, behavior and conservation biology. The Department is looking forward to an upcoming move into new space (beginning in 2021) with state-of-the-art re-

search and teaching labs. EEB'Âs Biodiversity Research Collections (https://biodiversity.uconn.edu) comprise outstanding collections of vertebrates and invertebrates, and plants (CONN herbarium and EEB greenhouses). Departmental foci are complemented by faculty in our sister departments, Molecular and Cell Biology, Physiology and Neurobiology, and Natural Resources and the Environment, as well in the Institute for Systems Genomics. Additional information about the Department can be found at http://www.eeb.uconn.edu .

Founded in 1881, UConn is a Land Grant and Sea Grant institution and member of the Space Grant Consortium. It is the state'Âs flagship institution of higher education and includes a main campus in Storrs, CT, four regional campuses throughout the state, and 13 Schools and Colleges, including a Law School in Hartford, and Medical and Dental Schools at the UConn Health campus in Farmington. The University has approximately 10,000 faculty and staff and 32,000 students, including nearly 24,000 undergraduates and over 8,000 graduate and professional students. UConn is a Carnegie Foundation R1 (highest research activity) institution, among the top 25 public universities in the nation.

Through research, teaching, service, and outreach, UConn embraces diversity and cultivates leadership, integrity, and engaged citizenship in its students, faculty, staff, and alumni. UConn promotes the health and well-being of citizens by enhancing the social, economic, cultural, and natural environments of the state and beyond. The University serves as a beacon of academic and research excellence as well as a center for innovation and social service to communities. UConn is a leader in many scholarly, research, and innovation areas. Today, the path forward includes exciting opportunities and notable challenges. Record numbers of undergraduate applications and support for student success have enabled the University to become extraordinarily selective.

MINIMUM QUALIFICATIONS

- A Ph.D. in Ecology and Evolutionary Biology or a related field (or equivalent foreign degree). - A record of peer-reviewed publication commensurate with career stage. - A record of extramural funding (e.g., fellowships or grants) commensurate with career stage. - Evidence of deep commitment to supporting diversity, inclusion, and equity.

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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

UHongKong EvolutionaryBiology

The Chinese University of Hong Kong

Applications are invited for:-

School of Life Sciences Professors / Associate Professors / Assistant Professors (Ref. 200001OZ)

The CUHK School of Life Sciences (http://www.sls.cuhk.edu.hk) has more than 40 academic staff and more than 150 postgraduate students. The School supports major research activities in plant and cell biology, marine and environmental science, neuroscience and stem cells and protein structural biology. The School offers 6 undergraduate programmes: Biochemistry, Biology, Cell and Molecular Biology, Environmental Science, Food and Nutritional Science, and Molecular Biotechnology, with an overall intake of about 200 student per year in a four-year curriculum.

To further develop the School, we are now actively hiring multiple faculties over the next several years. We welcome applicants with expertise in the above disciplinary areas or relevant new cutting-edge directions to apply, particularly in the following fields:

1. Biodiversity, ecology, evolution, or organismic biology.

2. Any other disciplines complementary to the development of the School.

Based on the background and experiences, the successful applicants will be offered the post of Professor, Associate Professor, or Assistant Professor accordingly.

Applicants should (i) have a PhD degree; and (ii) show potential for excellence in teaching and have achieved an excellent record in research. The appointees are expected to (a) develop a significant independent research programme with external grant support; (b) teach undergraduate and postgraduate courses in his/her field of expertise; and (c) perform service duties for the School and the University. Multidisciplinary research collaborations are encouraged within and outside the School.

The appointees will be provided with start-up funding commensurate with qualification and experience.

Appointments will normally be made on contract basis for up to three years initially, which, subject to mutual agreement, may lead to longer-term appointment or substantiation later.

Applications are open until the posts are filled. For enquiries, please contact the School Director via email (laurenlee@cuhk.edu.hk).

[Those who have responded to the previous advertisement (Ref. 200000UR) are under consideration and need not re-apply in this instance.]

Application Procedure Applicants should submit an online application and attach (1) a curriculum vitae; (2) a research plan; (3) a statement of teaching philosophy/experience; and (4) the names and contact information of three referees.

The University only accepts and considers applications submitted online for the posts above. For more information and to apply online, please visit http://career.cuhk.edu.hk . Jerome Hui <hui.jerome@gmail.com>

UMaryland ResAssist CichlidEvolution

Reference: Research Assistant Position

Contract: Full-time, 12 months (possibility of yearly renewal)

Location: University of Maryland, College Park MD

Application deadline: December 1st or until filled

Research: Cichlid fishes are some of the most diverse species on the planet. They have rapidly speciated from South America to Africa to India, over quite recent times making them a textbook example of adaptive radiations. Cichlid differ in nearly every aspect of their ecology and physiology and make a wonderful model for understanding phenotypic diversity and rapid speciation. We are fortunate that at the University of Maryland, we have three cichlid groups. This makes for a vibrant community of researchers working to understand the genetic and genomic basis of cichlid diversity underlying their neuroethology, visual communication, and sexual determination.

Along with their other modes of diversity, cichlids have some of the most variable visual sensitivities in all of vertebrates. Species differ in their sensitivities to different parts of the light spectrum. This is the result of species expressing different subsets of the seven available cone opsin genes. This produces species sensitive to either UV to green wavelengths, violet to green wavelengths, or blue to red wavelengths. We have shown that these differences are linked to varying ecologies including the local light environment and foraging styles. We have also used behavioral training experiments to show that cichlids utilize color vision in these important tasks.

We have made some progress in identifying the genetic and genomic mechanisms behind how the seven cone opsin genes are differentially regulated. We have also identified some candidate genes that form part of the opsin regulatory network. This project is a collaboration between the lab of Dr Scott Juntti and Dr Karen Carleton. We are working to make CRISPR mutants to test the role of several of the candidate regulatory genes. This will help us unravel the more complete regulatory network and see how it varies across cichlid diversity.

The position: We are looking for a Research Assistant who can help manage the generation of CRISPR mutants. This will include performing CRISPR injections, and rearing and breeding new cichlid lines. In addition, the research assistant will perform wet lab experiments such as PCR for genotyping and quantitative PCR for quantifying gene expression. They will also be trained in next generation sequencing technologies. The goal will be to contribute to generating data as well as assisting with manuscript preparation.

The ideal candidate:The ideal candidate will have at least a BSc (undergraduate) degree in life sciences. Some molecular biology experience is desirable, including DNA and RNA extraction, gel electrophoresis, genotyping, or quantitative PCR. Strong organizational and record-keeping skills are important. It is key to have some independence but also be willing to work as a member of team of graduate student, post-doctoral and faculty researchers. We are currently also looking for post-doctoral fellows in neuroscience (Juntti lab).

If you are interested in the position, send your CV, cover letter, and list of references to kcarleto@umd.edu.

Karen Carleton Professor Department of Biology 1210 Biology Psychology Bldg 4094 Campus Dr University of Maryland College Park MD 20742

301-405-6929

Karen Carleton <kcarleto@umd.edu>

UMuenster PlantMicrobiomeHerbivoreEvolution

The Institute for Evolution and Biodiversity at the University of Münster, Germany, invites applications for a Junior Group Leader Wissenschaftliche/r Mitarbeiter/in (Salary level TV-L E13, 100%)

in the Plant Adaptation-in-Action group, headed by Prof Shuqing Xu (https://www.uni- muenster.de/Evolution/plantadapt/people/shuqingxu.shtml). The successful candidate may start as soon as possible, preferably before March 2021. The salary will initially be provided for three years, with possibility of extension. Plants are living in a microbial world and with the threat of herbivores. However, it remains unclear how herbivores and microbes jointly shape plant evolution in nature. In this DFG-funded project, the candidate will lead a team in the Plant Adaptation-in-Action group to address this challenging question using an interdisciplinary approach.

During the course of the project, the candidate will mature his/her scientific skills and develop independence in project planning and management skills. In addition, the candidate will gain the opportunity to improve their leadership skills by leading a research team consisting of one PhD student and several MSc and BSc students. The position serves as a stepping-stone for the candidate to pursue a faculty position.

Requirements: We are looking for a highly motivated researcher with a doctoral degree, or equivalent thereof, in biology, evolutionary genetics, bioinformatics or computer science. The candidate is expected to design, conduct and organize large scale field experiments and analyse large amount of next generation sequencing data, in particular, metagenomic data, with high degree of independence. Thus, a background in bioinformatics, evolutionary genetics and metagenomics is required. Applicants must demonstrate experience in statistics, metagenomics, data analysis and microbiology. Experience with field work, plant-microbe interactions or plant-herbivore interactions are a plus. Our group consists of people of various nationalities and teamwork is essential for all projects in the group. Therefore, excellent communication skills, as well as proficiency in spoken and written English are expected. Good knowledge in German is a plus.

The University of Münster is an equal opportunity employer and is committed to increasing the proportion of women academics. Consequently, we actively encourage applications by women. Female candidates with equivalent qualifications and academic achievements will be preferentially considered within the framework of the legal possibilities. The University of Münster is committed to employing more staff with disabilities. Candidates with recognized severe disabilities who have equivalent qualifications are given preference in hiring decisions, although some restrictions related to specific project-related tasks may apply.

Applications must be in English and include:

(1) a motivation letter stating the research interests with reference to the stated requirements in no more than 2 pages, (2) a detailed CV including academic and extracurricular achievements, as well as details of all research experience, (3) an abstract of the PhD thesis, and (4) contact details of at least two referees.

Applicants should send their documents in one single PDF file to Prof Shuqing Xu (shuqing.xu@uni-muenster.de) with a subject line "Junior Group Leader Position - Your Name". The application review will commence on 15th December 2020. The position will remain open until filled.

Prof. Shuqing Xu Institute for Evolution and Biodiversity University of Münster Hüfferstraße 1 D-48149 Münster E-mail: shuqing.xu@uni-muenster.de Phone:+49 251 83-21090

Shuqing Xu <shuqing.xu@uni-muenster.de>

UNewMexico MuseumProgramSpecialist

The University of New Mexico (UNM) is seeking a full-time Program Specialist for the Museum Research Traineeship (MRT) Program that is funded by the National Science Foundation Research Traineeship program. The MRT is a new interdisciplinary graduate research training program addressing the NSF Big Idea of Harnessing the Data Revolution to train a diverse group of students in innovative ways to characterize and interpret museum objects (e.g., specimens, artifacts, archives) in the context of change over ecological and evolutionary timescales. Visit the MRT Program website for more information at https://na01.safelinks.protection.outlook.com/-?url=https%3A%2F%2Fmrt.unm.edu%2F&data=-

 . The Program Specialist is responsible for overseeing the planning, communication, implementation, and evaluation of the MRT program in close collaboration with the faculty leadership team and internal/external program evaluators. The Program Specialist is responsible for managing recruiting, educational, and training activities, and builds and maintains positive and effective working relationships with stakeholders crucial to the success of the MRT program. The program expects to directly support 40 graduate students over the next 5 years,and extend program benefits to other interested graduate and undergraduate student. This position offers an opportunity that integrates creativity and leadership with graduate education and training in STEM, with a major goal of recruiting and retaining a diverse group of student trainees. The position could also provide the opportunity for career development at UNM.

For detailed information please visit the posting Req14042 at the UNM Jobs website: https://unm.csod.com/ats/careersite/-JobDetails.aspx%3Fid%3D14042%26site%3D7 The best consideration date is Tues, Dec 8th 2020.

Thomas Turner

Associate Dean for Research, College of Arts & Sciences Professor of Biology Curator of Fishes,Museum of Southwestern Biology University of New Mexico Albuquerque, NM 87131 USA Voice: 505.277.7541 FAX: 505.277.0304 Email:turnert@unm.edu https://www.tacl.online/ Thomas F Turner <turnert@unm.edu>

UNorthCarolina ChapelHill Microbiologist

The College of Arts and Sciences at the University of North Carolina at Chapel Hill is recruiting up to six outstanding tenure track faculty to deepen and expand research and teaching related to racial equity, in parallel with two searches that address historical aspects of American slavery. We seek highly talented faculty whose research and teaching will make transformative contributions to the major themes of 1) Health, Wellness, and Equity in Communities of Color and 2) Black and Indigenous Families and Communities, with a preferred emphasis on U.S. populations. Searches in the departments of Biology, Communication, Economics, Exercise and Sport Science, Psychology & Neuroscience, and Sociology will contribute to this initiative. Across these searches, we aspire to recruit faculty who are doing innovative, intersectional, and high impact work that will diversify and enhance our research, teaching, and public outreach missions.

The Department of Biology at the University of North Carolina at Chapel Hill invites applications for a tenure-track position at the rank of Assistant Professor, to start as early as July 1, 2021, pending approval. We are seeking candidates with research and teaching interests in the general area of microbiology as it pertains to health, wellness, and equity in communities of color. Examples might include environmental microbiology, pathogenesis, health care, water quality, the gut microbiome, and respiratory health. Successful candidates will exhibit strong and innovative research, show potential for excellence in teaching microbiology and have a demonstrated interest in community outreach and mentoring students in under-served communities.

Educational Requirements All candidates must have earned a Ph.D. or equivalent degree.

Qualifications and Experience Applicants should have a successful record of excellence and productivity in research, and a desire to teach undergraduate and graduate students.

Equal Opportunity Employer The University of North Carolina at Chapel Hill is an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to age, color, disability, gender, gender expression, gender identity, genetic information, national origin, race, religion, sex, sexual orientation, or status as a protected veteran.

Special Instructions Applications should include: (1) a cover letter describing the applicant's interest in the position; (2) a curriculum vitae; (3) a summary of research accomplishments and future research directions (no more than 4 pages); (4) a statement of teaching and mentoring interests and experience (1-2 pages); and (5) a statement describing the applicant's past experiences, as well as past activities and planned commitment to promoting diversity, equity, and inclusion (1-2 pages) uploaded as "Other Document"; and (6) contact information for four references (letters are acceptable from tenure-track Assistant Professors or higher). Review of applicants will begin December 1, 2020 and continue until the position is filled.

Link to the Application Portal: http://-unc.peopleadmin.com/postings/184424

Inquiries regarding this position can be directed to Steve

Matson (smatson@bio.unc.edu).

"Burch, Christina L" <CBurch@bio.unc.edu>

USouthernCalifornia EvolutionaryBiology

https://usccareers.usc.edu/job/los-angeles/assistant-professor-of-biological-sciences/1209/17785043 The Department of Biological Sciences in the University of Southern California Dornsife College of Letters, Arts and Sciences invites applications for multiple tenure-track Assistant Professor positions. We seek accomplished and innovative researchers in all areas of biology. We especially encourage applications from candidates whose scholarship bridges the research interests across the sections of our department, namely Human and Evolutionary Biology, Marine and Environmental Biology, Molecular and Computational Biology, and Neurobiology (https://dornsife.usc.edu/bisc/). This search will emphasize candidates who will advance diversity, equity, and inclusion in our department through their research, teaching, and/or service. We encourage scientists who come from historically underrepresented groups or have non-traditional backgrounds to apply. The Department is committed to supporting the family needs of faculty, including dual career couples and single parents.

Applicants should have a Ph.D. (or equivalent) and the demonstrated ability to conduct compelling independent research and to attract external research funding. Review of applications will begin December 15, 2020. Applicants should submit, in a single pdf file, a curriculum vita, a cover letter, research, teaching, and diversity-equity-inclusion statements, as well as the contact information of four references. Information on USC's commitment to diversity, equity, and inclusion in the STEM fields can be found at https://diversity.usc.edu/. In order to be considered for this position, all candidates must apply via the "Apply" link at the top or bottom of this page. For more information, please contact Ian Ehrenreich, Vice Chair of Biological Sciences (ian.ehrenreich@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.

Helga Schwarz <helgasch@dornsife.usc.edu>

UTexas Austin EvolutionaryBiol

Dear Biologists,

I wanted to let everyone know about this open-rank job opportunity in the Department of Integrative Biology at the University of Texas at Austin:

The College of Natural Sciences at The University of Texas at Austin invites applications for tenure-track (Assistant Professor) or tenured (Associate Professor or Professor) faculty positions from candidates who are committed to building a diverse and inclusive educational environment. The College is especially interested in and values candidates who have experience working with diverse and underserved populations, and have demonstrated a commitment to improving the diversity of their academic communities.

For more information see: https://apply.interfolio.com/-79958 Deadline to apply is November 15th.

Felicity Muth, PhD Department of Integrative Biology, The University of Texas at Austin.

< http://felicitymuth.weebly.com/ > Twitter @felicitymuth < https://twitter.com/felicitymuth > < http://blogs.scientificamerican.com/not-bad-science/ > https://www.beecognition.com < https://www.beecognition.com/join-the-lab/ > < https://twitter.com/notbadscience >

"Muth, Felicity" <Felicity.Muth@austin.utexas.edu>

UToronto FieldEcologyEvolution

The Department of Ecology and Evolutionary Biology at the University of Toronto invites applications for a tenure stream appointment in Field Ecology and Evolutionary Biology at the rank of Assistant Professor, with an expected start date of July 1, 2021.

We seek candidates who conduct conceptually driven field research to study fundamental questions in ecology and/or evolution. We seek applications from candidates whose research program complements the research programs of the highly collaborative faculty currently in the department.

The successful candidate must have a PhD in ecology, evolution or a related field by the date of appointment, or shortly thereafter. Candidates must have a demonstrated record of excellence in research. The successful candidate will be expected to mount an independent, innovative, active, externally funded and internationally recognized research program. The successful candidate will also demonstrate excellence in teaching and contributions to the education and training of undergraduate and graduate students.

Candidates must provide evidence of research excellence which can be demonstrated by a record of publications in top-ranked and field relevant journals or forthcoming publications meeting high international standards, the submitted research statement, presentations at significant conferences, awards and accolades, and strong endorsements from referees of high standing.

Excellence in teaching will be demonstrated through a teaching statement highlighting previous experience that can include leading successful workshops or seminars, student mentorship, delivering conference presentations or posters, or experience as a teaching assistant or course instructor. Excellence in teaching may also be demonstrated through materials such as sample course syllabi (either of courses delivered by the candidate or planned for the future), course evaluations, or other evidence of superior performance in teaching-related activities submitted as part of the application.

Equity and diversity are essential to academic excellence. We seek candidates who value diversity and whose research, teaching and service bear out our commitment to equity. Candidates are therefore asked to include a statement discussing past, current and/or planned contributions to equity and diversity, which might cover topics such as (but not limited to): research or teaching that incorporates a focus on underrepresented communities, the development of inclusive pedagogies, public engagement activities that reach out to marginalized communities, and mentoring of students from underrepresented groups.

Salary to be commensurate with qualifications and experience.

The University of Toronto is a leading academic institution with over 60 faculty members specializing in ecology and evolution. Strong links exist between the Department of Ecology and Evolutionary Biology and the Royal Ontario Museum, the Department of Cell and Systems Biology, the Centre for Global Change Science, Dalla Lana School of Public Health, the School of the Environment, the University network of leading academic research hospitals (http://www.uhn.ca/, sunnybrook.ca/) and research groups with provincial and federal government agencies. The University owns a nearby field station dedicated to ecological research (the Koffler Scientific Reserve; http://www.ksr.utoronto.ca/-). Toronto is a vibrant and cosmopolitan city, one of the most desirable in the world in which to work and live.

All qualified candidates are invited to apply online at: https://jobs.utoronto.ca/job/Toronto-Assistant-Professor-Field-Ecology-and-Evolutionary-Biology-ON/542977017/ Applications must include:

- a cover letter - curriculum vitae - statement of research interests - a teaching statement highlighting previous experience as listed above - an equity and diversity statement (as noted above) - three representative publications or working papers - applicants must arrange to have Warning: base64 decoder saw premature EOF! three letters of reference sent directly by the referee to the hiring unit via email at chairsec.eeb@utoronto.ca by the closing date December 21, 2020, 11:59 p.m. (EST) (on letterhead, dated, and signed). PLEASE NOTE: This search is not using the University's automatic solicitation and collection functionality for reference letters

For further information on the Department of Ecology and Evolutionary Biology, please visit our website at http://www.eeb.utoronto.ca/. Questions regarding this position can be directed to Liz Rentzelos at: chair.eeb@utoronto.ca

Deadline for receipt of all application materials, including reference

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Other

ASN DiversityCommittee NewMemberApplication

The American Society of Naturalists (ASN) Diversity Committee (DC) seeks to add 2-4 new members starting in January 2021. The DC works to promote diversity, equity, and inclusiveness to enhance the study of evolution, ecology, and behavior and to foster the career of its developing scientists. We pursue initiatives that support marginalized groups, which include helping to create an inclusive, accessible environment at the Evolution conference, the stand-alone ASN meeting, and our field in general. Members serve a 3-year term, and the committee typically meets about once a month.

Applicants must be members of ASN (join or renew your membership here: https://amnat.org/membership/-beamember.html) and have attended at least one Evolution conference or ASN stand-alone meeting in the past.

We welcome participation from members of the community from all backgrounds and all countries, across all career stages (including graduate students and postdocs), and in all career paths. Applicants should submit an application (https://forms.gle/b1btKm6EZWNr3sEZ9) by Wed. 25 November 2020. If you have any questions, feel free to contact us at ASNdiversity@gmail.com .

Many of the DC's initiatives are created and operated with the DCs of our sister societies: the Society for the Study of Evolution and the Society for Systematic Biologists. Past or ongoing efforts of the ASN DC include:

- Data collection and analysis regarding the demographic composition of ASN - Creation of guidelines on best practices for awards procedures - Events at Society meetings including Story Collider and mixers to build community among LGBTQ+ biologists, biologists with disabilities, biologists of color, biologists at PUIs, and parents - Improving accessibility at Society meetings for scientists with disabilities, scientists of marginalized genders, and scientists who are nursing/caretaking - Creation of the joint society Inclusiveness, Diversity, Equity, and Access (IDEA) Award to recognize individuals who have strengthened the ecology and evolutionary biology community by promoting inclusiveness and diversity in our fields

For more information about the Diversity Committee, see https://www.amnat.org/about/governance/-Diversity.html *Nancy Chen, Ph.D.* Assistant Professor Department of Biology University of Rochester popgenchenlab.github.io/

Pronouns: she/her/hers

"nancy.chen@rochester.edu"
<nancy.chen@rochester.edu>

AvianGenomics SampleDataRequest

Title: Seeking avian tissue samples for denovo genome sequencing or unpublished avian denovo genomes; collaboration in the Bird 10,000 Genomes (B10K) Project

Text:

Since 2010 a global consortium lead by Prof Guojie Zhang (University of Copenhagen and BGI) has been generating draft genomes spanning the diversity of bird species. In this project we are generating a public re-

source of de novo sequenced avian genomes in a "top down" hierarchical strategy. Our initial paper releasing 1 genome per avian order was published in a special issue of Science in 2014 and our recent follow up in Nature (in press) releases genomes representing 95% of avian families.

Our consortium is currently entering phase 3, in which we aim to sequence and release 1 genome per avian genus. Thanks to broad international collaboration, we are in the process of generating data from over 1000 avian genera, but we are still looking for collaborators interested in helping us fill sampling gaps at the genus level.

Specifically we are looking for researchers who may be interested in joining our collaboration in the following ways:

a) Be interested in contributing to the consortium'Âs goals by providing biological materials of top quality, and obtained under appropriate permits, for use in generating de novo reference genomes. Our approach is based on a combination of single tube long fragment read (stLFR) and BGISeq technology, the samples must have been adequately stored so that they contain DNA fragments of at least >40k bp DNA. Typically, this means nitrogen-frozen soft tissues or blood, although other storage conditions (e.g. RNAlater) can preserve DNA adequately. All contributed samples must have been collected according to all local, national, and international laws, including the Nagoya Protocol when it applies.

Any genomes generated from contributed tissue materials will be provided at no cost to the sample source, for immediate use in their own research.

b) Be able to contribute existing, unpublished genome sequence data to the consortium. Specifically we hope to hear from researchers that have unpublished de novo sequenced avian genomes, who would be interested joining the collaboration by providing early access to thier data, for use in the pan-genera comparative analyses.

Ultimately we plan to publish a genus scale comparative genomics paper on the final dataset, with all sample/data providers offered co-authorship.

A full list of the genera from which we are currently seeking genomes and/or samples can be found here:

https://docs.google.com/spreadsheets/d/1fvJebsZL24i-fAu2F372jlkN8tyaidO6ItFbi3xDnh8/edit?usp=sharing

To express interest or request further information, please contact our sample collection coordinator: Daniel Bilyeli ÂÂksnebjerg daniel.oksnebjerg@sund.ku.dk

All the best, The B10K team.

peter.hosner@snm.ku.dk

ESEB 2 CallAwards Hewitt MaynardSmith

Godfrey Hewitt Mobility Award 2021 - Call for Applications

Godfrey Hewitt (1940-2013) was President of the European Society for Evolutionary Biology (ESEB) from 1999-2001. He was exceptionally influential in evolutionary biology both through his research and through his mentoring of young scientists. He was also a great believer in seeing organisms in their environment first-hand and in exchanges of ideas between labs. Therefore, ESEB annually offers mobility grants for young scientists in his name.

Closing date: Friday, 15 January 2021.

*Eligibility: *

The award is open to PhD students or postdoctoral scientists who are, at the closing date for applications, within 6 years of the start date of their PhD and ESEB members. In addition, applicants will be considered who are more than 6 years from the start of their PhD if they have had career breaks, worked part-time, or for other reasons have not worked continuously. Applicants who have previously received a Godfrey Hewitt mobility award are not eligible. The maximum single award will be 2000 Euros. It must be used to support fieldwork or a period of research at a lab that you have not previously visited. There is no restriction on the country of residence or nationality of the applicant.

Due to the COVID-19 situation, and in order to promote responsible and safe travel without compromising the quality of research, grantees of the 2021 ESEB Godfrey Hewitt mobility awards will be allowed to travel within 24 months from the date of announcement of the winners.

*Application procedure: *

Your application should be sent as a single PDF file to Ute Moniatte at the ESEB office, office@eseb.org. It should include your name, current status and institution, your PhD start date, your ESEB membership number, a description of the work to be carried out (maximum 500 words), an outline budget with brief justification (maximum 100 words) and a signed statement from your PhD supervisor or postdoctoral adviser (maximum 100

words) explaining why the work cannot be funded from your home institution or your proposed host institution.

Applications will be considered by a committee chaired by Frida Ben-Ami. The aim will be to announce decisions before the end of March 2021. The committee will consider the following key criteria:

1.The value of the proposed mobility in terms of its expected output and impact on the applicant's career. The committee prefers projects that are: a. Not a core component of the applicant's existing PhD or postdoctoral project, but a new venture. b. Clearly based on the applicant's own initiative c. Likely to be completed and have definable output within the award period d. Have the potential to lead to larger future projects or to enhance the applicant's career in evolutionary biology

2. The need for the GHM award, i.e. the potential for the funding provided by ESEB to make a difference, in relation to resources already available through the home or host institution.

Please endeavour to address these points in your application.

Best wishes, Ute Moniatte ESEB Office Manager

– European Society for Evolutionary Biology Email: office@eseb.org Homepage: www.eseb.org ——

John Maynard Smith Prize 2021: Call for Nominations

Every 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 2021 prize must have begun their PhD study after January 1, 2014. In addition, nomineeswill be considered who are more than 7 years from the start of their PhD 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 self-nominated. The 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 two in case of self-nomination) should be sent directly to Ute Moniatte.

Nominations and letters of support should arrive no later than Friday,**January 15, 2021. 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 Sara Magalhaes, will evaluate the nominations and inform the winner approximately by the end of February 2021.

The prize winner is expected to attend the ESEB congress in August 2021

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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

ESEB CallMeetingProposals Dec18

****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 (JEvBio).

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 'ÃÂ15,000 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.

A condition of the funding is that the meeting has a clear objective to produce either a Special Issue or Target Review for JEB. Within 4 months of the meeting manuscripts arising from the meeting should be submitted to the journal, to be handled by the organisers as guest editors or the editorial board of JEB, as appropriate.

There will be one call for applications per year, with this year' Âs deadline being ***December 18th 2020***. 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, Reviews Editor, JEvBio Mike Ritchie, former Editor in Chief, JEvBio Wolf Blanckenhorn, Editor in Chief, JEvBio Tanja Schwander, Deciding Editor and former Special Issue Editor, JEvBio

European Society for Evolutionary Biology Email: office@eseb.org Website: eseb.org

ESEB <office@eseb.org>

HarvardU FundingPlantEvolution

Research Funding opportunities at the Arnold Arboretum of Harvard University The Arnold Arboretum of Harvard University promotes and supports research consistent with its mission to discover and disseminate knowledge of the plant kingdom. To foster both independent and collaborative work, the Arboretum offers fellowships and awards to students, post-doctoral researchers, and professionals of the biological sciences including evolution, ecology, development, and genetics. Applicants are encouraged to define and develop paths of inquiry using the Arboretum's resources, including its world-renowned living collection, herbarium, plant records, library and archives, greenhouse and laboratories, and the expertise of its staff. There is currently one fellowship, eight awards, and an internship program. Applicants must submit a research proposal online by Feb 1. Please see the website for the specific requirements of each award. http://arboretum.harvard.edu/research/-programs-and-opportunities/ Available opportunities: DaRin Butz Research Internship Program of the Arnold Arboretum of Harvard University Ashton Award for Student Research Cunin / Sigal Research Award Deland Award for Student Research Shiu-Ying Hu Student/Postdoctoral Exchange Award Putnam Fellowship in Plant Science Arnold Arboretum Genomics Initiative and Sequencing Award Jewett Prize Sargent Award for Visiting Scholars Sinnott Award

Application Deadline: Feb 1 annually

– Faye Rosin, PhD Director of Research Facilitation Arnold Arboretum of Harvard University 1300 Centre St Roslindale, MA 02131

phone: (617) 384-5095 fax: (617) 384-6596

frosin@oeb.harvard.edu http://arboretum.harvard.edu/ "Rosin, Faye M" <frosin@oeb.harvard.edu>

JournalEvolBiol EditorInChief

Editor-in-Chief of the Journal of Evolutionary Biology

The European Society of Evolutionary Biology (ESEB; eseb.org/), in cooperation with Wiley Blackwell Publishers, is looking for an established evolutionary biologist with a position in a major research institution to lead the Journal of Evolutionary Biology (JEB; onlinelibrary.wiley.com/journal/14209101) as Editor-in-Chief (EiC) from mid 2021. Established in the 1980s, JEB is a long-standing international Society journal publishing cutting-edge papers in the field of evolutionary biology at large, with a major focus on the micro- & macro-evolution of all organisms at all levels (molecules to communities).

The EiC represents and oversees running the journal with focus on its scientific content. In close collaboration with the dedicated JEB Editorial Manager and a Wiley Publishing Manager, the EiC is responsible for:

§managing, recruiting and interacting with a large board of dedicated Handling and Deciding Editors to guarantee high quality publications in JEB;

§making policy decisions on publication strategy and quality control, in liaison with the publisher Wiley Blackwell and as part of ESEB's governing board;

§making final publication decisions based on scientific merit, and acting as Deciding Editor;

§co-organizing and attendance of the bi-annual ESEB conference from which symposium-based special issues

for JEB are derived;

§soliciting or commissioning suitable manuscripts, Special Issues and other publishing opportunities from various sources;

§promoting important JEB content to the public.

An estimated average of 10-15% of weekly time is dedicated to this position. Appointments are for a 4-year term. Location is flexible as most communication occurs electronically. An appropriate honorarium compatible with local employment regulations is paid. ESEB membership is required. Academic publishing is undergoing significant changes, and we would wish the candidate to be enthusiastic in support of a Society journal and its aims by pursuing opportunities to improve its impact and strength during this transition period.

We encourage interested candidates to contact informally one or more of the last three Editors in Chief for JEB for more information about what is involved (Allen Moore: ajmoore@uga.edu; Mike Ritchie: mgr@st-andrews.ac.uk; Wolf Blanckenhorn: wolf.blanckenhorn@uzh.ch). Your interest can also be discussed any of the current ESEB officers. A formal application/expression of interest should be sent to the ESEB secretary, John Pannell (john.pannell@unil.ch) by 30 November 2020. Your letter should provide a brief outline of your vision for the journal over the next few years and an explanation for why you would be interested in editing JEB at this point in your career. It should also include an appended CV.

Wolf U. Blanckenhorn, Editor-in-Chief JEB John Pannell, Secretary of ESEB

John Pannell <john.pannell@unil.ch>

NatureConservation CallEndemismPapers

From: francesca.raffini3@gmail.com To: evoldir@evol.biology.mcmaster.ca Cc: Bcc: Subject: Other: Call For Papers on Endemism Conservation Reply-To: francesca.raffini3@gmail.com

Call for papers on "Biological uniqueness: tools and advances to protect endemism" for a Special Issue

Dear colleagues,

We are guest-editing a Special Issue of the Journal for Nature Conservation (ISSN 1617-1381, IF 2.482) on the topic: "Biological uniqueness: tools and advances to protect endemism", which seeks to shed light on the particularities of endemism conservation in any terrestrial or aquatic ecosystem.

We call for original research papers with direct conservation applications addressing endemism at multiple levels of biodiversity, from molecular to ecological and evolutionary perspective, and through a wide variety of methodologically-sound approaches, from empirical, field-based, experimental studies to theoretical, statistical, simulation analyses. Integrated, interdisciplinary studies and clear directions for conservation are mostly welcome.

You can find more information at: https://www.journals.elsevier.com/journal-for-nature-conservation/call-for-papers/biological-uniqueness-tools-and-advances-to-protect-endemism The submission portal will be open from the 1st January to the 1st June 2021. Submitted papers should not be under consideration for publication elsewhere. We encourage perspective author(s) to send a short abstract or tentative title to the editors in advance (specialissueendemisms@gmail.com).

The Journal for Nature Conservation offers author(s) two choices to publish their research: 1) Subscription - Articles are made available to subscribers as well as developing countries and patient groups through our access programs. No open access publication fee; and 2) Gold Open Access - Articles are freely available to both subscribers and the wider public with permitted reuse. An open access publication fee is payable by author(s) or their research funder.

We look forward to hearing from you.

Kind regards,

The Guest Editors

Luciano Bosso, PhD Department of Agricultural Sciences, University of Naples Federico II (Italy) Email: luciano.bosso@unina.it Website: http://www.scienzeforestali.unina.it/LucianoBosso.htm

Francesca Raffini, PhD Department of Life Sciences and Biotechnology, University of Ferrara (Italy) Email: francesca.raffini@unife.it Website: https://francescaraffini.weebly.com/

Leonardo Ancillotto, PhD Department of Chemistry and Biology "Adolfo Zambelli", University of Salerno (Italy) Email: lancillotto@unisa.it Website: https://www.researchgate.net/profile/Leonardo_Ancillotto francesca.raffini3@gmail.com francesca.raffini3@gmail.com

Nosema SampleRequest

Dear bee research colleagues,

my colleagues and me, we are interested in studying polymorphisms and diversity of Nosema sp., parasites of honey bees and bumble bees. Therefore, we are looking for Nosema sp. spore samples (non-viable is fine) from different regions and host species. We are looking for all kind of Nosema spores: Nosema apis, Nosema bombi and Nosema ceranae.

By sending us samples, we would need a detailed description of all samples (year collected, host species, region or location, country, etc.) and the method used for Nosema sp.-species verification. If you do not have access to Nosema samples, please forward this e-mail to colleagues who might have some in their labs.

Thanks in advance for your kind support.

Freundliche Grüße/ Kind regards

Dr. Silvio Erler Julius Kühn-Institut (JKI) - Bundesforschungsinstitut für Kulturpflanzen Institut für Bienenschutz / Institute for Bee Protection Messeweg 11-12 D-38104 Braunschweig

Phone: +49-531-299-4217, Fax: +49-531-299-3028 E-Mail: silvio.erler@julius-kuehn.de www.julius-kuehn.de/bienenschutz/ ResearchGate: https://-www.researchgate.net/profile/Silvio_Erler Publons: https://publons.com/researcher/714780/silvio-erler/ “Erler, Silvio” <silvio.erler@julius-kuehn.de>

REU Evolution UIowa

Please share with undergraduates interested in summer research experiences in areas related to evolution - including biology, anthropology, and paleontology. Persons historically excluded from the sciences because of their ethnicity or race and/or who have limited research opportunities at their home institution are especially encouraged to apply.

The University of Iowa is offering ten NSF-funded Research Experiences for Undergraduates (REU) positions during the summer of 2021. Research projects span a range of topics, including evolution of behavior, origin of species, cancer evolution, evolution of sex, Evo-Devo, and paleontology. REU students will work on a specific project with one faculty mentor, but through interactions with their cohort they receive a broad exposure to evolutionary science. As part of the program, students: are trained 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.—

The REU program website and application form can be found here:—https://biology.uiowa.edu/reu. Note that while it is subject to change depending on status of the Covid-19 pandemic, we are currently planning for the REU to be an in-person experience.

If you have questions, please direct them to Andrew Forbes (andrew-forbes@uiowa.edu) or Maurine Neiman (maurine-neiman@uiowa.edu).

Andrew Forbes Associate Professor Department of Biology 434A Biology Building Iowa City, IA 52242 Tel: (319) 335-3006 andrew-forbes@uiowa.edu http://-www.biology.uiowa.edu/faculty_info.php?ID=3D1894

“andrew-forbes@uiowa.edu” <andrew-forbes@uiowa.edu>

SSE DiversityCommittee CallForApplications

The Society for the Study of Evolution (SSE) Diversity Committee (DC) seeks to add two to three new members starting in 2021, at least one of which will be a graduate student. The DC works to create a professional society that is supportive of members from all backgrounds through several main actions: by broadening representation to the SSE Executive Council, by pursuing initiatives that support historically excluded groups, and by creating an inclusive, accessible environment at the Evolution conference.

Applicants should submit a brief (1-2 page) statement of interest outlining three items on which applications will be evaluated: 1) their experience with Diversity, Equity, and Inclusion (DEI) service; 2) any ideas, priorities, and/or events they plan to contribute during their 3-year term;

3) the unique elements of their perspective/background that they bring to the committee. We welcome participation from members of the community across all stages of training, and in all career paths.

Applications should also confirm:

- career stage and institutional affiliation

- membership in SSE

- past attendance at Evolution conferences

Applicants must be members of SSE (join or renew your membership here: http://bit.ly/joinSSE) and have attended at least one Evolution conference in the past.

Many of the DC's initiatives are created and operated with the DCs of our sister societies, the American Society of Naturalists and the Society for Systematic Biologists. Past or ongoing efforts of the SSE DC include:

- Data collection and analysis regarding the demographic composition of SSE

- Creation of guidelines on best practices for awards procedures

- Events at the Evolution meeting including Story Collider and mixers to build community among LGBTQ+ biologists, biologists with disabilities, biologists of color, biologists at PUIs, and parents

- Improving accessibility at the Evolution conference for scientists with disabilities, scientists of marginalized genders, and scientists who are nursing/caretaking

- See our upcoming initiatives: https://-www.evolutionsociety.org/news/display/2020/9/-29/acting-on-our-commitment-to-diversity-equity-and-inclusion-dei-in-sse/ More information about the SSE DC can be found on our web page < https://www.evolutionsociety.org/content/diversity-committee.html >. Examples of prior initiatives, such as diversity events that were planned for the Evolution 2020 meeting, can be found on the meeting website < https://www.evolutionmeetings.org/diversity-at-evolution-2020.html >.

Please submit your application by December 15, 2020 to diversity@evolutionsociety.org. Questions may also be directed to this email address.

communications@evolutionsociety.org

TangledBank InstructorResources

I'll be teaching from The Tangled Bank (Carl Zimmer) in the spring and I'm looking for instructor resources, specifically images of the book's figures. MacMillan doesn't even list the book on their website, so I don't think these are available from the publisher anymore. Does anyone perhaps have these, either on a DVD or the book in .pdf form?

Thanks! James james.beck@wichita.edu

James Beck Department of Biological Sciences Wichita State University www.becklaboratory.com/James James.Beck@wichita.edu

Vienna PopGen webinars

Dear community,

we'd like to bring your attention to our PopGen Vienna webinars, featuring a series of high-calibre population/evolutionary genetics talks every Tuesday at 17:00 CET.

The full program including a registration link is available here: https://www.popgen-vienna.at/news/seminars/ Upcoming November talks: 10.11.20 Nandita Garud (Univ. of California, Los Angeles, US) Rapid adaptation in natural populations: Lessons from Drosophila and the human microbiome.

17.11.20 Nicolas Bierne (Univ. de Montpellier, FR) Anthropogenically admixed mussel genomes support a polygenic architecture of species barriers.

24.11.20 Wenyu Zhang (Max Planck Institute for Evolutionary Biology, DE) The high primary rate of gene retroposition leads to a high mutational load in house mouse natural populations.

Kind regards,

– Dr. Julia Hosp Vienna Graduate School of Population Genetics Coordinator

www.popgen-vienna.at https://twitter.com/-PopGenViennaPhD c/o Institut für Populationsgenetik Veterinärmedizinische Universität Wien (Vetmeduni Vienna) Veterinärplatz 1, 1210 Wien

Current home office contact via Skype: julia.hosp Office: +43 1 25077 4338 (currently unavailable)

http://www.vetmeduni.ac.at/en/population-genetics/ https://twitter.com/PopGenVienna julia.hosp@gmail.com

PostDocs

Barcelona StatPopGenomics

Postdoctoral opportunity: Statistical and Population Genomics

One postoctoral position is available to work in the study of the dynamics of the Distribution of Fitness Effects (DFE) produced by the domestication process. Sudden environmental changes can modify the DFE of a population. The presence of standing variation can play a fundamental role in the adaptation to the new environment. This project requirres bioinformatic and statistical analysis of whole genome data.

These are 2-year full time employment contract (Gross Salary approx. 35,300 euro /year).

In case further funding is procured within the academic area and the candidate is qualified, an extension up to of 4 years postdoc employment are possible.

Interested candidates, please contact to Dr. Sebastian E. Ramos Onsins at sebastian.ramos@cragenomica.es

Description of the call: CRAG has been recently awarded 10 post-doctoral fellowships on the MSCA-COFUND PROJECT "AGenT" (Agricultural Genomics Transversal Postdoctoral Programme; https://-www.cofund-agent.eu) to join different research groups on animal genomics and plant biology. This is a two-step process. In the first step, the interested candidates should contact the principal investigator of the research line they would like to join. Twenty candidates will be selected from all the interested applicants. In a second step, an internal committee will select 10 successful candidates to join CRAG. Applicants from all nationalities that obtained their PhD less than 5 years before the end of this call are eligible. Exceptions Applicants must not have resided or carried out her/his main activity (work, studies, etc.) in Spain for more than 12 months in the 3 years immediately before the call deadline. .

Timelines of the call: -Deadline first call: 30th November 2020 -Expected publication of results: April 2021

-Fellowships start date: May - October 2021

A detailed description of the fellowship and the application process is available at https://www.cofund-agent.eu . Sebastian E. Ramos-Onsins, PhD Researcher at CRAG

Centre for Research in Agricultural Genomics (CRAG) CSIC-IRTA-UAB-UB Plant and Animal Genomics Program Despatx 307 Carrer de la Vall Moronta, Edifici CRAG, Campus UAB 08193 Bellaterra, SPAIN

Phone: +34 93 563 6600 Ext 3348 Fax: +34 93 563 66 01

email: sebastian.ramos@cragenomica.es skype: sebasramos http://bioinformatics.cragenomica.es/-numgenomics/people/sebas http://github.com/-cragenomica/ Centre for Research in Agricultural Genomics Edifici CRAG - Campus UAB 08193 Cerdanyola del Vallès Barcelona, Spain cragenomica.es

Sebastián Ramos Onsins <sebastian.ramos@cragenomica.es>

Barcelona StatPopGenomics Amendment

AMENDMENT: PLEASE CONTACT sebastian.ramos@cragenomica.es BEFORE NOVEMBER 20th.

Postdoctoral opportunity: Statistical and Population Genomics

One postoctoral position is available to work in the study of the dynamics of the Distribution of Fitness Effects (DFE) produced by the domestication process. Sudden environmental changes can modify the DFE of a population. The presence of standing variation can play a fundamental role in the adaptation to the new environment. This project requirres bioinformatic and statistical analysis of whole genome data.

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A detailed description of the fellowship and the application process is available at https://www.cofund-agent.eu . Sebastian E. Ramos-Onsins, PhD Researcher at CRAG

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email: sebastian.ramos@cragenomica.es skype: sebasramos http://bioinformatics.cragenomica.es/-numgenomics/people/sebas http://github.com/-cragenomica/ Centre for Research in Agricultural Genomics Edifici CRAG - Campus UAB 08193 Cerdanyola del Vallès Barcelona, Spain cragenomica.es

Sebastián Ramos Onsins <sebastian.ramos@cragenomica.es>

sebastian.ramos@cragenomica.es

Budapest OriginOfTheEukaryoticCell

One week left until (12.01.) the first round of selection!

We are hiring a Postdoctoral Researcher(PD) in bioinformatics as part of an interdisciplinary project on the origin of eukaryotic cells. The PD will develop phylogenetic methods to investigate the provenance of prokaryotic genes in eukaryotes and the timing of their integration into the nascent eukaryotic lineage. The PD will be

based at the Institue of Evolution at the Hungarian Academy of Sciences' Center for Ecological Research under the supervision of Dr. Gergely SzöllÃµsi.

The project is highly collaborative and inter-disciplinary, both among fields (palaeobiology, phylogenetics, method development) and among countries/cultures, with team members in Bristol (Dr. Tom Williams, Prof. Phil Donoghue FRS and Prof. Davide Pisani), Budapest (Dr. Gergely SzöllÃµsi) and Den Helder (Dr. Anja Spang). More broadly, the project is part of a larger global initiative on the origin of eukaryotes funded jointly by the Simons and Moore Foundations. The PD will present their work at regular meetings of the entire consortium. The successful candidate will have a background in phylogenetics or, more generally, mathematical modeling.

Given the challenges of the ongoing pandemic, we're open to flexible/remote arrangements.

Pease enquire at ssolo@elte.hu

To be considered, please send a single merged PDF to ssolo@elte.hu that contains your CV including publication list, preferably with a link to your google scholar profile, academic transcripts, a statement of research interests (3 pages or less) as well as three academic references. Please include 'MOORE2020' in the subject of your email. Applications will be considered until the position is filled with first round of selection expected at the end of November 2020.

sszolo@gmail.com

ColoradoStateU MolecularEvolution

The Sloan lab at Colorado State University is recruiting a postdoctoral researcher who is broadly interested in molecular evolution to work on cellular integration of mitochondrial and nuclear protein synthesis. With the support of a new NSF grant, the lab will be investigating how the dynamic history of plant mitochondrial tRNA populations affects interactions with the nuclear-encoded enzymes responsible for tRNA editing and charging. In particular, we will investigate the ongoing loss of tRNA genes from the mitochondrial genomes of certain plants and how they are functionally replaced by importing cytosolic (nuclear) tRNAs that are separated by billions of years of evolution.

The project will include both comparative genomic and molecular genetic wet-lab components. A postdoc would have the opportunity to contribute to either or both of these areas depending on their skills and interests. Relevant areas of experience could include one or more of the following: protein sequence evolution, mitonuclear interactions, gene duplication, subcellular targeting, protein import, protoplast transformation, fluorescence microscopy, and both short-read and long-read sequencing technologies.

Our lab is in the Department of Biology, which is housed in a state-of-the-art research facility that opened in 2017. The department includes numerous labs in the fields of both plant molecular biology and evolutionary biology, so there are ample opportunities for collaboration outside the lab group. The university is in Fort Collins, Colorado, which routinely ranks among the top locations in the country in terms of overall quality of life. More information about our lab is available at our lab website: https://sites.google.com/site/danielbsloan/ We will be looking for a highly motivated postdoctoral researcher who is excited about addressing evolutionary questions at the molecular level and wants to contribute to a positive and collaborative intellectual environment. Start date is flexible, but we envision someone joining the lab in spring, summer, or early fall 2021. Inquiries can be e-mailed to Dan Sloan (dbsloan@rams.colostate.edu) and should include a CV and a brief statement of research/career goals. Evaluation will begin January 1, but inquiries are still highly encouraged after that point.

Dan Sloan <dbsloan@rams.colostate.edu>

Cornell CompPathogenGenomics

Postdoctoral Associate Position in Pathogen Comparative and Evolutionary Genomics Dr. Laura Goodman's Lab, Department of Population Medicine and Diagnostic Sciences College of Veterinary Medicine, Cornell University, Ithaca, NY

The Goodman Lab in the Department of Population Medicine and Diagnostic Sciences, Cornell University College of Veterinary Medicine, is recruiting a full-time postdoctoral associate analysis position in the area of evolutionary genomics of bacteria and coronavirus. The postdoctoral associate will work in collaboration with the lab of Michael Stanhope and investigators at other institutions on projects relating to E. coli adaptation and antibiotic resistance in dogs, and alpha and beta coronavirus evolution in animals. Data for the E. coli project are already collected and the coronavirus sequence data collection is underway. The candidate should be well

versed in basic principles and techniques of prokaryote comparative genomics, as well as molecular evolution analysis. Successful candidates should have an interest in infectious diseases, strong communication and interpersonal skills, and demonstrate skills and experience in handling and manipulating large data sets, via remote server access using Linux command line.

Required Qualifications Ph.D. in molecular biology, microbiology, evolutionary biology or related field. Must be able to work confidently as an independent researcher in a remote analysis set-up. Must be experienced in handling NextGen sequence data - preferably in prokaryotes. Experience in evolutionary genetic analysis.

To apply, visit https://academicjobsonline.org/ajo/jobs/17266, to submit a cover letter describing your research interests, career goals, research skills, and experience; CV (including a list of publications); writing sample, and the names of three professional references.

As per Cornell's standard policy, this is a one-year appointment, subject to renewal based on performance and available funding.

The chosen candidate could start immediately and will be expected to work remotely in an approved US domestic location that meets Cornell's liability and compensation policies. Relocation is not required or expected.

If you have any questions regarding this posting, please contact Dr. Laura Goodman (laura.goodman@cornell.edu).

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans and Individuals with Disabilities. We also recognize a lawful preference in employment practices for Native Americans living on or near Indian reservations. Cornell University is an innovative Ivy League university and a great place to work. Our inclusive community of scholars, students, and staff impart an uncommon sense of larger purpose, and contribute creative ideas to further the university's mission of teaching, discovery, and engagement.

"laura.goodman@cornell.edu"
<laura.goodman@cornell.edu>

CPG Stockholm Palaeogenomics

POSTDOCTORAL RESEARCHER IN PALAEOGENOMICS

We are looking to fill a position of Postdoctoral researcher in palaeogenomics. The advertised position is for one year. The postdoc will be based in Love Dalén's research group at the Centre for Palaeogenetics (www.palaeogenetics.com), which is a joint venture between the Swedish Museum of Natural History and Stockholm University. The position is funded by a FORMAS project aimed at investigating the palaeogenomic consequences of Pleistocene climate change.

WORK TASKS

The postdoc will conduct both laboratory work and computational analyses of palaeogenomic data from a wide range of different animal species, with the aim to track evolutionary changes through time and their relation to past climate change. In addition, the postdoc will be encouraged to develop new projects, apply for third-party funding, supervise students and lecture at courses.

QUALIFICATIONS

The ideal candidate is a creative and independent researcher with a PhD degree in biology or another relevant field. Depending on when the candidate defended his/her PhD thesis, the official employment will either be as a postdoc or researcher. A record of scientific achievement in bioinformatics and computational genomics is essential, as is previous experience in handling NGS data using scripts and analysis pipelines. Additional merits include: - Experience in computational analysis of ancient or historical genomic data. - Proficiency in wet lab analyses of ancient or historical DNA samples. - Experience working in a Unix/Linux environment and programming skills. - Excellent communication skills in English.

SCOPE OF EMPLOYMENT

Form of employment: Temporary employment. Scope: Full-time. The ideal starting date is 1st of January 2021, but this is highly flexible. The position is for one year.

ABOUT THE SWEDISH MUSEUM OF NATURAL HISTORY

The Swedish Museum of Natural History (http://www.nrm.se) is one of the leading institutions of

its kind in Europe. It combines a venerable tradition and unique collections with cutting-edge research in geology, paleontology and biology. The research at the Department of Bioinformatics and Genetics focuses on computational phylogenetics, population genetics and genomics. More information is available at: www.nrm.se/en/forskningochsamlingar/-bioinformatikochgenetik.9000580.html APPLICATION

Last application date: 04/12/2020 Reference number: 2.3.1-604-2020 You can apply for this job via this link: https://www.nrm.se/en/ommuseet/jobbahososs/-ledigatjanster.9005019.html The application should consist of: - a one-page personal letter describing your research interests, qualifications and reasons for applying - a CV that also includes contact details for 2-3 references.

CONTACT

Contact person: Professor Love Dalén +46-8-519 542 81 love.dalen@nrm.se

Union representatives: - Ingimar Erlingsson, Saco-S, +46-8-519 540 68 - Mattias Forshage, ST, +46-8-519 540 49

OTHER

The Swedish Museum of Natural History strives for gender balance, and ethnic and cultural diversity among its staff. http://www.nrm.se Love.Dalen@nrm.se

EmoryU BacteriaBacteriophageEvolution

Postdoctoral Research Associate Position 'V Department of Biology, Emory University, Atlanta, Georgia, USA

We are looking for an investigator to do jointly theoretical and experimental research on the population and evolutionary biology of bacteria and bacteriophage. The qualifications desired for this NIH-funded project are background and experience, (i) doing experimental research with bacteria and bacteriophages, (ii) doing mathematical and computer simulation modeling of the population and evolutionary dynamics of bacteria and bacteriophage, (iii) extracting and preparing DNA from bacteria and phage to sequence specific regions of their genomes as well as whole-genome sequencing, and (iv) with the application of the bioinformatic tools necessary for the analysis these DNA sequence data. The preferred candidates will meet all of these qualifications. We are not interested in pure theoreticians or bioinformaticians. For a perspective on our research and our recent and not-so-recent publications, see www.eclf.net .

Candidates for this position should have their Ph.D. or equivalent degree or anticipate having these degrees by January 2021. To inquire or apply, please write to Bruce Levin blevin@emory.edu. In addition to your CV, in your application please included a 500 - 1000 word description of a project on the population and evolutionary biology of bacteria and phage upon which you would be the primary investigator (= first or sole author). Be sure to list the question(s) you would like to address and provide a brief description of how you would address them. Also include the names and e-mail addresses of three (3) people from whom we can request letters of recommendation. We will only ask for references after an initial screening of your application, and will let you know if we do so. Emory University is an equal opportunity and affirmative action employer. Women, minorities, people with disabilities, and veterans are strongly encouraged to apply.

Applications will be accepted until December 15, 2020

With best wishes for your well-being and that of all the people for whom you care

Bruce

– Bruce R. Levin, Samuel Candler Dobbs Professor Department of Biology Emory University 1510 Clifton Rd Atlanta, GA 30322 404 727 2826 Office, 404 727 2956 Lab, 404 727 2880 Fax blevin@emory.edu www.eclf.net "Levin, Bruce" <blevin@emory.edu>

FloridaIntlU EvolutionDiversity

I currently have two years of funding for a postdoctoral researcher at Florida International University. The postdoc will lead research projects and will have the opportunity to develop independent research within the major research themes in the Cox laboratory. This position will start in the summer or Fall of 2021, but I am open to earlier starting dates. If you are interested in working in the lab, please contact me by email (ccox@fiu.edu) with your CV and brief (~1 paragraph) statement of research experience and interests. Review of applicants will begin immediately and continue until the position is filled, but applicants are encouraged to contact me by November 30th, 2020.

We study the evolution of diversity in nature. Our

research at Florida International University integrates evolutionary biology, physiology, transcriptomics, and genomics to understand both the evolution and function of phenotypic and genetic variation at different levels of biological organization ïÂ¿Â½V between sexes, within species, and among species. We study this diversity in amazing ecosystems from the subtropics of south Florida to lowland tropical rainforest in central Panama and the arid highlands of Mexico and the American southwest. While current research in our lab generally centers around reptile and amphibian systems, I also study other animals and am open to exciting project ideas involving other organisms. Please visit the Cox laboratory website http://www.coxevolab.org/ Florida International University is located in Miami, which is a great place to live and work. South Florida is a subtropical paradise with warm summers and mild (almost nonexistent) winters. Miami is only minutes away from two national parks (Biscayne National Park and Everglades National Park), countless beaches, and the Florida Keys. Miami is also a vibrant and culturally diverse city, with the accompanying access to great dining and other recreational opportunities. Finally, south Florida is an amazing place to study reptiles, amphibians, and other animals, with diverse native wildlife and dozens of abundant invasive species.

We are strongly committed to diversity, equity, and inclusion by creating an environment where scientists of all backgrounds are empowered to conduct great science. In particular, we acknowledge that science has systematically disadvantaged women, LGBTQ people, and Latinos/Latinas, Black, Indigenous, and other non-Black People of Color. We seek to contribute to rectifying this injustice through training, dialogue, and support of initiatives that will to make science more just for everyone. You are encouraged to apply if these same values are also important to you.

Christian Cox <ccox@fiu.edu>

HarvardU PlantEvolution

Katharine H. Putnam Fellowships in Plant Science The Arnold Arboretum of Harvard University invites applicants for research fellowships in plant science. Putnam Fellowships offer excellent opportunities for advanced research and study using the Arboretum's living collections of woody plants. Scientists with a PhD and who have identified an independent research project that would utilize the Arboretum's living collections are encouraged to apply. The living collection, numbering some 15,000 plants, in over 2,200 species, is distinguished as one of the most thoroughly documented collections of temperate woody plants in the world. Taxonomic diversity and breadth within the collection are noteworthy, and the floras of China, Japan, and Korea are particularly well represented.

Deadline: Feb 1 Eligibility: Proposals are sought from early-career individuals with a PhD in plant biology, evolution, plant genetics, plant ecology, horticulture, or related discipline. Applicants should be well positioned to conduct original, independent research and to publish their findings in peer-reviewed publications.

Fellowship Details: Putnam Fellows are full-time employees of Harvard University during their tenure, with stipends of up to $53,000 per year depending on the duration of the fellowship, and are eligible for health insurance benefits. Modest support is available for research expenses and travel costs. The fellowship is typically awarded for 2 years, pending a satisfactory progress report at the end of the first year. Putnam Fellows are expected to be in full-time residence at the Arboretum and are provided office and research space.

The Putnam Fellowship is an independent post-doctoral position. As an independent scholar, Putnam Fellows have access to shared laboratories, resources, and interactions with fellow scientists, students and staff. It is not necessary to have a specific faculty host.

More information: http://arboretum.harvard.edu/-research/programs-and-opportunities/ Faye Rosin, PhD Director of Research Facilitation Arnold Arboretum of Harvard University 1300 Centre St Roslindale, MA 02131

phone: (617) 384-5095 fax: (617) 384-6596

frosin@oeb.harvard.edu http://arboretum.harvard.edu/

Ifremer MarineConservation

Ifremer has launched its 2021 call for post-doc applications to researchers proposing innovative projects that are consistent with the three main themes below:

Protect and restore the ocean.

Sustainably use marine resources to benefit society.

Create and share ocean data, information & knowledge.

For more information about the themes, see:

https://wwz.ifremer.fr/en/Research-Technology/-Scientific-strategy/Join-Ifremer-for-your-Post-Doc

Sophie Arnaud-Haond

Ifremer UMR 248 MARBEC (Marine Biodiversity, Exploitation and Conservation) Bd Jean Monnet, BP 171, 34203 Sète Cedex - France Tel: +33 4 99 57 32 61

sophie.arnaud-haond@umontpellier.fr

IndianaU EvoDevoHornedBeetles

POSTDOC POSITION IN EVO DEVO AND ECO DEVO OF HORNED BEETLES (Moczek-Lab, Indiana University, Bloomington)

A full-time postdoctoral position is available in Armin Moczek's lab (https://ecoevodevo.com/), Department of Biology, Indiana University, Bloomington. Our lab conducts research in the evolutionary developmental (evo-devo) and ecological developmental (eco-devo) biology of insects. We focus on the genetic, developmental, and ecological mechanisms, and their interactions, that mediate the origins and diversification of novel complex traits (such as beetle horns, firefly lanterns, or treehopper helmets) and functions (such as nutrition-responsive development, sexual dimorphisms, or alternative reproductive tactics).

The position will focus on identifying the genes and pathways underlying the origin and diversification of horns and other complex traits in the extraordinarily diverse beetle genus Onthophagus. Specifically, the work will use genomic and candidate-gene approaches to identify and functionally characterize the developmental-genetic mechanisms that regulate horn morphology (size, shape, position, integration), context-dependent expression of horns (sex- and nutrition-specificity), and how evolutionary changes in these mechanisms have mediated diversification within and among species. This position is fully funded by a multi-year grant from the National Science Foundation.

The postdoctoral candidate would have opportunities to develop additional independent lines of research in these and related areas.

We seek a collegial, self-motivated, independent, and intellectually curious individual with a recent PhD in Evolutionary Biology, Developmental Biology, or related fields required at the time of appointment. Applicants must have strong bench skills, and familiarity with techniques such as RNAinterference, CRISPR-Cas9, qPCR, cloning, immuno-histochemistry, and the bioinformatic analyses of next-gen sequencing data is strongly desirable (though training in these techniques will also be provided as necessary). In addition, candidates must have demonstrated excellent written and oral communication skills. Experience working with insects is helpful but not required. The position is initially available for 12 months, with likely extension for a second and third year funds permitting. Salary will be commensurate with experience, and full benefits are included.

Indiana University has a large and interactive group at the interface of evolutionary and developmental biology and ecology. Bloomington is situated in scenic, hilly southern Indiana, near several parks and wilderness areas. The cultural environment provided by the University is exceptionally rich in art, music, and theater.

To apply, please submit a letter of application, a CV, a statement of research interests, and the contact information for three references to https://-indiana.peopleadmin.com/postings/9755.Anticipated start date is January 4, 2021 (though exact start date is flexible), with best consideration to those applying prior to December 4, 2020. Note that applications arriving after this date will continue to receive full consideration until the position is filled. Inquiries can be directed to Armin Moczek (armin@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, color, disability, ethnicity, sex, gender identity, gender expression, genetic information, marital status, national origin, race,

religion, sexual orientation, or veteran status.

Armin Moczek Fulbright Distinguished Chair in Science, Technology, and Innovation

Professor of Biology, Indiana University http://-ecoevodevo.com/ https://agencyinlivingsystems.com/ https://afrisnet.org/ Immigrants - we get the job done!

"Moczek, Armin P" <armin@indiana.edu>

IndianaU PlantMicrobeInteractions

Postdoctoral Fellow in Evolutionary Ecology Indiana University The Lennon lab (https://-microbes.bio.indiana.edu/) seeks a motivated and curious postdoc to work on GEMS: Genomics and Eco-Evolution of Multi-Scale Symbiosis, which is a newly announced NSF Biological Integration Institute (https://symbiosis.illinois.edu) to investigate plant-soil-microbe interactions using integrative approaches from molecular biology,ecology, evolution, theory, genomics, and computation. In addition to expertise in these disciplines and questions, qualified applicants will have background or drive to learn about population-level barcoding, microbiology, experimental evolution, and the analysis of high throughput sequence data. The postdoc will have the opportunity to work collaboratively with researchers from Indiana University, University of Illinois Champaign-Urbana, University of Chicago, and University of Carolina Greensboro. By the start of appointment, a Ph.D. in Microbiology, Ecology, Evolutionary Biology, Computational Biology or related field is required. The position is available for 12 months with expected renewal in subsequent years based on satisfactory performance. Anticipated start date is January 1, 2021 but negotiable. Salary will be commensurate with experience. Full benefits are included.

Indiana University has a large and interactive group at the interface of ecology, evolution, and microbiology. Bloomington is situated in scenic, hilly southern Indiana, near several parks and wilderness areas. The cultural environment provided by the University is exceptionally rich in art, music, and theatre. To apply, please submit a letter of application, a C.V, statement of research interests, and the contact information for three references to https://indiana.peopleadmin.com/postings/9998. Best consideration for those applying prior to December 1, 2020. Inquires about the position can be directed to Jay Lennon (lennonj@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 employmentwithout regard to age, ethnicity, color, race, religion, sex, sexual orientation, gender identity or expression, genetic information, marital status, national origin, disability statusor protected veteran status.

Jay T. Lennon Professor Department of Biology Indiana University 1001 E. 3rd Street Bloomington, IN 47405 812-856-0962 lennonj@indiana.edu web: microbes.bio.indiana.edu wiki: lennon.bio.indiana.edu

"Lennon, Jay" <lennonj@indiana.edu>

JohnsHopkinsU DiseaseEvolution

The research group of Dr. Alison Hill at Johns Hopkins University invites applicants for a postdoctoral fellow to contribute to the group's work developing mathematical models and computational tools to better understand, predict, and control infectious diseases. We are seeking a motivated and creative PhD-level scientist with experience applying mathematics to biological systems. The successful applicant will become a part of two highly-collaborative multi-PI groups at the university: the Institute for Computational Medicine https://icm.jhu.edu/ and the Infectious Disease Dynamics Group http://-www.iddynamics.jhsph.edu/ The position is expected to be virtual for the duration of university closures in response to COVID-19.

Multiple positions are available to contribute to new and ongoing projects in the group, such as modeling a) within-host dynamics and evolution of HIV infection in response to antiretroviral therapy, b) cure strategies for HIV/AIDS including immunotherapy and latency-targeting therapies, c) strategies to slow the evolution of drug resistance for a wide range of pathogens, d) spread of COVID-19 and the efficacy of control policies. The group additionally studies the spread of bed bug infestations, antiviral immune responses, cancer-causing viruses, and the intersection of human behavior and infection spread. The work involves both deterministic and stochastic modeling, and working with a variety of data types and collaborators around the world. The successful candidate will also be welcome to pursue independent research topics of mutual interest. The

lab is funded by grants from the National Institutes of Health and the Bill & Melinda Gates Foundation. More information about our current and previous work can be found at http://alsnhll.github.io/ The successful applicant should have a PhD in a quantitative field and some experience working on topics in biology, medicine, or public health. Example fields of training of former lab members include (but are not limited to) applied math, biophysics, epidemiology, systems biology, ecology/evolutionary biology, physics, and biomedical engineering. The ideal candidate would be able to follow projects through from conception to publication, be a strong writer, have experience presenting their work to scientific audiences from diverse fields, enjoy working collaborative, and be excited to mentor junior trainees. Programming skills (ideally in at least one of Python, R, or Matlab) are required.

The start date of the position is flexible, and could be as early as Dec 2020 or as late as Spring 2021. Due to university regulations during the COVID-19 pandemic, the applicant must already be living in the US and must be able to work remotely. The duration of the position is also flexible based on the employee's performance and career goals, and can be renewed on an annual basis. Salary is competitive and commensurate with experience; comprehensive benefits including health insurance are provided to all postdoctoral fellows.

Interested candidates should submit the following (in pdf form) to alhill@jhmi.edu:

* A cover letter describing the applicant's research interests, educational background and previous research experiences, and career goals * A CV, which includes a link to a Google Scholar profile * Contact information for 3 references (will only be contacted after initial meeting with applicant)

Applications will be considered on a rolling basis and should be submitted as soon as possible.

"alhill@jhmi.edu" <alhill@jhmi.edu>

LundU Paleogenomics

LundU.Paleogenomics

Post-doctoral Fellow Position

Lund University, Sweden

https://lu.varbi.com/what:job/jobID:366072/?lang=en
We are looking for a postdoctoral fellow

We are accepting applications for a two-year postdoctorate fellow position in biostatistics and genomics to developing machine learning tools to date genomess and identify their geographic origins. The position is available immediately. See the link above for full details.

Review of applications begins on at the end of December 2020.

Overview:

Candidates are expected to have an interest in biology and human history alongside strong computational skills with a background in mathematics, statistics, physics, computer science, and/or a related field. Candidates are also expected to have fundamental knowledge and experience with Machine Learning methods. The candidate will work jointly with Dr. Eran Elhaik and Prof. Mattias Ohlsson 9Department of Biology, Lund University), and Prof. Eske Willerslev (at the University of Copenhagen.

Many thanks!

Eran Elhaik, Ph.D. Assoc. Professor in genomics

Lund University Faculty of Science Department of Biology SE 223 62 Lund Visiting address: Sölvegatan 35

Tel: +46 46-222 9419 Fax: +46 46-222 44 25 eran.elhaik@biol.lu.se http://www.eranelhaiklab.org/ Eran Elhaik <eran.elhaik@biol.lu.se>

MaxPlanck Jena EvolutionaryCellBiology

Max Planck Jena - Evolutionary/Cell Biology.

Two year postdoc/research scientist position at Max Planck Institute for Chemical Ecology, Germany, on the evolution of target site insensitivity.

We are seeking a dedicated and talented full-time cell culture scientist to join the Predators and Toxic Prey Research Group at the Max Planck Institute for Chemical Ecology in Jena. The successful candidate should have a strong background in molecular and cell biology techniques including production of recombinant plasmids/bacmids, large construct (P1, BACs, PACs) plasmid purification, culture of cell lines, cell transfection, and recombinant protein expression. They will play an important role within the research group by investigating the evolution of target site insensitivity.

They will be expected to participate in experimental design, conduct experiments, and to maintain detailed records. The position is available until 31.12.2022 and may be extended depending upon funding. The position is available immediately, and will ideally start early 2021.

The remuneration is paid according to the collective agreement of the public service TVöD according to the qualification and the activity to be transferred. We particularly welcome applications from women and underrepresented minority candidates. The Max-Planck society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. The working language of the group is English.

Roles/Responsibilities: - Prepare reagents, buffers, and growth media. - Aseptic maintenance of cell culture - thawing, passaging, and cryopreservation of cells. - Production of recombinant bacmids. - Plasmid purification. - Transfection of cells, and recombinant expression of proteins via baculovirus. - Extraction of plasma membrane proteins. - Functional assay of proteins. - Maintains the lab in good working order, which includes operation and maintenance of equipment (centrifuges, microscopes and incubators). - General laboratory cleaning and maintaining of logs. - Work according to established Standard Operating Procedures (SOPs) and regulatory guidance. - Troubleshoot, and keep detailed records in a laboratory notebook. - Conduct experiments independently. - Communicate results and observations to colleagues in one-to-one and team meetings.

Qualifications and experience: - A Masters or PhD degree in biology, biochemistry, or other related subject with 1-2 years of experience. - Cell and molecular biology techniques including working under aseptic technique, sf9 cell culture, producing recombinant baculovirus, working with DH10Bac competent cells, ELISA. - Technical proficiency in operation of standard cell biology laboratory equipment including microscopes, laminar flow biological safety cabinet, plate readers, liquid handlers, centrifuges and pipettes. - Excellent attention to detail, strong documentation skills, and ability to communicate effectively (both written and verbal). - Excellent organizational, technical, and trouble-shooting skills with attention to detail. - Ability to learn new techniques, perform multiple tasks simultaneously, and keep accurate records, follow instructions. - Ability to work independently and as part of a team, self-motivation, adaptability, and a positive attitude.

How to apply: Candidates should send a CV and cover letter to predatorsandpreympg@gmail.com indicating their interest in the position and their background in cell and molecular biology techniques. Incomplete applications will not be considered. Application deadline is 4th December 2020.

Hannah Rowland <hrowland@ice.mpg.de>

MBL WoodsHole MaternalAgeEffects

Postdoc 'V Maternal age effects: mitochondrial and epigenetic mechanisms A postdoctoral research position is available to study the cellular, genetic, and epigenetic mechanisms of maternal age effects on offspring health and lifespan. The project will focus on the role of mitochondrial dynamics and function in maternal age effects, using molecular, bioinformatic, biochemical, and imaging techniques.

This is an NIH-funded project in the laboratory of Dr. Kristin Gribble at the Marine Biological Laboratory, Woods Hole, MA. The lab researches the mechanisms and evolution of aging and maternal and transgenerational effects on offspring health. We use rotifers as a model system for our work. For more information about the lab' Âs research and publications, see mbl.edu/jbpc/gribble.

Applicants should possess a Ph.D. molecular biology, cell biology, biochemistry, genetics, bioinformatics, or a related field. The ideal candidate will have a record of scientific rigor, productivity, and creativity. Excellent oral and written communication skills are required. Knowledge of rotifer biology is not required; highly motivated individuals with experience in other model systems and with a background in bioinformatics, cell biology, biochemistry, epigenetics, and/or imaging are encouraged to apply. Salary commensurate with experience and qualifications.

Apply for this position via the MBL careers website <https://recruiting.ultipro.com/MAR1033MBL/-JobBoard/4c3007c3-6354-41de-a13f-d95be60d91e9/-OpportunityDetail?opportunityId 6840a6-9ab5-45b4-a9c9-a8e18ce15009>. Please submit (1) a cover letter with a brief description of your research experience and how you will contribute to research on the mechanisms of maternal effects on offspring, (2) a CV, and (3) contact information for at least three references.

Jennifer Larkum <jlarkum@mbl.edu>

MichiganStateU MolBiolQuantGenet

A postdoctoral position is available in molecular biology/quantitative genetics and genomics in the Department of Animal Science at Michigan State University in the laboratory of Wen Huang (https://qgg-lab.github.io). Our laboratory is broadly interested in the genetics of complex quantitative traits, using Drosophila, livestock animals, and human data as models. Laboratory approaches include classical genetics, molecular biology, genomics, statistics, and bioinformatics therefore trainees will receive training in these areas.

This advertisement invites applications from candidates with background in molecular biology/genetics. Candidates with a recent Ph.D. and experience in molecular biology or molecular genetics are strongly encouraged to apply; prior Drosophila experience is not required but a plus. Projects that can be immediately started include mapping developmental and environmental regulatory variation for translational control in early Drosophila embryos; development of massively parallel reporter assays to assess effects of regulatory variation for translation. Postdocs are also encouraged to develop projects that fit their own interest and align with directions of the lab. Candidates are encouraged to inquire and/or apply by sending current CV and a brief introduction explaining background, experience and career plan to the PI (Wen Huang: huangw53@msu.edu). References will be checked when there is mutual interest to move forward.

"huangw53@msu.edu" <huangw53@msu.edu>

MNHN-CNRS France ExtinctionHistoricalDNA

Postdoctoral position in historical DNA, extinction risk, and a genetic time series

A postdoc position is available to work on historical DNA from bird sub-fossils, museum skin specimens and fresh samples to develop a novel real-time assessment of genetic response to anthropogenic environmental change across multiple bird species following first human arrival in a pristine environment. The time series is designed to examine the long-term processes leading to variation in extinction risk between closely related species, comparing differences in demographic and selective responses to common environmental changes.

The position is part of a project funded by the French National Research Agency (ANR), that links competences of two research centres in France. In Toulouse, the UMR AMIS is among the leading laboratories worldwide in ancient DNA studies, and will be the postdoc's base for the historical DNA guidance and wet-lab work.

In Paris, the French National Museum of Natural History (MNHN) houses important specimens for the study, and is also home to expertise in genome-wide demographic analyses and method development, as well as in links between extinction risk, evolutionary history, and the study set up. The ANR project comes with funding for three years of postdoc salary, and some flexibility is possible in the recruit's time allocation between Toulouse and Paris over this period.

Please see below for further details and to apply

Postdoctoral position in historical DNA, extinction risk, and a genetic time series

ANR project Suscept-Ext: Understanding susceptibility to extinction using historical museum specimens as a genetic time series French National Museum of Natural History (ISYEB, MNHN), Paris University of Toulouse (AMIS - CNRS)

Scientific Coordinator, Paris: Ben Warren Toulouse participants: Ludovic Orlando, Catherine Thèves, Lounès Chikhi, Eric Crubézy Paris participants: Stefano Mona, Guillaume Achaz UK collaborator: Julian Hume

Evolutionary history is expected to play a major role in determining which species decline in population size to extinction in response to environmental change, but the processes by which this comes about are poorly understood. Although population genetic studies provide much promise to understand the microevolutionary processes behind macroevolutionary patterns of extinction risk, inferences can be limited by our confidence in the timescales inferred, and by the scale of such studies, which frequently include only one lineage. As a key-player in project ANR Suscept-Ext, the postdoc will tackle both of these issues, applying ancient DNA methods to museum (historical & subfossil) samples to obtain a genome-wide time series for multiple Mascarene island bird lineages that differ in abundance and other biological traits. Islands in the Mascarene archipelago (Mauritius & Réunion), Indian Ocean, are unusual among

sizable and biologically diverse landmasses worldwide, in that they had no human population until European arrival 400 years ago. Therefore, there exist museum samples and subfossils spanning the full duration of anthropogenic environmental change, allowing a real-time assessment of genetic response to environmental changes of known timing and across multiple species following first human presence.

Major goals for the postdoc include: 1) as a top priority, developing a working protocol and obtaining reliable genome-wide data from a variety of bird historical DNA samples, including museum skins (toe-pads), and subfossils up to 12,000 YBP from a variety of preservational environments including limestone and volcanic rock caves (essential), as well as attempting those of anoxic marshes;

2) playing a key role in DNA extraction and interaction with external genomics companies in order to obtain both de novo reference genomes and re-sequenced genomes from fresh samples;

3) analysing the resulting genetic time series (modern and historical genome-wide data of varying completeness) to track temporal changes in demography and selection since first human arrival in the Mascarenes ˜ 400 generations ago.

Funding has also been obtained for a PhD student to work alongside the postdoc in data analysis, the ancient DNA lab and/or method development, beginning by Year 2 at the latest.

Candidates are expected to have proven experience in generating and analysing genome-wide ancient or historical DNA data, and should ideally:

- have a strong interest in the broad theme of the study - understanding the role of evolutionary history in determining which species decline towards extinction in response to environmental change - be interested in relevant population genomic methods - show willingness, if needed, to play a key role in training a PhD student to help with the historical DNA wetlab work

The ANR project comes with funding for three years of postdoc salary,

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MNHN-CNRS France ExtinctionHistoricalDNA 2

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MunichU GenomicsAdaptiveDivergence

2-year post-doc position - the genomics of adaptive divergence

A postdoc position investigating the effect of gene flow on adaptive divergence in experimental populations of the fission yeast Schizosaccharomyces pombe is available in the research group of Jochen Wolf at Munich University, Germany.

Background Adaptive divergence describes how new forms can arise from a shared common ancestor by adaptation to different environments and is thought to be essential for the formation of new species by means of natural selection. Under geographical isolation, adaptive divergence readily results as a by-product of ecological specialization. Under conditions of gene flow, however, the conditions under which divergence may arise is a matter of debate. Gene flow might breakup beneficial combinations resulting in generalist phenotypes, but on the other hand can introduce novel variation that might facilitate novel adaptations. Due to the complex interactions between local adaptation, life history trade-offs, and genetic interactions, determining the mechanisms leading to divergence in natural systems is challenging. Controlled, replicated evolution experiments are a promising, yet largely unexplored way, to generate insight on the genetic basis of adaptive divergence in the context of gene flow. The Project We have been running an experimental evolution study for six years using the haploid fission yeast Schizosaccharomyces pombe, in which we vary the amount of migration while applying disruptive selection. The first analyses of the 132 replicate populations after 53 asexual generations (3 years into the experiment) showed divergence to be strongest

in allopatry as would be expected. Yet, also with the highest levels of gene-flow divergent ecological adaptation arose (1). In this project we will further analyse the populations (currently at 150 sexual generations, including ~2000 asexual generations). We are specifically interested to understand how genetic correlations (trade-offs) between life history traits affect ecological adaptation and which genetic architecture the stable maintenance of divergence against gene flow. We will analyse time series and haplotype data to understand if and how divergent phenotypes are maintained over time and test hypotheses such as antagonistic pleiotropy, negative epistasis, and assortative mating. This experiment with its stored longitudinal collection of population samples, which can be revived any time, is a great resource and evolution playground for any evolutionary geneticist. Qualifications The successful applicant holds a PhD degree, preferably with experience in experimental evolution, population genetics, comparative genomics, and has the bioinformatic skillset to analyse large genome-wide data sets. Basic knowledge of molecular biology techniques are expected, but specific training in yeast-genetics and -genomics will be provided. The position is open to researchers willing to perform both experimental and bioinformatic/population genetic analyses. Previous experience with yeast, quantitative genetics and/or statistical modelling (e.g. linear mixed models) is a clear asset. Research environment of the host lab The Wolf lab applies an integrative approach to explore micro-evolutionary processes and genetic mechanisms underlying species divergence, adaptation and genome evolution (2, 3). Using large-scale genomic approaches combined with field and lab-based experiments, we characterize genetic diversity within and between populations and assess its relationship to phenotypic divergence (4-6) - sometimes interpreting the data under a conservation angle (7, 8). In addition, we explore methodological aspects of data analyses (9, 10) and engage in comparative approaches to study evolution across larger timescales (11, 12). Empirical systems currently include natural populations of birds (swallows, cuckoos and corvids (4-6, 13, 14)), marine mammals (pinnipeds and killer whales) (15, 16) and fission yeast (1, 17, 18). More information on the research activities in the lab can be found at http://www.evol.bio.lmu.de/-research/j_wolf/index.html. The University of Munich is consistently ranked among the top Universities worldwide, in particular the life science branch with its newly inaugurated campus offering excellent technical facilities and many interaction possibilities including the gene center, several Max-Planck-Institutes and the Helmholtz Centre (http://www.campusmartinsried.de/en/336-2/-#). With the highest concentration of supercomputing in Germany the Leibniz Supercomputing Centre and its local partners provide access to state-of-the art computing facilities (https://www.lrz.de/english/). Munich, Bavaria's capital, is a vibrant, yet relaxed city with many traditions still

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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

NHM Luxembourg LandscapeGenetics

NatHistMuseum.Luxembourg.LandscapeGenetics

A three-year postdoc position funded by the Luxembourg Research Fund is available in the Zoology Department of the National Natural History Museum, Luxembourg (MNHNL). The postdoc will work with Alain Frantz (MNHNL) and Ximo Mengual (Zoologisches Forschungsmuseum Alexander Koenig, Bonn)

The project

The overall objective of the proposed study is to use landscape genetic resistance modelling to analyse the functional connectivity of typical Luxembourg and Western European landscapes from the viewpoint of hoverflies (Diptera: Syrphidae). We aim to understand whether urbanisation and the structural diversity of agro-ecosystems have an impact on hoverfly dispersal and which landscape features facilitate or hinder gene flow. The approach will be conducted for four target species in three urbanised areas and two pairs of rural areas with different degrees of habitat diversity. Among other aims, we will also test whether hoverfly size and habitat specialisation may influence the impact of habitat fragmentation on the flies.

What we require

Applicants should have a doctorate (PhD) in natural sciences with a background in genetics, molecular ecology, entomology and/or related disciplines. Applicants should have a strong interest in landscape genetics, i.e. in the use of large genetic datasets to make inferences about effective dispersal in animals. Ideally, candidates should have experience in bioinformatics, a proven track record in entomological field work and they should not shy away from laboratory work.

The successful applicant will be responsible for collecting samples in the field, performing some laboratory work and analysing the landscape genetic data. She/he will disseminate the results of the project through presentations and scientific publications.

Applicants should have a strong interest to work in an interdisciplinary team so that excellent knowledge of English is required. A driving licence is essential.

What we offer

A three-year contract with a competitive salary is offered. The post-doc will be based mainly in the Zoology research group at the MNHNL in Luxembourg City. The group has recently been re-established and is a well-funded, ambitious research group. As a postdoc you will benefit from easy access to your supervisors, but are expected to take on a leadership role relative to the more junior members of the team. While the project at hand is very ambitious, the position offers the prospect of significant autonomy. Throughout the years, a large number of genetic data sets have accumulated in the department that would lend themselves to landscape genetic analyses.

The MNHNL is an equal opportunity employer and is committed to increasing the proportion of women in academics. Consequently, we actively encourage applications by women. We also welcome applications from candidates with severe disabilities. Disabled candidates with equivalent qualifications will be preferentially considered.

How to apply

Applications should be written in English and compiled into a single PDF file. The application should include a cover letter (including the date on which the applicants could start the position, their motivation for this position and future research interests), curriculum vitae and copies of university degrees. Application material should be submitted no later than the 15th of December to alain.frantz@mnhn.lu. The same address can be used for informal inquiries. The (strongly) preferred starting date is the 1st of February 2021.

Alain FRANTZ <Alain.FRANTZ@mnhn.lu>

PekingU EvolutiongeneDrive

Postdoctoral Positions in the Champer Lab at Peking University Center for Life Sciences

Multiple postdoctoral positions are available in the Champer lab at Peking University in the School of Life Sciences and the joint Center for Life Sciences. Jackson Champer is scheduled to open the lab in early 2021. Entering postdocs can be experimental or computational, though individuals interested in both areas of research are also welcome.

Lab Overview

The main initial topic of the lab will be CRISPR gene drive. This type of allele can bias inheritance in its favor, potentially allowing it to spread throughout a population. There are many possible applications, such as spreading genes in mosquitoes that prevent transmission of malaria, dengue, and other diseases that kill hundreds of thousands of people every year. Gene drive can even be used for conservation purposes, such as suppression of invasive species. The lab will likely be pursuing additional related topics in the near future.

Initial goals of the lab will be: 1. To develop new types of gene drives using the fruit fly as a model organism. 2. To develop highly efficient gene drives that avoid "resistance" in mosquitoes. 3. To use computational modeling to assess how well gene drives will actually perform in real-world environments.

The general lab philosophy is to provide a friendly and supportive environment to help individuals be productive and achieve their career goals.

Application Requirements

Applicants should have a Ph.D. in biology or any other scientific or quantitative field.

Experimental postdocs should preferably have experience in molecular cloning and either fly or mosquito handling.

Computational postdocs should have a solid background in at least one programming language, such as python, R, or C++, and preferably experience in population modeling with simulations.

Applicants should have adequate English skills.

Application Instructions

To apply for a position, please send your CV/resume and a cover letter to Jackson Champer (jc3248@cornell.edu). Applicants with fellowships should mention this in their cover letter.

Optionally, applicants may send a short project proposal (which may be particularly important if applicants do not have experience in any of the stated areas above).

Applicants will be considered on a rolling basis.

Additional Information

Questions about the lab and the positions are welcome (jc3248@cornell.edu). For additional information, including the PI's CV, published papers, and previous students, see: https://champerlab.weebly.com Here are examples from the PI's recent work. Experimental paper: https://www.nature.com/articles/s41467-020-14960-3 Computational paper: https://www.biorxiv.org/content/10.1101/769810v1 Jackson Champer <jc3248@cornell.edu>

QMUL London BayesianPhylogenetics

Postdoctoral Research Assistant

Queen Mary University of London - School of Biological & Chemical Sciences

Deadline: 06-Dec-2020

Apply: https://ig24.i-grasp.com/fe/tpl_QMUL01.asp?newms=rf&ID=QMUL23381
A Postdoctoral Research Assistant position is available at Queen Mary University of London (QMUL) in Dr Mario dos Reis' group, to work on the BBSRC-funded project "Efficient Bayesian phylogenomic dating with new models of trait evolution and rich diversities of living and fossil species", in collaboration with Prof Phil Donoghue (Bristol University), and Prof. Ziheng Yang (UCL).

The successful candidate should have a PhD in Biology, Bioinformatics, Computer Science or a related field. The candidate should be able to provide evidence of expertise in biological data analysis and should have excellent computing skills. Knowledge of phylogenetics theory and methodology would be an advantage as would a proven record of high-quality published research. Self-motivation, an ability to work as part of a team and excellent research management and presentation skills are essential.

The post-holder will conduct research on the development and/or application of Bayesian phylogenetic models of molecular and morphological trait evolution, including analyses of simulated and real datasets, to calibrate evolutionary trees to geological time. The successful candidate will be expected to contribute to design of software and/or computational analysis pipelines, analysis of results and writing conference presentations and research papers. An ability to analyse biological data is essential, and ideally, the candidate would also have experience of phylogenetic analysis with software such as R, Beast, MrBayes or PAML. The candidate will join an international, multi-disciplinary team with cross site visits throughout the project.

Queen Mary is one of the top research-led universities in the UK and was ranked 9th among the UK multi-faculty universities in the Research Excellence Framework (REF 2014). All postdoctoral researchers are part of the QMUL Doctoral College, which provides support with high-quality training and career development activities.

At QMUL we believe that a diversity of ideas helps us achieve the previously unthinkable. Throughout our history, we've fostered social justice and improved lives through academic excellence and we continue to live and breathe this spirit today, not because it's simply 'the right thing to do' but for what it helps us achieve and the intellectual brilliance it delivers.

We continue to embrace diversity of thought and opinion in everything we do, in the belief that when views collide, disciplines interact, and perspectives intersect, truly original thought takes form.

The post is located in Mile End, it is full-time and available for a period of 2 years. The start date is 4th January 2021 or soon thereafter. The salary is in the range of 31,613 - 34,220 per annum and is inclusive of London allowance.

We offer access to a generous pension scheme, 30 days' leave per annum (pro-rata for fixed-term), a season ticket loan scheme and access to a comprehensive range of personal and professional development opportunities.

Informal enquiries are welcomed, and may be made to Dr Mario dos Reis via e-mail at m.dosreisbarros@qmul.ac.uk

For information about the School of Biological and Chemical Sciences please visit https://www.qmul.ac.uk/sbcs/ Mario dos Reis

Senior Lecturer @ QMUL https://dosreislab.github.io
mariodosreis@gmail.com

Riken Japan EvolutionaryBiology

TheoryEcologyEvolutionRIKEN-iTHEMS, Japan

Full Details: https://www.riken.jp/en/careers/-researchers/20201019_2/index.html Job description: RIKEN iTHEMS is seeking postdoctoral researcher(s) in the field of ecology and evolutionary biology (including population genetics, epidemiology, quantitative biology, and bioinformatics). Successful applicant(s) are expected to not only pursue high quality research in their own field but also promote interdisciplinary collaborations among different fields such as mathematics, physics, chemistry, life sciences, engineering, computational sciences, information sciences, and social sciences, under the concept of iTHEMS. This time, we encourage early-career applicants who have a high research potential in pursuing collaboration with Dr. Ryosuke Iritani (ecology and evolution) as well as various iTHEMS-researchers across disciplines. Though your research backgrounds in population-/community-dynamics, stochastic analysis, evolutionary game theory, and stochastic simulations are highly beneficial, we value your research proposal (concreteness, logicality, and realizability of your future plans) more than your past achievements. We welcome a pre-application inquiry for specific research plans and how fitted we think you could be, or for anything else (to the contact information below; please cc to ryosuke.iritani [at] riken.jp as necessary).

Qualification: The candidate should possess or is expected to obtain a doctoral degree by the starting date.

Work location: RIKEN Wako (2-1 Hirosawa, Wako, Saitama 351-0198)

Salary and benefits

1.A one-year fixed-term employment contract, renewable based on evaluation, to a maximum of 3 years of from the initial date of hire. 2.RIKEN may adjust the above maximum period of renewability based on a) the employee's abilities, work load at the time of contract completion, performance and work attitude and b) the continuation of the employee's center, laboratory or project and RIKEN's management situation and budget at the time. In principle, employment contracts will not be renewed for individuals older than 65 years. 3.The employee's period of fixed-term employment cannot exceed 10 years from the initial date of hire (or 10 years from April 1, 2013 for fixed-term employees already at RIKEN prior to this date).

In principle, the first two months of employment is considered a trial period. Salary will be commensurate with qualifications and experience. Commuting and housing allowances will be provided. Social insurance will be applied. Mandatory membership in the RIKEN Mutual Benefit Society (RIKEN Kyosaikai).

This position falls under the specialized duties discretionary work system; one working day will be calculated as 7 hours and 30 minutes.

Days off include public holidays, New Year's holidays (Dec. 29 - Jan 3), and RIKEN Foundation Day. No smoking on site (designated smoking areas available). These and other provisions are in accordance with RIKEN regulations.

RIKEN is promoting a Gender Equality Program by taking various measures to create a workplace where both men and women are able to give full rein to their talents and abilities. When applicants are judged to be equally qualified on the basis of fair and impartial criteria, women applicants will be given preference.

Also, eligible for an exemption from repayment for category 1 scholarship loans provided by the Japan Student Services Organization before the fiscal year 2003, and eligible applying for the MEXT Grants-in-Aid for Scientific Research (Kakenhi).

Required documents

1.Complete CV (with email address and ORCID iD) * Write down in the notes section of your CV the number written next to the title of the job position (e.g.W20122). 2.List of publications (including preprints) each with DOI 3.Research statement (summary of current and past research; no more than 2 pages) 4.Research proposal (your future plan; no more than 3 pages) 5.Your view of interdisciplinary theoretical and mathematical sciences (no more than 1 page) 6.Contact information of two persons willing to provide a reference 7.Consent form for handling personal information based on GDPR If you are a resident of the European Economic Area (EEA), you are required to submit the document, "Consent form for handling personal information based on GDPR (PDF 97KB)" with your signature.

*You will find detailed information about General Data Protection Regulation (GDPR) on the following website: Data protection | European Commission

How to apply: Combine the above documents in one PDF file and send it to ithems_app [at] ml.riken.jp with Subj: iTHEMS PD application (Biology, W20122).

Note: Application documents will not be returned.

Deadline: Open until the position is filled. First, we will select the application documents that arrived by December 21, 2020.

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SGN Frankfurt GenomicAdaptation

Job offer ref. #11-20021

The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. SGN conducts natural history research with almost 800 employees and research institutions in six federal states. Within SGN, the Senckenberg Biodiversity and Climate Research Centre (BiK-F) explores the interactions between biodiversity, climate, and society. Senckenberg BiK-F invites applications for a PostDoc Position - Genomic basis of environmental adaptation

(100%) The position is in the research group of Professor Imke Schmitt at the Senckenberg Biodiversity and Climate Research Centre. The lab studies molecular evolution and ecology of the lichen symbiosis with a focus on organism-environment interactions. Current interests include genome evolution, secondary metabolism, microbial community ecology, population genetics, and symbiotic interactions. Organisms we work with are lichenized and non-lichenized fungi and green algae, and bacterial and viral communities (microbiomes) of lichens and plants.

You will initially work on existing projects, and later develop your own research program within the thematic context of the Schmitt lab. You will have the option to get teaching experience and habilitate at Goethe University. You are expected to maintain a strong publication record, acquire third party funding, advise students, and contribute to the Senckenberg Science and Society program.

Your profile:

§PhD in evolutionary biology, ecology, bioinformatics, microbiology, or related field

§Strong publication record showing keen interest in molecular evolution and ecology

§Excellent communication and writing skills in English

§Bioinformatics skills, including NGS data analysis and ecological modeling, e.g. de novo genome assembly, metabarcoding, metagenomics, transcriptomics

§Laboratory experience, e.g. DNA extraction, library construction

§Creativity, ambition, analytical and collaborative skills

§A plus: Experience in experimental manipulation of microorganisms/plants

Salary and benefits are according to a full-time public service position in Germany (TV-H E13, 100%). The contract should start as soon as possible - ideally on February 1st, 2021 - and will initially be limited to three years with a possibility of extension.

The Senckenberg Research Institutes support equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment is in Frankfurt am Main, Germany.

Please send your application, mentioning the reference of this job offer (ref. #11-20021) before December 15th, 2020 by e-mail (attachment in a single pdf document) and including a cover letter detailing research interests and experience, a detailed CV and a copy of your certification to: Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25

60325 Frankfurt am Main

E-Mail: recruiting@senckenberg.de For more information contact Prof. Imke Schmitt (imke.schmitt@senckenberg.de).

Recruiting <recruiting@senckenberg.de>

Stockholm StatisticalPhylogenetics

Postdoctoral researcher in statistical phylogenetics

The Ronquist lab (https://ronquistlab.github.io/) is looking to fill a position as a postdoctoral researcher in statistical phylogenetics. The postdoc will be a key player in the development of new modelling and inference tools based on universal probabilistic programming, an approach that has attracted considerable attention across scientific disciplines in recent years. Specifically, we will be developing a domain-specific language to describe phylogenetics problems, and design new inference strategies for such model descriptions. The goal is to

successfully tackle some of the most challenging research problems in statistical phylogenetics and phylogenomics. For some early success stories, see our recent manuscript on bioRxiv: https://doi.org/10.1101/2020.06.16.154443 The postdoc will be encouraged to develop new projects, apply for third-party funding, supervise students and lecture at courses.

The ideal candidate should be a creative and independent researcher with a PhD degree in biology, statistics, computer science or another relevant field. Depending on when the candidate defended his/her PhD thesis, the official employment will either be as a postdoc or researcher. The candidate should be familiar with biological research problems, be comfortable with mathematical and statistical reasoning, and have solid computational and programming skills. Documented scientific achievement in computational biology or a related field is essential, as are excellent communication skills in English. We will pay particular attention to scientific talent and potential.

The position is for two years, with preferred starting date in early 2021. The position is funded by the Swedish Research Council and the project is a collaboration involving the Swedish Museum of Natural History, the KTH Royal Institute of Technology, Uppsala University and Uber AI. In a related project, Kew Gardens and the University of Gothenburg are also involved.

Read more and apply here: https://www.nrm.se/-ommuseet/jobbahososs/ledigatjanster.9005019.html The application deadline is December 18.

Fredrik Ronquist Professor, Dept. Bioinformatics and Genetics Swedish Museum of Natural History, Stockholm

E-mail: fredrik.ronquist@nrm.se

Fredrik.Ronquist@nrm.se

SwedishUAgricSci HoneyBeeViruses

A postdoc position at the Swedish University of Agricultural Sciences in Sweden. The position is about characterizing the molecular adaptations of virus resistance and tolerance in honeybees.

Here is the link: https://www.slu.se/en/-about-slu/work-at-slu/jobs-vacancies/?rmpage=-job&rmjobB35&rmlang=UK Barbara Locke Grandér, Ph.D.

Associate professor on bee health| Docent inom bihälsa Swedish University of Agricultural Sciences| Sveriges lantbruksuniversitet Department of Ecology|Institutionen for ekologi Postal address:| Postadress:P.O.Box 7044, 750 07 Uppsala, SWEDEN Visiting address:| Besoksadress: Ulls väg 16, 756 51 Uppsala, SWEDEN Phone:| Telefon: +46 18 67 25 64 Email: barbara.locke@slu.se http://www.slu.se/-en/cv/barbara-locke-grander Barbara Locke Grandér <Barbara.Locke@slu.se>

TexasAMU PheonotypicPlasticity

Postdoctoral position available at the Behavioral Plasticity Research Institute

A postdoctoral position is available in the Department of Entomology at Texas A&M University, College Station, TX, USA. The position is part of the Behavioral Plasticity Research Institute (BPRI), one of the U.S. National Science Foundation'Âs four newly established Biology Integration Institutes (https://www.nsf.gov/-news/special_reports/announcements/090120.03.jsp).

The BPRI focuses on understanding locust phase polyphenism, one of the most striking examples of coordinated phenotypic plasticity. This phenomenon provides a powerful comparative system for understanding how gene expression patterns and epigenetic regulation are linked to shifts in behavior, physiology, and ecology that result in outbreaks, collective movement, and mass migration. The BPRI is established to comprehensively dissect this phenomenon and use it as a model system to transform the study of phenotypic plasticity. With a commitment to improving diversity, inclusion and equity, the BPRI will train the next generation of integrative biologists who can efficiently navigate across different disciplines.

The vision of the BPRI is predicated on integration through collaboration. We recognize the scientific and societal impacts are maximized when groups of people with diverse backgrounds and experiences come together to work towards shared goals and the common good. This philosophy will inform all BPRI activities.

This position offers a unique opportunity for an integrative biologist to acquire diverse skills across different biological disciplines. This position will closely interact and collaborate with all members of the BPRI, and have an opportunity to develop leadership skills via governance. The successful candidate will assist in the

supervision of undergraduate and graduate students, and thus gain hands-on, guided mentoring experiences. The position will be co-supervised by Entomology faculty members Drs. Hojun Song, Spence Behmer, and Greg Sword. We are especially interested in candidates who can contribute to the BPRI'Âs diversity through their scholarship and service. Women, minorities, people with disabilities, and veterans are encouraged to apply.

About the Community 'X Texas A&M University main campus is located in College Station, which is part of a metropolitan community of over 200,000 people, including the city of Bryan. In addition to excellent health, education, and recreation services, the community affords a rich variety of cultural activities typical of a major university environment, including museums, music, art, and theatre. College Station is within easy reach of some of the most cosmopolitan cities in the US 'V about 90 minutes from Houston and its major international airport, and under 2 hours from Austin. The Department of Entomology (https://entomology.tamu.edu/) at Texas A&M University is one of the top entomology departments in the United States. Additionally, the interdisciplinary program in Ecology and Evolutionary Biology (https://eeb.tamu.edu/) provides an excellent opportunity to interact with a large community of ecologists and evolutionary biologists across different departments and colleges.

To apply, visit: https://-tamus.wd1.myworkdayjobs.com/-AgriLife_Research_External/job/College-Station-AL-RSCH/Postdoctoral-Research-Associate_R-033591
Hojun Song <hsong@tamu.edu>

UArizona TheoryMutationLoad

Postdoc position: population genetics theory with high mutation rate

A postdoc position is available with PI Joanna Masel (http://www.eebweb.arizona.edu/faculty/masel/-people/joanna/) at the University of Arizona in Tucson. Being computational, the position is amenable to remote work, and efforts will be made to accommodate all situations. That said, Tucson is located in the biodiverse Sonoran desert, surrounded on all four sides by mountainous national and state parks, with an attractive climate for most of the year. Stipend is at NIH rates, and the cost of living in Tucson is relatively low.

The question we want to answer is, as Kondrashov put it, "why have we not died 100 times over?" given the estimated high (U>1) prevalence of deleterious mutations https://doi.org/10.1006/jtbi.1995.0167. In current simulations of realistically high genome-wide deleterious mutation rates, relative fitness must constantly be renormalized so as not to be overwhelmed by a Muller's ratchet of fixations of small effect size deleterious mutations, even in large sexual populations.

We have devised a powerful new computational approach that can capture realistic linkage as well as realistically high population sizes and mutation rates for species such as humans. This postdoc's first task will be to finish adapting our relative fitness code to instead be grounded in absolute fitness. This will open up a variety of questions about population viability / mutational meltdown, reproductive compensation, and the best approach to modeling epistasis, depending on interests.

Excellent computer programming skills are required, ideally including both C and Python. Prior knowledge of theoretical population genetics is preferred, although exceptionally strong computational scientists from highly quantitative backgrounds outside evolutionary biology will also be considered, as will non-theoreticians who can demonstrate deep understanding of theoretical issues. Start date is negotiable, and funding is secured through December 2023.

Contact Joanna Masel at masel@email.arizona.edu for more information and to apply.

"masel@arizona.edu" <masel@arizona.edu>

UBritishColumbia PopGenomics

A two-year postdoctoral research position is available in the laboratory of Dr. Michael Russello at The University of British Columbia (Okanagan Campus) in the area of population and conservation genomics starting April 1, 2021. I am looking for a highly motivated individual to join our group studying the genomic basis of life history variation and adaptation to changing environments, using kokanee, the freshwater resident form of sockeye salmon, as a study system. Individuals with strong bioinformatic and analytical skills are especially encouraged to apply. Prior experience with whole genome resequencing and analysis is highly desirable.

UBC is one of the world's leading universities, and is consistently ranked in the top 40. The university has

two distinct campuses, one in Vancouver and one in Kelowna. UBC's Okanagan campus, located in the city of Kelowna, has over 10,000 students in seven faculties, with strong undergraduate and graduate programs. Situated in the heart of the Okanagan Valley, one of the most scenic regions in Canada, it offers an intimate learning environment and excellent opportunities for regional, national, and international scholarly activities.

The position requires a two-year commitment and comes with a completive salary that exceeds the NSERC scale and an excellent benefits package. To apply, e-mail your CV and contact information for three references to: michael.russello@ubc.ca. Materials must be received by Dec. 15, 2020 for full consideration, but late applications will be accepted until the position is filled. You can visit the lab website (http://people.ok.ubc.ca/-mirussel/) for more information. The position is subject to final confirmation of funding.

Michael Russello Professor The University of British Columbia Okanagan Campus Department of Biology 3247 University Way, FIP346 Kelowna, BC Canada V1V 1V7 michael.russello@ubc.ca

michael.russello@ubc.ca

UCalifornia Berkeley GeneDrivePopulationGenetics

POSTDOC POSITION IN POPULATION GENETICS OF GENE DRIVE SYSTEMS

The Marshall Lab (https://www.marshalllab.com/) at the UC Berkeley School of Public Health is seeking to hire a postdoctoral scholar to work on mathematical and computational aspects of gene drive systems in mosquito vectors of malaria, dengue and other mosquito-borne diseases. The position is initially for one year, with the possibility of extension, and is available early to mid-2021. Salary is commensurate with experience, and full benefits are included.

The successful candidate will work on exciting collaborative projects with a consortium of mathematical modelers, molecular biologists, ecologists and epidemiologists, mostly throughout the University of California system. Molecular biology labs that we collaborate with include the Akbari Lab (https://www.akbarilab.com/-), Bier Lab (http://bierlab.weebly.com/) and Gantz Lab (http://www.gantzlab.org/) at UCSD, and the James Lab at UC Irvine. Ecology labs that we collaborate with include the Vector Genetics Lab (https://vectorgeneticslab.ucdavis.edu/) at UC Davis and the Mosquito Control Lab at QIMR Berghofer in Australia. We also collaborate with TIGS-UCSD (https://tigs.ucsd.edu/) and the Debug Project (https://debug.com/) at Verily Life Sciences (https://verily.com/), and serve as modeling lead for the UC Irvine Malaria Initiative (https://ucimi.org/).

Tasks that we are seeking help with include: * Working with molecular biologists to develop and parameterize models of genetic control systems, * Contributing to development of our modeling framework, the Mosquito Gene Drive Explorer (MGDrivE) (https://-marshalllab.github.io/MGDrivE/), * Calibrating ecological and epidemiological models to available mosquito and vector-borne disease data, * Developing target product profiles for mosquito genetic control systems, * Informing monitoring and surveillance protocols to assess intervention efficacy and unintended spread, & * Mentoring PhD, Masters and undergraduate students.

An ideal candidate will have: * A strong background in applied mathematics, statistics and/or computer science, * Experience with population genetics, genomics or ecological and epidemiological modeling, * An interest in mosquitoes and/or mosquito-borne diseases, & * An interest in mentoring students and promoting diversity, equity and inclusion in research.

If you are interested in the position, please send: i) your CV, including a list of publications and the names and email addresses of three potential referees, ii) PDFs of your two most significant publications or manuscripts to date, and iii) a cover letter describing your research interests and motivations for joining our lab to John Marshall at john.marshall@berkeley.edu. Inquiries are also welcome. Additional information about the research in our lab can be found at https://www.marshalllab.com/. The position will remain open until filled. The first review date will be January 8th 2021.

UC Berkeley has a large and vibrant public health and computational biology community spanning the School of Public Health, the Center for Computational Biology, the Innovative Genomics Institute, the Department of Integrative Biology, the Department of Environmental Science, Policy and Management, and more. UC Berkeley offers competitive salaries, excellent benefits and is an equal opportunity employer. The City of Berkeley and the surrounding San Francisco Bay Area is known for its progressive values, vibrant social and cultural scene, and beautiful surrounding environment.

"Marshall, John M." <john.marshall@berkeley.edu>

UCalifornia Davis FishEvolution

Postdoctoral Scholar: The Fish Lab Conservation and Culture Laboratory Department of Biological and Agricultural Engineering, University of California, Davis.

The Fish Conservation and Culture Laboratory (FCCL, https://fccl.ucdavis.edu/ is seeking a postdoctoral scholar to work on sperm preservation and competition and hybridization of an endangered fish species, Delta Smelt Hypomesus transpacificus. The FCCL is a part of Dept. Biological and Agricultural Engineering at University of California, Davis, but the location of the FCCL is off campus in Byron, CA. This appointment will be at 100% time for duration of one year with the possibility of extension for another year. Full-time salary and benefits are included and are consistent with UC Davis policy and commensurate with applicant experience.

POSITION DESCRIPTION: The successful candidate will be involved in studies mainly focused on, but not limited to, 1) developing sperm (cryo)preservation methods and 2) studying hybridization among smelt species. General responsibilities will also include: laboratory support, animal trial support, animal care, sample analysis, data management. The candidate should also be actively and significantly involved in reviewing journal articles, engaging in discussions on research and the interpretation of research results, participating in appropriate professional societies or groups and other educational and research organizations, presenting research data in society annual conferences, and publishing manuscripts. The ideal candidate will have strong interpersonal, communication, and decision-making skills, as well as the ability to work well both independently and as part of a team.

BASIC QUALIFICATIONS: PhD degree in Animal Science, Aquacultural Engineering, or a related field, with a minimum of 4 years' experience in a laboratory. Strong lab techniques for sperm activity monitoring. Experience in aquacultural systems, fisheries sciences, ecology, or related field. Experience in developing fish culture methods for all life stages. Solid knowledge and experience of statistical data analysis. Demonstrated publication record. Good oral and written skills to communicate data summary to collaboration parties. Provide own, reliable, transportation to and from work site with a CA driver's license.

PREFERRED QUALIFICATIONS: Experience in sperm preservation of fish. Experience in fish sperm competition studies. Knowledge of hybridization and/or genetics.

PHYSICAL DEMANDS: Work under indoor and outdoor conditions over rough terrain. Physical strength and endurance to move throughout working aquaculture facility. May encounter spiders, snakes, wasps, and other animals occurring in field conditions.

JOB EXPECTATIONS: Promptly respond to the requests made by the supervisor. Give timely feedback, including bad outcomes. Write semi-annual reports. Prepare posters and present results in conferences. Travel to and from client sites on and off campus and the FCCL site at Byron, CA 94514. Work within regularly scheduled hours (8am - 5pm) and occasional evenings, weekends, or holidays to meet project priorities, with the option to work flexible or extended hours as needed based on workload demands. The postdoctoral scholar is personally responsible for following health and safety guidelines/instructions.

APPLICATIONS: Application materials should be submitted to Dr. Tien-Chieh Hung at thung@ucdavis.edu. The position will remain open until filled. Start date ASAP.

MATERIALS REQUESTED TO INCLUDE: To apply, please send the following application materials: 1) Cover letter 2) Curriculum vitae

QUESTIONS: Please direct questions to Dr. Tien-Chieh Hung (thung@ucdavis.edu). (thung@ucdavis.edu).

UCalifornia LosAngeles ConservationScience

The UCLA La Kretz Center for California Conservation Science < https://www.ioes.ucla.edu/lakretz/ > invites applications for its 2021 Postdoctoral Fellowship in California Conservation Science. We seek a postdoctoral scholar who conducts innovative biological research to work with the La Kretz Center and partner agencies to achieve outcomes that will direct and lead California conservation efforts. Candidates may work in any discipline that provides the scientific underpinnings for the preservation, protection, management, or restoration of at-risk species, environments, or ecological communities in California. Our current research directions include, but are not limited to:

(i) conservation science at the urban/wildland interface, particularly invasions at the urban/wildland interface, behavioral attributes of introduced species, and the ecological and evolutionary effects of urbanization; (ii) urban biodiversity, ecosystems, and ecosystem services with an emphasis on comparative assessments of urban biodiversity (phylogenetic, richness, genetic diversity, etc.), evaluations of ecosystem services in the urban environment, and ecosystem ecology; (iii) California conservation science that leverages networks of protected areas to answer questions about speciation, adaptive evolution, and species delimitation or uses these lands to understand the impact(s) of disturbance on species ecology, conservation, or behavior; or (iv) The California Conservation Genomics Project (CCGP) <https://sites.lifesci.ucla.edu/eeb- CCGP/ < https://-/sites.lifesci.ucla.edu/eeb-CCGP/> >, a large, multi-campus initiative led by the La Kretz Center that is delivering genomic resources to California to enhance species and habitat management.

We seek Fellows whose research overlaps with a minimum of one UCLA faculty member who is a La Kretz affiliate <

https://www.ioes.ucla.edu/lakretz/people/-?ioesroleÂfiliates > and one agency partner in California (see below). Applicants should identify in their cover letter potential faculty and agency partners to collaborate with on their proposed project. The Fellow is expected to work closely with their UCLA faculty mentor and agency partner(s) as project timelines require. Our current list of possible agency partners includes, but is not limited to: - The Nature Conservancy: Sophie Parker (restoration; urban conservation; invasive species) - LA Natural History Museum: Jann Vendetti (mollusk ecology and evolution; species natural history) - US Geological Survey: Robert Fisher (applied conservation; biodiversity; ecology and evolution) - US Bureau of Land Management: Mike Westphal (applied conservation, climate change) - US Fish and Wildlife Service: Cat Darst (endangered species management) - Natural Communities Coalition: James Sulentich (protection and recovery of sensitive species) - National Park Service: Katy Delaney (amphibian and avian ecology, evolution, and conservation) - National Park Service: Seth Riley (mammalian ecology, evolution, and conservation) - Department of Defense: Robert Lovich (conservation on Dept. of Defense lands)

The La Kretz Fellowship is for two years, subject to review after the first year. The target start date is September 2021, and is flexible. The position offers full benefits, and an annual research/travel allowance. Candidates who have recently completed their Ph.D. or will have completed it by August 2021 are encouraged to apply.

To apply, please send applications to lakretz@ioes.ucla.edu as a single PDF file that includes (i) a cover letter, (ii) your CV, (iii) a research and management accomplishments statement (maximum two pages), (iv) a project proposal that includes potential La Kretz affiliates and agency partners of interest (maximum three pages, including references), and (v) two of your relevant publications. We also ask that you have (vi) two letters of reference sent, one of which must be from your Ph.D. advisor. Please arrange to have reference letters emailed to the same address with the subject line "La Kretz Postdoc letter for (your last name)". The deadline for completed applications is December 20, 2020. Please e-mail questions to Brad Shaffer, Director of the La Kretz Center, at brad.shaffer@ucla.edu.

Gary Bucciarelli <garyb@ucla.edu>

UCLouvain InsectAdaptation

UCLouvain_Insect Learning for Rapid Adaptation to changing habitats

Postdoc position in Evolutionary Ecology

We are looking for highly motivated candidates to apply for a 2 to 4-year postdoctoral position, funded through UCLouvain university ("Action de recherche concertée"), in the laboratory of Prof Caroline Nieberding (https://-nieberdinglab.be/, UCLouvain, Belgium).

Animals were long thought not to learn. Over the years research has, however, revealed that most animals do learn to some extent. This paradigm shift has led to the hypothesis that learning is a form of behavioural plasticity that participates to rapid adaptation of natural populations in nature, in response to human induced habitat degradations. Yet, the adaptive value of learning remains rarely quantified so far. This project will quantify the adaptive value of learning in the field in a number of butterfly species facing increasing reduction and fragmentation of suitable habitats. Butterflies are flagship and bioindicator species of the quality of European natural habitats, and we have occurrence data spanning several decades. This project aims at providing one of the first field-based estimates of the selective value of learning for a key behavioural trait, oviposition site selection ("OSS" hereafter). OSS is key to colonisation of suitable habitats in butterflies, the larvae of

which have only a low mobility. As learning is costly, we expect that increased learning and memory skills are correlated to reduced survival and/or egg production and we will quantify potential trade-offs associated with learning and memory.

The postdoctoral research will include experiments in the field in Belgium and ecologically-relevant experiments in the laboratory, where field-caught animals can be monitored. The ideal candidate for this position will have a strong background in behavioural ecology, statistical analyses, expertise in butterfly ecology and a capacity for creative and critical thinking. The candidate will have opportunities to learn some of the specific skills required for the project by our network of national and international collaborators. Applicants should hold a PhD diploma. The deadline for applications is December 15th, or until the application is filled.

The salary will be around 2000 euro netto per month plus benefits (health insurance,'Â') which are included in the Belgian system. Our University is an Equal Opportunity/Affirmative Action Employer, and is in a French-speaking region of Belgium, but the language for meetings and scientific interactions is English. For background information about our university, see https://-/uclouvain.be/en/index.html . Interested? Applications should be sent to Prof. C. Nieberding (caroline.nieberding@uclouvain.be). Applications will include: 1) a motivation letter including a statement of interests; 2) full CV including list of publications; 3) Contact details of at least 2 referees. Informal inquiries are welcome. More info on the duration of the project can be obtained by contacting C. Nieberding directly. We will start reviewing applications as they arrive until the appropriate candidate is selected, and the project will be starting in Spring 2021.

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Prof. Dr. Caroline Nieberding Evolutionary Ecology and Genetics Group Biodiversity Research Centre Earth and Life Institute University of Louvain (UCLouvain) Carnoy building, office b112 Belgium phone: +32 (0)10 47 34 88 website: https://nieberdinglab.be Parcel and mail deliveries at the secretary's office :

Earth and Life Institute Université catholique de Louvain Secrétaire ELIB SST/ELI/ELIB Carnoy (local B193) Croix du sud 4-5, bte L7.07.04 1348 Louvain-la-Neuve

phone: +32 (0) 10 47 34 98 fax: +32 (0) 10 47 34 90

Caroline Nieberding <caroline.nieberding@uclouvain.be>

UCollegeLondon OriginsOfLife

Three post-doc positions in "Origins of Biology: How energy flow structures metabolism and heredity at the origin of life", in the Department of Genetics, Evolution and Environment, University College London.

The project is funded by a BBSRC sLoLa grant. Two post-doc positions will focus on experimental work related to the origins of metabolism as observed in life, ranging from microfluidic work on CO2 fixation and the growth of fatty acid protocells, through to nucleotide synthesis and polymerization via prebiotic equivalents of biochemical pathways. The third position will involve mathematical modelling, considering the origin of the genetic code within this prebiotic scenario, and will interact closely with the two experimental fellows, aiming for synergy between modelling and experiment.

The project is led by Prof Nick Lane works on how energy flow structures metabolism and genetics at the origin of life and over evolution. He uses both experimental and computational methods to address these questions. This project is an ambitious attempt to develop a framework for the origin of life grounded in energy flow that stretches from CO2 fixation to the origin of the genetic code. It is highly cross-disciplinary and involves co-investigators across three divisions. The UCL team includes Prof Andrew Pomiankowski (expertise in mathematical modelling of heredity and selection); Dr Amandine Maréchal (expertise in bioenergetics and analytical chemistry), Prof Finn Werner (expertise in chemistry and evolution of RNA polymerase); Prof Beppe Battaglia (expertise in protocells and amphiphile chemistry); Prof Jo Santini (expertise in anaerobic microbiology and redox metals); Prof Nicolas Szita (expertise in microfluidic engineering and process chemistry); Dr Stefanie Frank (expertise in FeS free-radical chemistry) and Prof John Ward (expertise in carbon-carbon bond formation).

The three posts are funded initially for 2 years with possibilities for extension. We will be looking for overlapping skill sets and an ability to collaborate effectively as part of a larger team bringing together collaborators from across three divisions at UCL.

Please contact Prof Nick Lane (nick.lane@ucl.ac.uk) for informal enquiries Job reference:1872924 For application details and submission, see: https://tinyurl.com/-y5oqp7v2 Application deadline: 6 Dec 2020 Preferred

starting date: early 2021

"Pomiankowski, Andrew" <a.pomiankowski@ucl.ac.uk>

UExeter PhageEvolutionBiofilms

I am looking for a junior or senior postdoc to join the research group at the Living Systems Institute at the University of Exeter (UK) for the duration of 3 years. The role is part of the project 'Phage host range evolution in spatially structured microbiomes', funded by BBSRC (UK) and NSF/BIO (US).

The aim of the project is to understand how the spatial organisation of bacterial cells within a biofilm and the heterogeneity of the cells' metabolic state within the biofilm affect bacteriophage host range evolution.

You will work with the model system of bacteriophage T7 and E. coli. In parallel, you will develop and run simulations to describe the dynamics of phage evolution within the biofilm, aiming for a theoretical description of phage evolution.

This project is a collaboration with the groups of Prof. William Harcombe (University of Minnesota) and Prof. Carey Nadell (Dartmouth College) in the United States. The project thus offers plenty of opportunities for collaboration and a research visit to these groups.

Please email if you have any questions: w.moebius@exeter.ac.uk

Apply till 9th of December via the University of Exeter's website: ow.ly/mZhe50ChqSj

Wolfram Moebius Lecturer University of Exeter Exeter, United Kingdom

W.Moebius@exeter.ac.uk

UGeorgia EvolutionAging

The Parrott Lab < http://www.parrottlab.com/ > at the University of Georgia's Savannah River Ecology Lab < https://srel.uga.edu/ > is recruiting a postdoctoral scholar to investigate the ecological and environmental drivers of epigenetic aging trajectories. Potential projects include identifying the ecological and environmental factors that influence epigenetic aging, investigating the mechanisms by which they are translated into aging trajectories, and determining the consequences of variable epigenetic aging trajectories on organismal ecology. The postdoctoral scholar will perform experiments using an established fish model, conduct molecular and bioinformatic analyses, prepare manuscripts and grant proposals, and will mentor graduate and undergraduate students in the lab. Although initial appointment will be for one year, funding for three years is available.

Qualifications: A Ph.D. is required, and applicants with a background in bioinformatics, genetics, molecular ecology/biology, and/or computational ecology are especially encouraged to apply. Demonstrated experience in statistical analyses and data management skills is desired. The successful candidate will be expected to demonstrate commitment to timely completion of deliverables, including publication of results in peer-reviewed outlets.

The Savannah River Ecology Lab (SREL) is located near Aiken, SC on the Savannah River Site, a National Environmental Research Park operated by the Department of Energy. The SREL is a satellite lab of the University of Georgia and is composed of ~150 faculty, research professionals, graduate students, and staff. The Aiken area is excellent for nature lovers and has a vibrant downtown. Our lab is also part of the Odum School of Ecology at the University of Georgia in Athens, GA, which provides additional opportunities for collaboration, intellectual development, etc. We are a diverse and supportive group, and we welcome applications from everyone.

Application Deadline and Process: The projected start date is flexible, but sometime in Spring/Summer 2021 is preferred. Applications will be reviewed as they come and will continue until a suitable candidate is identified. To apply, please send: (1) a cover letter summarizing your qualifications for the position, research interests, and career goals; (2) a CV; and (3) names and contact information for three professional references to Dr. Ben Parrott (benparrott@srel.uga.edu).

"lance@srel.uga.edu" <lance@srel.uga.edu>

UHongKong EvolutionaryGenetics

THE UNIVERSITY OF HONG KONG

Research Assistant Professor (1 post) and Post-doctoral Fellows (2 posts) in the Research Division for Ecology and Biodiversity (Ref.: 502646)

Applications are invited for appointment as Research Assistant Professor (RAP) (1 post) and Post-doctoral Fellows (PDF) (2 posts) in Ecological and Evolutionary Genetics at the Research Division for Ecology and Biodiversity (DEB; Ref.: 502646), to commence as soon as possible on a three-year fixed-term basis for RAP, or on a three-year temporary basis for PDFs.

Collectively and ideally, the three appointees would work as a team to strengthen and build up research in ecological genetics at DEB. The appointees will be given room to choose direction of their research within one of the following themes: i) intra- and interspecific variation in mutation rates, ii) the role of introgression in establishing invasive bird species in Hong Kong, and iii) ecological genetics and genomics of hole-nesting passerines in Hong Kong. There are also opportunities to work with existing extensive genome re-sequencing and QTL-cross datasets of stickleback fishes.

What we require

Applicants for the three positions should possess a Ph.D. degree in Evolutionary Biology, Genetics, Computational Biology, or related field. For the RAP position, a strong academic track-record with earlier post-doctoral experience and high level of scholarly accomplishments is expected. Applicants for the two postdoctoral positions are also expected to have strong academic track-records, but previous postdoctoral experience is not a requirement (albeit desirable). Experience in analyses of large genome-wide genotyping and/or whole genome re-sequencing datasets is considered to be advantageous, but applicants with other types of experiences are not excluded from applying if well-merited and strongly justified. Willingness to contribute to supervision of PhD students and MSc students is expected, and the candidates for the RAP posting are expected to apply for research funding through the many funding instruments available in HK.

What can offer

The Faculty of Science provides a supportive and friendly environment and has embarked on a programme of recruitment to invest in areas of acknowledged strength and internationally competitive activity. Information about the Faculty can be obtained at https://www.scifac.hku.hk/ and https://www.cpao.hku.hk/firstandforemost/rankings . The Research Division for Ecology and Biodiversity (DEB) 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, please visit: https://www.scifac.hku.hk/research/research-divisions-and-units/research-divisions/ebd .A highly competitive salary[MJ1] commensurate with qualifications and experience will be offered, in addition to annual leave and medical benefits. At current rates, salaries tax does not exceed 15% of gross income. The appointment for RAP will attract a contract-end gratuity and University contribution to a retirement benefits scheme, totalling up to 15% of basic salary.

The University is an equal opportunities employer and is committed to equality, ethics, inclusiveness, diversity and transparency

How to apply

The University only accepts online application for the above posts. Applicants should apply online and upload an up-to-date C.V., publication list and a letter of intent explaining why they would like to be considered for the position, and expression of their research interests in PDF format, submitted to: https://jobs.hku.hk. They should also arrange 2 referees to send reference letters to Professor Merilä by e-mail (merila@hku.hk) directly. Prof. Merilä can be approached with informal queries about the posts. Review of applications will commence as soon as possible and continue until February 28, 2021, or until the posts are filled, whichever is earlier.

Juha Merilä Chair Professor, Director Division of Ecology & Biodiversity The University of Hong Kong Kadoorie Building (office #N-19) Pokfulam Road Hong Kong, SAR

Office tel: (+852) 2299 0607

merila@hku.hk

Google Scholar: https://scholar.google.com/citations?user=cZJ7ifQAAAAJ&hl=en merila@hku.hk

UIllinois Chicago EvolutionaryBiology

Postdoctoral Research Associate- Bridge to Faculty- Department of Biological Sciences, University of Illinois at Chicago The Department of Biological Sciences in the College of Liberal Arts and Sciences at the University of Illinois at Chicago (UIC) invites applications for a Bridges to the Faculty Postdoctoral Research Associate in any area of biology, beginning August 16, 2021. Bridge to the Faculty is a UIC postdoctoral program designed to recruit underrepresented scholars with the goal of transitioning them to tenure-track faculty members after two years (https://diversity.uic.edu/engagement/-bridge-to-the-faculty/). This recruitment initiative aims to attract and retain promising scholars to UIC, as well as diversify our faculty to better serve the cultural wealth of our students, our community, and the nation. UIC is a comprehensive, urban, public, Research 1 university with state-of-the-art research facilities and a national leader among public higher education institutions in providing access to underrepresented students. We are among the nation's top five most diverse campuses and are designated as a Minority Serving Institution (MSI), Asian American and Native American Pacific Islander-Serving Institution (AANAPISI), and Hispanic Serving Institution (HSI). See https://oae.uic.edu/resources/-diversity-resources/ for more about Diversity at UIC. The successful candidate will spend two years working in a lab in the Department of Biological Sciences that is closely aligned to their research interests, following a detailed mentoring plan. They are expected to develop a successful independent research program that is competitive for federal grants, and that will allow them to transition to a tenure track faculty position in the Department after two-years. The faculty position will include a competitive start-up package. Although there are no formal teaching duties, the fellow is expected to be involved in mentoring undergraduate research, as well as provide occasional guest lectures to an existing course. Candidates must have received a Ph.D. in Biology or a closely related field no earlier than August 16, 2017 and no later than August 16, 2021. Although prior postdoctoral experience is preferred, all eligible candidates will be evaluated.

Applicants should submit an online application and additional materials tohttps://jobs.uic.edu/job-board/job-details?jobID=139225 by January 8, 2021. Applications must include a cover letter and 1) a research plan, 2) statement abouttheir past, present, and future contributions to promoting equity, inclusion, and diversity in their professional career, 3) a curriculum vitae, and 4) the names and contact information of at least three references. The research plan does not require a defined faculty sponsor but should include short- and long-term research interests so that a potential mentor can be identified. Questions about this position can be sent to Alexander Shingleton (ashingle@uic.edu) or Miquel Gonzalez-Meler (mmeler@uic.edu). Final authorization of the position is subject to availability of funding.

The University of Illinois at Chicago is an affirmative action, equal opportunity employer, dedicated to the goal of building a culturally diverse and pluralistic faculty and staff committed to teaching and working in a multicultural environment. We strongly encourage applications from women, minorities, individuals with disabilities and covered veterans. The University of Illinois may conduct background checks on all job candidates upon acceptance of a contingent offer. Background checks will be performed in compliance with the Fair Credit Reporting Act.

The University of Illinois System requires candidates selected for hire to disclose any documented finding of sexual misconduct or sexual harassment and to authorize inquiries to current and former employers regarding findings of sexual misconduct or sexual harassment. For more information, visit https://www.hr.uillinois.edu/-cms/One.aspx?portalId=4292&pageId=1411899 Thank you,

Jacquelyn DeLaurentis Human Resource Associate

Department of Biological Sciences The University of Illinois at Chicago

845 W Taylor St.

3238 SES, MC 066 Chicago, IL 60607 jdelaur@uic.edu

Jacquelyn DeLaurentis <jdelaur@uic.edu>

UMaryland EvolutionaryTheoryAndDisease

Postdoc in Evolutionary Theory and Disease: University of Maryland, College Park

The Bruns lab at the University of Maryland is hiring a postdoc to work on developing and analyzing evolutionary models of specialized and generalized forms of

disease resistance for a new EEID- NIH-funded project "Resistance Variation to Endemic Disease."

In nature hosts are infected by, and co-evolve with a suite of pathogen species. Empirical studies have shown that genetic resistance to different pathogen species is often correlated, and critically, that these resistance correlations can also affect a host's susceptibility to novel, foreign pathogens. The postdoc would work to develop general theoretical models that examine the co-evolutionary processes that give rise to resistance correlations between endemic and foreign pathogens, and use these to investigate the ecological consequences of resistance correlations for the invasion of foreign pathogens. The project is in collaboration with Michael Hood's lab at Amherst college. The theoretical models developed as part of the project at Maryland will complement empirical research at Amherst into resistance correlations to anther-smut disease in *Silene vulgaris.*

This is a two-year appointment. The anticipated start date is January 2021.

Qualifications: A Ph.D. in evolution, ecology, or mathematical biology or related field is required by the start date of the appointment. The successful applicant will plan, conduct, and publish research, contribute to the professional development of undergraduate and graduate students, and assist with data dissemination and outreach. Candidates should have a strong background in evolutionary theory and mathematical modeling. Prior experience with disease ecology is highly desirable. A track record of excellent written and verbal communication, and the ability to work well with others is required.

To apply: To apply please send: A cover letter, CV, contact for 3 references to ebruns@umd.edu (letters will be requested at a later date). The official job posting will be available soon through UMD.

Founded in 1856, University of Maryland, College Park is the state's flagship institution. Our 1,250-acre College Park campus is just minutes away from Washington, D.C., and the nexus of the nation's legislative, executive, and judicial centers of power. This unique proximity to business and technology leaders, federal departments and agencies, and a myriad of research entities, embassies, think tanks, cultural centers, and non-profit organizations is simply unparalleled. Synergistic opportunities for our faculty and students abound and are virtually limitless in the nation's capital and surrounding areas. The University is committed to attracting and retaining outstanding and diverse faculty and staff that will enhance our stature of preeminence in our three missions of teaching, scholarship, and full engagement in our community, the state of Maryland, and in the world.

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Emily (Emme) Bruns Assistant Professor of Biology University of Maryland College Park, MD 20741 (301) 405-7684 ebruns@umd.edu http://biology.umd.edu/emily-bruns.html Emily Louise Bruns <ebruns@umd.edu>

UMaryland ModelingEvolution

Reposting this because the job-link is now live: https://-ejobs.umd.edu/postings/80175 Postdoc in Evolutionary Theory and Disease: University of Maryland, College Park

The Bruns lab at the University of Maryland is hiring a postdoc to work on developing and analyzing evolutionary models of specialized and generalized forms of disease resistance for a new EEID- NIH-funded project "Resistance Variation to Endemic Disease."

In nature hosts are infected by, and co-evolve with a suite of pathogen species. Empirical studies have shown that genetic resistance to different pathogen species is often correlated, and critically, that these resistance correlations can also affect a host's susceptibility to novel pathogens. The postdoc would work to develop general theoretical models that examine the co-evolutionary processes that give rise to resistance correlations between endemic and foreign pathogens, and use these to investigate the ecological consequences of resistance correlations for the invasion of foreign pathogens. The project is in collaboration with Michael Hood's lab at Amherst college. The theoretical models developed as part of the project at Maryland will complement empirical research into resistance correlations to anther-smut disease in native populations of Silene vulgaris in Piemonte, Italy.

This is a two-year appointment.

Qualifications: A Ph.D. in evolution, ecology, or mathematical biology or related field is required by the start date of the appointment. The successful applicant will plan, conduct, and publish research, contribute to the professional development of undergraduate and graduate students, and assist with data dissemination and outreach. Candidates should have a strong background in either evolutionary theory, population genetics, or mathematical modeling. Prior experience with disease ecology or plant biology is highly desirable. A track record of excellent written and verbal communication, and the ability to work well with others is required.

To apply: To apply please upload a cover letter, CV, contact for 3 references to: https://ejobs.umd.edu/-postings/80175 directed to ebruns@umd.edu

Founded in 1856, University of Maryland, College Park is the state's flagship institution. Our 1,250-acre College Park campus is just minutes away from Washington, D.C., and the nexus of the nation's legislative, executive, and judicial centers of power. This unique proximity to business and technology leaders, federal departments and agencies, and a myriad of research entities, embassies, think tanks, cultural centers, and non-profit organizations is simply unparalleled. Synergistic opportunities for our faculty and students abound and are virtually limitless in the nation's capital and surrounding areas. The University is committed to attracting and retaining outstanding and diverse faculty and staff that will enhance our stature of preeminence in our three missions of teaching, scholarship, and full engagement in our community, the state of Maryland, and in the world.

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– Emily (Emme) Bruns Assistant Professor of Biology University of Maryland College Park, MD 20741 (301) 405-7684 ebruns@umd.edu http://-biology.umd.edu/emily-bruns.html "ebruns@umd.edu" <ebruns@umd.edu>

UmeaU ComputationalMicrobialEvolution

Dear all,

There are multiple bioinformatics post-doc positions available in my group to work on discovery and molecular evolution of microbial toxin-antitoxin systems, and/or antibiotic resistance factors. Read more about us here! https://atkinson-lab.com/ Projects include:

Tool development for protein function predictionWeb server development for sequence analysisComparative genomics for prediction of novel toxin-antitoxin systems and antibiotic resistance factors, including epidemiological directionsStructural bioinformaticsToxin-antitoxin network analysisPhylogenetics and phylogenetic profiling, including for discovery of novel factors involved in ribosome quality controlPrediction of novel gene clusters for microbial interactions, antibiotic biosynthesis, attack and defence mechanismsSequence analysis of proteins involved in bacteria vs bacteriophage andbacteriophage vsbacteriophage interactions, with future directions in phage therapy and biotechnology

We also have positions available for those who like to pipette, working with the group of Vasili Hauryliukhttp://www.mims.umu.se/groups/vasili-hauryliuk.html The Atkinson lab is in an exciting period of expansion, after recent generous awards from the Knut and Alice Wallenberg Foundation, and the Kempe Foundation. Swedish speakers can read more about our KAW project herehttps:/-/kaw.wallenberg.org/grundforskning-djupt-inne-i-bakteriernas-arvsmassa Please send a CV and cover letter describing why you are interested in working in our team togemma.atkinson@umu.se,deadline 7th December.

Informal enquiries are very welcome!

Gemma

Gemma C. Atkinson Docent / Associate Professor Department of Molecular Biology UmeÃ¥ University https://atkinson-lab.com/ Gemma Atkinson <gemma.atkinson@umu.se>

UNevada Reno PopulationGenomics

Postdoctoral scholar, Parchman lab, University of Nevada, Reno.

For full details on this position, please see: https://nshe.wd1.myworkdayjobs.com/UNR-external/job/University-of-Nevada-Reno—Main-Campus/Postdoctoral-Scholar—Biology_R0122809-1 Job Description The University of Nevada, Reno is recruiting for a Postdoctoral Scholar for the Biology department in the Parchman lab. This position will work at the intersection of population genomics and applied, trait-based restoration ecology. The Postdoctoral Scholar will do ecological and landscape genomic analyses spanning a suite of Great Basin plants of importance to ecological restoration, with the potential for additional and similar research spanning several ecologically significant conifers of the Sierra Nevada. This position involves collaborative research aimed at addressing how population genomic variation is shaped by geographic and environmental variation, and how these factors underly phenotypic variation and local adaptation. The project includes addressing questions related to three types of data: high throughput reduced representation sequencing data (GBS, RADseq), phenotypic data measured in common gardens, and performance in restoration settings. The work will or may involve collaboration with the Leger lab, also in the Biology Department at UNR, as well as the Bisbing lab, NRES Department at UNR, depending on applicant skills and interests.

Ample computational resources exist to support this work through the Parchman lab (2 private compute nodes, 512 GB RAM each, 90 TB storage server) and UNR's HPC system. The initial appointment will be for 1 year, working in collaboration with Drs. Parchman and Leger, which may be renewed based on performance up to 3 years. Extended funding for the position may also be available for similar work on conifer species in the Sierra Nevada in collaboration with Dr. Bisbing.

Required Qualifications PhD in Evolutionary Biology, Genetics, Ecology or a related field by time of appointment.

Preferred Qualifications The postdoctoral scholar will invest in data analysis and manuscript preparation for multiple projects, both as lead author, and as a member of the collaborative group. Ideal candidates would have demonstrated proficiency with Unix systems, programming in R, Perl, and/or Python as well as experience or expertise with high throughput sequencing data for population genetic inference, including but not limited to: - general competency in bioinformatics - population and phylo- genetic analyses of reduced representation data (GBS, RADseq) - analyses of whole genome resequencing data - reference genome assembly and annotation

Compensation Grade Postdoctoral Scholar

Total Compensation The total compensation package includes a competitive salary, moving allowance (if applicable), a rich retirement plan, health insurance options that include dental and vision, life insurance, long-term disability, annual and sick leave, along with many other benefits. Additionally, there is a grant-in-aid educational benefit for faculty and dependents. For more information, please visit: UNR Benefits

For full details on this position, please see: https://nshe.wd1.myworkdayjobs.com/UNR-external/job/University-of-Nevada-Reno—Main-Campus/Postdoctoral-Scholar—Biology_R0122809-1 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>

UTexas Austin GenomicDataScience

Applications are invited for multiple postdoctoral positions in the Narasimhan lab (https://vagheesh.cns.utexas.edu < https://vagheesh.cns.utexas.edu/ >) part of the Departments of Integrative Biology, Statistics and Data Sciences as well as Population Health at the University of Texas at Austin. The primary focus of our work is on human medical and evolutionary genomics.

We seek motivated Postdoctoral Fellows to develop novel computational methods to large and complex datasets and to leverage these towards insights into human health or understanding human evolution. We are particularly interested in building methods that integrate information across linked imaging, genetic and electronic health record data as well as methods for time series analysis of genomic data from ancient DNA.

The applicant must have a Ph.D. in computer science, statistics, computational biology, engineering (all fields),

genetics or another strong quantitative discipline and a track record of working on scientific questions in a collaborative research environment. Candidates with experience in machine learning, particularly in computer vision and deep learning applications are especially encouraged to apply.

To apply please send an email to vagheesh {at} utexas {dot} edu with your CV, a description of your background and experience, as well as the names and contact information of two references.

The University of Texas at Austin, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, national origin, age, marital status, sex, sexual orientation, gender identity, gender expression, disability, religion, or veteran status in employment, educational programs and activities, and admissions.

Job ad: https://jobrxiv.org/job/the-university-of-texas-at-austin-27778-postdoctoral-research-fellow-in-genomic-data-science/ Vagheesh M. Narasimhan Assistant Professor Department of Integrative Biology Department of Statistics & Data Sciences Department of Population Health The University of Texas at Austin https://vagheesh.cns.utexas.edu

vagheesh@gmail.com

WageningenU SurinameRiceGenomics

Post-doc -Hidden crop diversity in Suriname: tracing the origins of Maroon rice using genomics

https://www.wur.nl/en/vacancy/Post-doc-Hidden-crop-diversity-in-Suriname-tracing-the-origins-of-Maroon-rice-using-genomics.htm We are looking for An enthusiastic and motivated plant biologist with a PhD who can work in a collaborative and multidisciplinary team. We invite applications from ambitious candidates with relevant research experience and a passion for studying genetic diversity in crops using genomic approaches.

The post-doctoral candidate will be part of the multidisciplinary project “Hidden crop diversity in Suriname: tracing the origins of Maroon rice by integrating ethnobotany and genomics”. This project combines ethnobotanical field surveys, published historical data, archival research, and advanced genomic analysis to discover the genetic diversity, geographical origins and migration history of traditional rice landraces grown by Maroons, descendants of enslaved Africans who live in the Suriname rainforest.

Specifically, you will characterize the genomic variation in Maroon rice landraces and compare these to modern and historic rice accessions and crop wild relatives from the Guianas, West Africa, Asia and the US, by means of whole-genome (re)sequencing. You will use Single nucleotide polymorphisms (SNPs) to quantify diversity within Surinamese landraces and assess their genetic and geographical origins with advanced genomic and bioinformatic methods. You will search for specific genetic traits for which these landraces were selected and detect potential introgressions from wild rice. Close collaboration is foreseen with a PhD student (to be recruited at Naturalis Biodiversity Center, Leiden) who will conduct ethnobotanical fieldwork in Suriname and collect rice specimens and associated Maroon knowledge.

The Biosystematics Group and The Graduate School Experimental Plant Sciences The post-doctoral position will be under the daily supervision of Prof. Eric Schranz and Prof. Tinde van Andel at the Biosystematics Group, Wageningen University & Research. The position will be co-supervised by Dr. Robin van Velzen. You will be part of the Biosystematics group, with ˜30 employees, including technicians, PhD students, postdocs, junior and senior scientists working on fundamental questions about biological diversity. The group research themes are: (1) origin and maintenance of plant and insect biodiversity, (2) speciation, domestication and plant-animal interactions, and (3) applying phylogenetic patterns to test hypotheses on underlying evolutionary processes. The Biosystematics Group is part of the Plant Science Group and works closely together with other groups (e.g., Genetics, Bioinformatics) within Wageningen University. The position will be part of the Dutch inter-university Graduate School Experimental Plant Sciences (EPS). The mission of EPS is to organize the training of PhD students and postdocs to become self-reliant researchers.

We ask - A PhD in plant genomics, genetics, or related fields with an interest in crop domestication and diversity; - Expertise in and experience with generating and analysing plant comparative genomic and population genetic datasets; - A collaborative worker with good interpersonal communication skills; - A good command of both spoken and written English language is critical (i.e. as demonstrated by published work). This position requires an excellent English language proficiency (a mininum of CEFR C1 level). For more information about this proficiency level, please visit our special lan-

guage page.

Applications should include: a cover letter including a statement about your motivation to apply and your suitability for the position; a curriculum vitae including contact information for two references; and copies of your University PhD degree.

We offer We offer a meaningful and challenging position with, depending on your experience, a competitive salary from a minimum of €3.353 to a maximum of €4.402 for a full working week of 38 hours in accordance with the Collective Labor Agreement Dutch Universities. The job is for a period of 4 years (1 year, and after a positive evaluation extension for another 3 years) at an international leading organization. The candidate will be based at the Biosystematics group.

In addition, we offer:

- 8% holiday allowance; - a structural year-end bonus of 8.3%; - excellent training opportunities and secondary employment conditions; - flexible working hours and holidays can possibly be determined in consultation so that an optimal balance between work and private life is possible; - excellent pension plan through ABP; - 232 vacation hours, the option to purchase extra and good supplementary leave schemes;

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WorkshopsCourses

Italy ancientDNA Dec17

Cycling backward: The G-BiKE workshop on ancient and historical DNA. < https://sites.google.com/fmach.it/g-bike-genetics-eu/meetings-events/g-bike-adna-workshop?authuser=0 >

The aDNA contribution to the CBD post-2020 Global Biodiversity Framework

December 17th, 2020, 8:45 am-5:15 pm, CET (UTC + 1)*. Online (Zoom platform)

Registration < https://sites.google.com/fmach.it/g-bike-genetics-eu/meetings-events/g-bike-adna-workshop/registration-adna-workshop?authuser=0 > deadline: December 10th, 2020.

*check your time with this < https://everytimezone.com/ >

Background

The relevance of genetic diversity in biodiversity protection and management has been only rarely included in policies and regulations. This seems to be the case for the CBD post-2020 Global Biodiversity Framework too.

To this end, the COST Action G-BiKE < https://sites.google.com/fmach.it/g-bike-genetics-eu/home?authuser=3D0 > together with GEO-BON and IUCN has recently developed three genetic indicators to be included in the next strategy (Hoban et al, 2020 < https://sites.google.com/fmach.it/g-bike-genetics-eu/reports-publications/biological-conservation?authuser=0 >):

1) The number of populations [or breeds] within species with an effective population size > 500 compared to the number < 500.

2) The proportion of (sub)populations [or geographic range] maintained within species.

3) The number of species and populations in which genetic diversity is being monitored using DNA-based methods.

In this one-day online workshop we aim to highlight how aDNA studies can play a pivotal role for the practical implementation of the genetic indicators, especially of 1) and 2). Through key lectures and specific fora, we will present how aDNA studies are already poised to make these indicators highly informative in the light of CBD post-2020 Global Biodiversity Strategy.

Program (NB all times are CET/UTC +1):

8:45-9:00 am

Intro from G-BiKE: *Cristiano Vernesi* (Fondazione Edmund Mach, Italy) and *Margarida Fernandes-Lopes* (Instituto da Conservaçãao da Natureza e das Florestas, Portugal)

9:00-10:30

Overview of aDNA with ample Q&As:

-An introduction to the aDNA world - *Ludovic Orlando* (University of Toulouse, France)

-Population genomics of the extinction process - *Love Dalén *(Centre for Palaeogenetics, Stockholm, Sweden)

-Impact of human activities on genetic diversity and microbiomes of wildlife through time - *Katerina Guschanski* (Uppsala University, Sweden)

10:30-10:45

coffee break

10:45-11:00

Tour de table: self-presentation of speakers, discussants and attendees.

11:00-11:30

Forum 1: Setting the baseline: how many genetically distinct different populations were out there?

Coordinator: *Andy Foote* (NTNU, Norway)

Discussants:

Eline Lorenzen (University of Copenhagen, Denmark)

Evelyn Jansen (University of Newcastle, UK)

Flora Jay (CNRS, LRI, University Paris-Saclay, France)

11:30-12:20pm

Discussion in 3 breakout rooms

(each room will be composed by speakers, discussants and attendees)

12:20-1:20pm

Lunch break

1:20-1:50

Forum 2: Measuring genetic erosion: how aDNA can inform on effective population size and other relevant diversity indices?

Coordinator: *Love Dalén* (Centre for Palaeogenetics, Stockholm, Sweden)

Discussants:

Jouini Aspi (Oulu University, Finland),

David Díez del Molino (Stockholm University, Sweden)

Ida Moltke (Copenhagen University, Denmark)

Katerina Guchanski (Uppsala University, Sweden)

1:50-2:40

Discussion in 3 breakout rooms

2:40-3:10

Forum 3: How can I make the best of my historical and ancient collections

Coordinator: *Tom Gilbert* (University of Copenhagen, Denmark)

Discussants:

Ian Barnes (The Natural History Museum, London, UK)

Nathan Wales (University of York, UK)

Mikkel Sinding (Trinity College Dublin, Ireland & Copenhagen University, Denmark)

3:10-4:00

Discussion in 3 breakout rooms

4:00-4:15

Coffee break

4:15-5:15

Wrap up with short synthesis from each Room

Discussant: *Jan-Olov Westerberg** (IUCN Council) to be confirmed*

Plenary round-table: how to summarize the main workshop outcomes into a paper to be submitted in the next couple of months or so. Tasks assignment.

Target audience:

Overview of aDNA: general audience.

Fora: Young investigators with biological and ecological background,

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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

Online Epigenomics Jan11-15

Dear all,

still a few places left on the ONLINE Physalia course "NGS analysis for gene regulation and epigenomics": (https://www.physalia-courses.org/courses-workshops/course59b/)

When: 11-15 January 2021

In this course, we will cover a broad range of software and analysis workflows that extend over the spectrum from the best practices in the quantitative analysis of ChIP-seqand ATAC-seq data to the analysis of the chromatin 3D structure (such as A/B compartments, chromatin loops or TADs). This course will help the attendees gain accurate insights into local and spatial regulatory functions of the chromatin.

We will start by introducing general concepts of chromatin biology. From there, we will then continue to describe all majoranalysis steps from the raw sequencing data to the processed and usable data. Finally, we will focus more specifically on thedifferent analyses strategies to use to extract information from genomic datasets such as Hi-C, ATAC-seq or ChIP-seq

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

Carlo Pecoraro, Ph.D

Physalia-courses DIRECTOR info@physalia-courses.org http://www.physalia-courses.org/ Twitter: @physacourses mobile: +49 17645230846 https://groups.google.com/forum/#!forum/physalia-courses "info@physalia-courses.org" <info@physalia-courses.org>

Online EukaryoticMetabarcoding Feb22-26

Dear all,

registrations are now open for the 6th edition of the Physalia course on "Eukaryotic Metabarcoding", which will be held online from the 22nd to the 26th of February 2021.

Instructors: Dr. Owen Wangensteen (University of Tromsø) and Dr. Daniel Marquina (Swedish Museum of Natural History).

This workshop gives an overview of metabarcoding procedures with an emphasis on practical problem-solving and hands-on work using analysis pipelines on real datasets. After completing the workshop, students should be in a position to (1) understand the potential and capabilities of metabarcoding, (2) run complete analyses of metabarcoding pipelines and obtain diversity inventories and ecologically interpretable data from raw next-generation sequence data and (3) design their own metabarcoding projects, using bespoke primer sets and custom reference databases. All course materials (including copies of presentations, practical exercises, data files, and examplescripts prepared by the instructing team) will be provided electronically to participants.

The syllabus has been planned for people which have some previous experience running simple commands in Linux and using the R environment (preferently RStudio) for performing basic plots and statistical procedures.

Course website: (https://www.physalia-courses.org/-courses-workshops/course4/)

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

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org http://www.physalia-courses.org/ Twitter: @physacourses mobile: +49 17645230846 https://groups.google.com/forum/-#!forum/physalia-courses "info@physalia-courses.org" <info@physalia-courses.org>

Online GenePredictionAnnotation Jan18-22

CIBIO-InBIO NEWS

ADVANCED COURSES

GENE PREDICTION AND ANNOTATION OF WHOLE GENOMES

January 18-22, 2021 | CIBIO-InBIO (Online)

Registration deadline: December 04, 2020

< https://cibio.up.pt/workshops–courses/details/-advanced-course-gene-prediction-and-annotation-of-whole-genomes > Click here for more information

ART & DESIGN FOR SCIENTISTS

February 01-05, 2021 | CIBIO-InBIO (Online)

Registration deadline: December 14, 2020

< https://cibio.up.pt/workshops–courses/details/-advanced-course-art–design-for-scientists > Click here for more information

SEMINARS IN BIODIVERSITY AND EVOLUTION

SENIOR WEBINAR "GLOBAL BIODIVERSITY CHANGE: A 6th MASS EXTINCTION OR A MORE BIODIVERSE WORLD?"

Henrique Pereira, iDiv, Martin Luther University Halle-Wittenberg, Germany & CIBIO-InBIO

November 27, 2020 - 15h30

< https://cibio.up.pt/seminars-in-biodiversity-and-evolution/details/global-biodiversity-change-a-6th-mass-extinction-or-a-more-biodiverse-world > Click here for more information

STUDENT WEBINAR "HOW DO PREDATORS SHAPE THE DISTRIBUTION AND ACTIVITY PATTERNS OF DIFFERENT PREY SPECIES?"

Filipe Rocha, CIBIO-InBIO

November 27, 2020 - 14h45

< https://cibio.up.pt/seminars-in-biodiversity-and-evolution/details/how-do-predators-shape-the-distribution-and-activity-patterns-of-different-prey-species > Click here for more information

CONFERENCES

TiBE 2020 - METABARCODING AND METAGENOMICS

December 09 - 11, 2020 | Virtual Event

New deadline for registration: December 01, 2020

https://cibio.up.pt/tibe/details/tibe2020 CIBIO-InBIO's Office for Science Communication and Outreach CIBIO - Research Center in Biodiversity and Genetic Resources InBIO Associate Laboratory University of Porto, Vairao Campus Rua Padre Armando Quintas 4485-661 Vairao Portugal

t: +351 252 660 400

e: divulgacao@cibio.up.pt

w: http://cibio.up.pt/ f: https://www.facebook.com/-cibio.inbio CIBIO-InBIO Divulgaçao

Online GenomeResolvedMetagenomics Feb8-12

Dear evoldir members,

Transmitting Science is offering the LIVE ONLINE course 'Introduction to Genome-resolved Metagenomics for Microbial Communities' (FULLY FUNDED SCHOLARSHIPS AVAILABLE)

Instructors: Dr. Tom Delmont (Genoscope, CEA CNRS, France) Dr. Anna Fotaki (University of Copenhagen, Denmark)

Dates & Times: February 8th-12th, 2021 9:00-12:00 &14:00-17:00 (GMT+1, Madrid time)

COURSE OVERVIEW:

Shotgun metagenomics, the non-targeted sequencing of genomes from all microorganisms in a sample, has brought new insights into microbial ecology. However, the limited length of individual metagenomic reads (far smaller than individual genes) is limiting downstream analyses, stressing the need to reconstruct reads and make sense of this output. On this front, genome-resolved metagenomics has emerged as a highly effective way to identify genomes directly from the metagenomic assembly outputs, bypassing cultivation to explore the gene content of individual microbial populations. With the ever-increasing use of applying next generation sequencing technologies to an array of environmental samples (e.g., microbiomes, oceans, soils), genome-resolved metagenomics has gained increased attention. Reconstructing and analysing genomes using metagenomic data as a starting point can be incredibly informative, but requires the understanding of key biological concepts (e.g., what is a bacterial population) and learning of bioinformatics tools (e.g., how to handle metagenomic assemblies and curate individual genomes).

This course will cover both the biological concepts and bioinformatics tools to take best advantage of the rapidly growing field of genome-resolved metagenomics. Participants will also briefly be introduced to the analysis of micro-diversity through single-nucleotide variants and processing of pangenomes to take best advantage of newly characterised genomes. Course material will be based on a mixture of lectures and hands-on exercises with real datasets for participants to practice on. The course is intended for researchers and graduate students who plan on studying microorganisms with metagenomics, and are especially interested in genomics through genome-resolved metagenomics.

Participants should expect to gather a good understanding of genome-resolved metagenomics, which they will be able to apply to their own metagenomic datasets.

We offer TWO FULLY FUNDED SCHOLARSHIPS for this course. For more information and registration: https://www.transmittingscience.com/courses/genetics-and-genomics/introduction-to-genome-resolved-metagenomics-for-microbial-communities/
Contact: haris.saslis@transmittingscience.com

All the best,

Haris Saslis, PhD Course Coordinator Transmitting Science www.transmittingscience.com
haris.saslis@gmail.com

Online IntroRNAseq Jan18-22

Dear all,

last seats available on our course on "Introduction to RNA Sequencing", which will held online from the 18th to the 22nd of January.

This course is structured over 5 days of theoretical and hands-on training and covers the majority of the concepts and challenges commonly faced when analysing direct RNA-Seq data. It will start from common tasks such as data QC and gene expression quantification and then move on to more advanced topics such as transcriptome assembly, polyA-tail length measurements and RNA modifications detection.

This course is intended for an audience of researchers with a certain degree of familiarity with RNA sequencing concepts. While not exclusively directed to attendees with bioinformatics training, the majority of the practicals will make use of command-line tools. Therefore some experience with a *nix environment (e.g. Linux or MacOS) and the shell (e.g. Bash) are highly desirable. Some familiarity with R will also be an advantage.

Programme: (https://www.physalia-courses.org/courses-workshops/course59c/curriculum59c/)

Course website: (https://www.physalia-courses.org/courses-workshops/course59c/ 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

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org http://www.physalia-courses.org/%3D0A%3D0ATwitter mobile: +49 17645230846 https://groups.google.com/forum/-%23!forum/physalia-courses info@physalia-courses.org

Online MachineLearningForBiologists Mar22-26

Dear all,

registrations are now open for our ONLINE course "Machine Learning for biologists- a hands-on introduction"

When: 22-26 March 2021

Course website: https://www.physalia-courses.org/-courses-workshops/course43/ The objective of the course is to provide a broad hands-on introduction to the use of multivariate methods and machine learning for the analysis of complex biological datasets.

The syllabus has been planned for people with zero or very basic knowledge of machine learning. Students are assumed to have basic familiarity with R programming language.

Programme: (https://www.physalia-courses.org/-courses-workshops/course43/curriculum43/)

Here is the full list of our courses and Workshops: (https://www.physalia-courses.org/courses-workshops/)

Best regards,

Carlo

Carlo Pecoraro, Ph.D

Physalia-courses DIRECTOR info@physalia-courses.org http://www.physalia-courses.org/ Twitter: @physacourses mobile: +49 17645230846 https://-groups.google.com/forum/#!forum/physalia-courses info@physalia-courses.org

Online Metabarcoding Dec1 ExtDeadline

Dear Colleagues,

We would like to inform you that the registration deadline for TiBE2020 has been extended to the 1st of December 2020!

If possible, we would greatly appreciate to count on your collaboration in the dissemination of this information.

Thank you so much!

TiBE 2020 | METABARCODING AND METAGENOMICS

>From 9 -11 Dec 2020, we are hosting TiBE2020 online. This is the 10th edition of Trends in Biodiversity and Evolution conference, CIBIO-InBIO's annual scientific event, that this year will be on "Metabarcoding and Metagenomics".

The event takes place on a virtual platform that allows live streaming, poster visualization and networking. 3 keynote speakers are confirmed: Agnès Bouchez, INRAE, France; Tyler Kartzinel, Brown University, USA and Mike Schwartz, National Genomics Center for Wildlife and Fish Conservation, USA.

More information and registration forms can be found on https://cibio.up.pt/tibe/details/tibe2020 Vitor Lima

Science Communication and Outreach Office

CIBIO - Research Center in Biodiversity & Genetic Resources / InBIO Associate Laboratory - University of Porto

Campus Vairão

Rua Padre Armando Quintas, 7 4485-661 Vairão | Portugal < https://cibio.up.pt/ > Website | < https://twitter.com/CIBIO_InBIO > Twitter | < https://www.facebook.com/cibio.inbio/ > Facebook

CIBIO-InBIO Divulgação

Online NanoporeGenomeAssembly Feb22-26

Dear all,

registrations are now open for the 2nd edition (ONLINE) of our course "GENOME ASSEMBLY USING OXFORD NANOPORE SEQUENCING"

When: 22 - 26 February 2021

Course website: (https://www.physalia-courses.org/-courses-workshops/course59/)

Instructors: Dr. Robert Vaser and Josip Maric (University of Zagreb, Croatia - (http://complex.zesoi.fer.hr/-index.php/en/)). Here you can find our interview with our instructors: (https://www.physalia-courses.org/-news/n16/)

This course will introduce the audience with a spectre

of methods which are present in a usual assembly workflow, starting from raw data and finishing with a fully assembled genome. We will see how to obtain nucleotide sequences from raw signals, dive deeper into the most used assembly paradigm for long fragments, try out and compare several state-of-the-art assemblers, and at last, assess the quality of the obtained assembly with and without a reference genome. Structured over five days, this course consists of both theoretical and practical aspects which are intertwined through each day. The presented theoretical foundation will be applied on small bacterial datasets and visualized in order to better grasp the algorithms at hand.

Here is 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

Best regards,

Carlo

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Online PopulationsGeneticsUsingR Nov30-Dec11

Fundamentals of populations genetics using R (FOPG01) This course will be delivered live

https://www.prstatistics.com/course/fundamentals-of-populations-genetics-using-r-fopg01/ 30 November - 11 December

This is a 'Â¥LIVE COURSE'Â 'V the instructor will be delivering lectures and coaching attendees through the accompanying computer practical'Âs via video link, a good internet connection is essential.

TIME ZONE 'V Western European Summer Time 'V however all sessions will be recorded and made available allowing attendees from different time zones to follow a day behind with an additional 1/2 days support after the official course finish date (please email oliverhooker@prstatistics.com for full details or to discuss how we can accommodate you).

Course Overview:

The aim of the course is to introduce you to the fundamentals of population genetics theory, through quantitative visualizations of the dynamic of genetic elements within and between populations, using the R statistical programming language. We will be using a mixture of lectures, exercises, and case studies to increase the intuitive understanding of population genetics concepts and facilitate conceptual experimentation and visualization in R.

By the end of the course participants should: 1. Understand the fundamentals of population genetics theory 2. Be able to use R to visualize data sets and write simple functions 3. Know how to import different data types into and out of R 4. Create simple population genetics simulations in R 5. Understand essential summary statistics from the population genetics literature (e.g. FST , D, pi, theta, etc.) 6. Be able to generate publication quality figures from population genetic data

UPCOMING COURSES

Introduction to Python and Programming in Python (PYIN01) https://www.prstatistics.com/course/-introduction-to-python-and-programming-in-python-pyin01/ Introduction to mixed models using R and Rstudio (IMMR03) https://www.prstatistics.com/-course/introduction-to-mixed-models-using-r-and-

rstudio-immr03/ Bayesian hierarchical modelling using R (IBHM05) https://www.prstatistics.com/course/-bayesian-hierarchical-modelling-using-r-ibhm05/ Meta-analysis in ecology, evolution and environmental sciences (METR01) https://www.prstatistics.com/course/meta-analysis-in-ecology-evolution-and-environmental-sciences-metr01/ Fundamentals of populations genetics using R (FOPG01) https://www.prstatistics.com/-course/fundamentals-of-populations-genetics-using-r-fopg01/ Introduction to Scientific, Numerical, and Data Analysis Programming in Python (PYSC01) https://-www.prstatistics.com/course/introduction-to-scientific-numerical-and-data-analysis-programming-in-python-pysc01/ Machine Learning and Deep Learning using Python (PYML01) https://www.prstatistics.com/-course/machine-learning-and-deep-learning-using-python-pyml01/ Structural Equation Modelling for Ecologists and Evolutionary Biologists (SEMR03) https://www.prstatistics.com/course/structural-equation-modelling-for-ecologists-and-evolutionary-biologists-semr03/ Species Distribution Modeling using R (SDMR03) https://www.prstatistics.com/-course/species-distribution-modeling-using-r-sdmr03/ Model-based multivariate analysis of abundance data using R (MBMV03) https://www.prstatistics.com/-course/model-based-multivariate-analysis-of-abundance-data-using-r-mbmv03/ Landscape genetic data analysis using R (LNDG04) https://www.prstatistics.com/-course/landscape-genetic-data-analysis-using-r-lndg04 Functional ecology from organism to ecosystem: theory and computation (FEER01)

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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

Online RADSeq Dec7-10

The University of Connecticut's Computational Biology Core is offering a workshop on assaying genetic variation using restriction-associated DNA sequencing, or RAD-Seq.

The workshop will cover basic concepts and walk through a complete analysis on a high performance computing cluster. The analysis will start with raw reads and go through some very basic analyses of population genetic structure. The core learning goal is to familiarize attendees with the steps necessary to analyze RAD-seq data, the tools available, common data formats, and possible pitfalls they may encounter.

We'll use data collected from a landscape genetic study of arctic grayling, a marine fish, using the ddRAD method (Peterson et al. 2012). All code required to complete the full analysis will be provided in a public github repository, and sessions recordings will be available to all participants after the workshop.

The workshop will take place over 4 days for three hours each day.

Dates: December 7-10 (4 days)

Time: 9.00am - 12.00pm

Location: Online

Cost: $300

Workshop schedule:

Day 1: Introduction to Linux/HPC

Day 2: Introduction to RADSeq, high throughput sequencing data, quality control, read mapping

Day 3: Reference-based and de novo variant discovery approaches.

Day 4: Manipulating, filtering, reformatting output files. Basic population genomic analyses.

Registration

To register, please follow this link: https://forms.gle/-zkjkwAnUsBZLjLWZ6 Workshop FAQ

Who should attend?

Anyone who wants to learn the fundamentals of RAD-seq analysis.

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 $300.

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.e

noah.reid@uconn.edu

Portugal ReproducibilityInScience

Course 'Reproducibility in science'

Taught by Ines Fragata | January 6-8, 2021 @ Lisbon, Portugal

This course will be given ONLINE

Objectives Provide students with basic workflows, platforms and tools to increase reproducibility at all scientific levels

Topics: - Why reproducibility in science is important. - Working with Github. - Data processing workflows to maximize reproducibility. - Notebooks (R and Jupyter). - Manuscript and data repositories.

Course INSTRUCTOR Ines Fragata (irfragata@gmail.com) (http://ce3c.ciencias.ulisboa.pt/-member/inesfragata) Researcher at cE3c

Intended audience: This three days intensive course will be open to a maximum of 30 participants, being directed to PhD or MSc students in Biology or related areas, and postdocs and other professionals working in related areas

Minimum formation: Bachelor's degree in biology or related areas.

The course is free for 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (BIODIV UL, UP) and Biology and Ecology of Global Changes (BEAG UL, UA). For information of fees for other participants see the programme details.

Deadline for applications: December 8, 2020

Candidates should send a short CV and motivation letter to Ines Fragata (irfragata@gmail.com)

For additional details about this course and others go to: https://ce3c.ciencias.ulisboa.pt/training/ Course 'Introduction to R programming and biological data analysis'

Taught by Ines Fragata and Vitor Sousa | May 5-7, 2021 @ Lisbon, Portugal

IMPORTANT NOTE: This course is intended to be presential, but if needed (e.g. due to COVID-19 security measures by the time of the course) it may be adapted to be given remotely (ONLINE)

Objectives Provide students with basic knowledge of R programming, allowing them to manipulate and visualize data with R.

Topics: - Introduction to R and R studio - R Basic syntax - Introduction to variable types and functions - Manipulate vectors, matrices and data frames - Read and load data into R - Make graphics in R

Course INSTRUCTORS Ines Fragata (irfragata@gmail.com) (http://ce3c.ciencias.ulisboa.pt/-member/inesfragata) Researcher at cE3c

and

Vitor Sousa (vmsousa@fc.ul.pt) (http://-ce3c.ciencias.ulisboa.pt/member/vitorsousa) Researcher at cE3c Coordinator of the Evolutionary Genetics Group

Intended audience: This three days intensive course will be open to a maximum of 20 participants, being directed to PhD or MSc students in Biology, Evolution, Ecology or related areas, and postdocs and other professionals working in related topics.

Minimum formation: Bachelor's degree in biology or related areas. No previous knowledge of R is necessary.

The course is free for a maximum of 8 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (BIODIV UL, UP) and Biology and Ecology of Global Changes (BEAG UL, UA). For information of fees for other participants see the programme details.

Deadline for applications: April 2, 2021

Candidates should send a short CV and motivation letter to Ines Fragata (irfragata@gmail.com)and Vitor Sousa (vmsousa@fc.ul.pt).

For additional details about this course and others go to: https://ce3c.ciencias.ulisboa.pt/training/ Course Advanced R for Ecology and Evolutionary Biology

Taught by Ines Fragata and Vitor Sousa | May 10-14, 2021 @ Lisbon, Portugal

IMPORTANT NOTE: This course is intended to be presential, but if needed (e.g. due to COVID-19 security measures by the time of the course) it may be adapted to be given remotely (ONLINE)

Objectives: Provide students with statistical knowledge and tools to manipulate, analyze and visualize biological data with R. Introduction to modeling, simulations and Bayesian statistics.

Topics: - Refresher into R - Exploratory analysis for ecology and evolution (Principal Component Analysis) - Linear regression and ANOVA - Hypothesis testing using bootstrap and permutations - Introduction to analysis of population genetics in R - Modeling and simulation of dynamics systems - Bayesian statistics and advanced inference algorithms (Markov chain Monte Carlo) - Students case studies

Course INSTRUCTORS Ines Fragata (irfragata@gmail.com) (http://ce3c.ciencias.ulisboa.pt/member/inesfragata) Researcher at cE3c

and

Vitor Sousa (vmsousa@fc.ul.pt) (http://ce3c.ciencias.ulisboa.pt/member/vitorsousa)

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UIdaho BiologyVectorBorneDiseases

The Center for Health in the Human Ecosystem of the University of Idaho (Moscow, ID, U.S.A.) hosts the annual Biology of Vector-borne Diseases six-day course. This course provides accessible, condensed training and "knowledge networking" for advanced graduate students, postdoctoral fellows, faculty and professionals to ensure competency in basic biology, current trends and developments, and practical knowledge for U.S. and global vector-borne diseases of plants, animals and humans. We seek to train the next generation of scientists and help working professionals to more effectively address current and emerging threats with holistic approaches and a strong network of collaborators and mentors.

The course is both lecture- and discussion-based and is delivered by internationally recognized experts, with integrated case studies of emerging vector-borne pathogens to highlight parallels and key distinctions in biology across plant, animal and human vector-borne diseases. This course sets an example of new vision, through leadership of the Center for Health in the Human Ecosystem, to create an enduring community of participants and instructors to expand the impact and sustainability of these approaches.

The course is scheduled for Sunday through Friday, June 20-25, 2020. The applications portal is open now. Applicants will be notified of their acceptance and invited to register for the course. The course registration fee (USD $1,500) includes housing, meals, course materials and social activities. Registration fee will be due following acceptance into the course.

For more information and to apply see: https://www.uidaho.edu/cals/center-for-health-in-the-human-ecosystem/education/vector-borne-diseases
"mborowiec@uidaho.edu" <mborowiec@uidaho.edu>

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.