E v o l D i r

September 1, 2019

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.

—— / ——

Conferences

ArizonaStateU NonHumanPrimates Nov13-15

Non-human primates 'V Novel insights into evolution and medicine

Date: November 13-15th, 2019 Location: Arizona State University, Tempe (AZ), USA

Join us on November 13-15th 2019 at Arizona State University's Center for Evolution and Medicine for the "Non-human primates 'V Novel insights into evolution and medicine" meeting.

Keynote Speakers: * Karen Bales, University of California, Davis * Evan Eichler, University of Washington * Katie Hinde, Arizona State University * Susanne Pfeifer, Arizona State University * Jeff Rogers, Baylor College of Medicine * Anne Stone, Arizona State University * Jeff Wall, University of California, San Francisco * Anne Yoder, Duke University

Organizers: * Susanne Pfeifer, Arizona State University * Anne Stone, Arizona State University

Registration: Registration is free of charge but mandatory. Breakfast, lunch, and coffee will be provided during the meeting. The meeting is limited to 50 participants and priority will be given to those presenting their work at the meeting. The abstract submission deadline is August 31st 2019.

For more information, to apply, and/or to submit an abstract, please visit http://spfeiferlab.org/nhp-meeting/ — Susanne P. Pfeifer Assistant Professor Arizona State University School of Life Sciences

spfeife1@asu.edu

Asilomar ASN Jan2020

This is a reminder that registration for the American Society of Naturalists Stand-Alone meeting at Asilomar opens on Thursday (8/15). Participants will need to submit their presentation title and a short abstract (~200-250 words) at the time of registration. Registration for the meeting will be available through Eventbrite at (payable with a credit card or Paypal) Housing at Asilomar needs to be reserved separately at Registration costs for members are greatly discounted. Anybody

can become an ASN member at anytime here: The cost of membership is less than the additional cost of registration for non-members.

The American Society of Naturalists invites graduate students, postdocs, faculty and other professionals from ecology, evolution, behavior, genetics, physiology, and associated fields to a stand alone meeting at the Asilomar Conference Grounds on January 3-7, 2020. This meeting will celebrate the unique ability of ASN to unify broad conceptual themes across biology by integrating theory with data and by using new technological tools to address long-standing questions. In short, this conference will showcase what it means to be a naturalist and researcher in the 21st century.

This conference is unique because it involves a small number of participants (200 people) interacting closely over meals, scientific talks, and casual conversations in a beautiful natural setting on the shore of the Monterey Peninsula. The scientific program will consist of posters, 15-minute talks, and 5-minute lightning talks, in addition to three symposia in the afternoons. Lightning talks will also include five minutes for questions, so are helpful for getting feedback and starting a conversation. Evening activities will include a presidential debate, a natural history trivia contest, and interactions around a bonfire. More information is available at www.amnat2020.com . If you have any questions, concerns, or suggestions, please email Casey terHorst (casey.terhorst@csun.edu)

Casey terHorst Associate Professor Department of Biology California State University, Northridge 18111 Nordhoff Street Northridge, CA 91330-8303 Office Phone: (818) 677-3352 casey.terhorst@csun.edu http://-www.ecoevolab.com he/him/his

casey.terhorst@csun.edu

ClemsonU SEPEEG Oct4-6

Hi All SEPEEG GOERS (past, present and future),

Clemson is proud to host the 45th SEPEEG meeting, Oct. 4-6, 2019 at the Clemson University Outdoor lab.

The website is now “live” and registration is open.

https://www.clemson.edu/science/departments/-biosci/research/sepeeg.html We have space for 140 participants and since there are no concurrent sessions, about 30 talks (plenty of room for posters!).

Register early and make sure you are included in SEPEEG 2019.

Please forward to lab mates and colleagues that may be interested in attending.

Margaret B. Ptacek, PhD Professor, Department of Biological Sciences Director

mptacek@clemson.edu

Cleveland Evolution Jun19-23 ASNCallSymposia

The American Society of Naturalists

Proposals for a Symposium to be held at the

2020 SSE/ASN/SSB Meeting in Cleveland, OH

Due October 1st, 2019

The American Society of Naturalists invites proposals for a special symposium at the 2020 annual joint meeting of the Society for the Study of Evolution, the American Society of Naturalists, and the Society of Systematic Biologists, to be held June 19-23, 2020, in Cleveland, OH.

Proposed symposium topics should support the Societys goal to advance the conceptual unification of the biological sciences and to further knowledge in evolution, ecology, behavior, and organismal biology. Proposals should be synthetic and interdisciplinary, and address important emerging issues in evolution, ecology, or behavior. A budget of $8,000 for travel, registration, and accommodation is provided to help defray expenses.

Proposals should include (1) a title; (2) a description of the symposium topic (one page); (3) a list of six speakers, including institutional affiliations, who have agreed to participate in the symposium; (4) a justification for the symposium, explaining why the topic and speakers are appropriate for a Society-sponsored symposium (up to one page).

Please submit proposals by midnight Eastern Standard Time on October 1, 2019, by email (kmkay@ucsc.edu) as a single pdf attachment, under subject heading: ASN Symposium Proposal: Evolution 2020. Proposals that include women, young investigators, and individuals from underrepresented groups are especially encouraged.

The Societys selection committee will evaluate proposals based on the likelihood of attracting a substantial audience, the significance and timeliness of the topic, and on the topics differing substantively from recent symposia hosted by the Society. All applicants will be notified of the decision before the end of November.

Kathleen M. Kay

ASN Symposium Committee Chair

Department of Ecology and Evolutionary Biology

University of California, Santa Cruz

kmkay@ucsc.edu

Kathleen Kay <kmkay@ucsc.edu>

Debrecen Hungary ReproductiveStrategies Nov7-10

Reproductive strategies in the 21st Century: The Official Symposium of University of Debrecen, Hungary, 7-9 November 2019

Dear Colleagues, we are delighted to invite you to our Symposium, see http://konferencia.unideb.hu/en/-node/304 To celebrate 30 years of research on reproductive strategies of plants and animals at the University of Debrecen (Hungary), we will host a three-day international symposium in November 2019. The Symposium will start with a welcome reception in the University Aula at 7 pm on Thursday 7 November 2019.

The Symposium will provide a forum for researchers of reproductive behaviour of microbes, plants and animals including humans to consider the current state of science and where the field is going. World-leading speakers will overview their recent research and address the future challenges facing the field. The conference will close on Sunday 10 November with an optional excursion to nearby Hortobagy National Park, an UNESCO World Heritage Site.

The Symposium will be opened by Profs Rosemary and Peter Grant (Princeton), and followed by plenary speakers that will include Prof. Hans Hoffmann (University of Texas, Austin), Prof. Ruth Mace (University College London), Prof. Ran Nathan (Hebrew University of Jerusalem) and Dr Beata Oborny (Eotvos Lorand University, Budapest).

Speakers will cover various aspects of reproductive strategies using cutting-edge research in life histories, neuro-genomics, population demography, sexual dimorphism, mating systems and parenting, dispersal and biodiversity conservation. Keynote speakers will include Prof. Andy J. Green (Estacion Biologica de Donana, Sevilla), Prof. Zoltan Barta (University of Debrecen), Prof. Michaela Hau (Max-Planck-Institute for Ornithology, Seewiesen), Prof. Ferenc Jordan (Hungarian Academy of Sciences, Budapest), Prof. Andras Liker (University of Pannonia, Veszprem), Prof. Szabolcs Lengyel (Hungarian Academy of Sciences, Debrecen), Dr. Araxi Urrutia (University of Bath) and Prof. Bela Tothmeresz (University of Debrecen).

To facilitate the attendance of young scientists and to widen participation, costs will be kept at minimum. Debrecen is a one of the top tourist destinations in Hungary with an international airport that has direct flights to several major European destinations. The city has a large international student community and offers an excellent selection of hotels, restaurants and sightseeing facilities.

For further information please contact reproductive.strategies2019@gmail.com

The symposium will only accommodate 120 participants, so we recommend early registration.

The Symposium will include the following topics:

* Life history strategies and reproductive strategies * Sexual dimorphism: genomes, neuro-endocrine systems and behaviour * Mating systems and population dynamics * Family dynamics in humans and non-human animals * Sex difference in dispersal and spatial ecology * Reproduction, ecology and speciation * The significance of reproductive strategies for conservation

We look forward seeing you in Debrecen.

Dr Orsolya Valko, University of Debrecen, valko.orsolya@science.unideb.hu

Dr Zoltan Nemeth, University of Debrecen, nemeth-zoltan@science.unideb.hu

Prof Tamas Szekely, University of Bath & Debrecen, T.Szekely@bath.ac.uk

The Symposium is sponsored by the University of Debrecen, the Hungarian Academy of Sciences, and the ELVONAL program of Hungarian Science and Innovation Agency

Tamas Szekely <bssts@bath.ac.uk>

Julie Heinecke <julie.heinecke@embl.de>

Heidelberg Adaptation Mar1-4

EMBO | EMBL Symposium: The Organism and its Environment Location: EMBL Heidelberg, Germany Date: 1 - 4 March 2020

Submit Abstract by 17 November

Event Website: https://www.embo-embl-symposia.org/-symposia/2020/EES20-01/ Symposium Overview

We are at the dawn of a new era of biology where we will start to understand how organisms function together and react or adapt to changes at different molecular levels. This includes the multitude of stresses that organisms are exposed to, from malnutrition and adverse climate events to many other biological, chemical and physical insults. Progress in biological analyses at both a single scale and across scales, have allowed us to further understand organisms in the context of dynamic environments. These can be environments which are changed by disease, commensal cohabitation or competition, as well as abiotic factors. With the molecular understanding we already have at the cellular and organismal levels, and new tools and quantitative approaches, this symposium will address how genotype and the environment bring about phenotypes at the population level.

Session Topics

- Small-scale evolutionary experiments: model organisms - Small-scale evolutionary experiments: model ecosystems - Effects of environmental variation and stress - Adaptive responses to environmental variation - Population level genome changes in nature - Preparing for the future

Organising Committee

Edith Heard, EMBL Heidelberg, Germany Maria Leptin, EMBO, Germany

Julie Heinecke, PhD Marketing Team Lead European Molecular Biology Laboratory Course and Conference Office Meyerhofstr. 1 D-69117 Heidelberg Germany

Tel: +49 6221 387 8359 Fax: +49 6221 387 8158

Visit www.embl.org/events for a list of all EMBL events and subscribe to our newsletter at www.embl.org/-events/newsletter/signup . Follow us on: Facebook | Twitter | Instagram | LinkedIn | YouTube | EMBL Events Blog

Helsinki InsectAdaptation Jul19-24

The XXVI international Congress of Entomology is happening July 19-24 2020, in Helsinki, Finland. We are soliciting submission for oral presentations in the symposium: Spatial population and community dynamics during climate change.

Symposium description: Insect populations and the composition of the communities that they inhabit are dynamic. These dynamics depend on biotic and abiotic processes occurring locally and at a landscape scale. The effects of climate change on these determinants of population and community dynamics may be complex, but are also important to understand in the face of the decline of biodiversity that we experience globally as a result of climate change. In this symposium we present current theoretical and empirical research on spatial patterns of population and community level responses to climate change.

Symposium organizers: Saskya van Nouhuys, Kristjan Niitepold, Aapo Kahilainen, Ayco Tack

If you would like to submit an abstract for consideration in the symposium please follow this link: https://submit.peerageofscience.org/conference/-ICE_2020/109566 .Or contact Saskya van Nouhuys at Saskya@cornell.edu

"Saskya D. van Nouhuys" <saskya@cornell.edu>

Helsinki InsectEvolution TravelAward

Hello,

Travel funds have been made available by the National Science Foundation to provide travel support for early career investigators to attend the XXVI International Congress of Entomology in Helsinki, Finland (http:/-/www.ice2020helsiki.fi). Applicants must be currently working at US institutions as graduate students or postdoctoral researchers. Applicants must also present at the conference about research related to global change and insects.

To apply for a travel award, please complete the following: 1. Submit the following items as a single PDF document <3 pages in length: (a) a short curriculum vitae (2 pages or less); (b) a brief description of up to 3 of your most significant contributions, including research (published or not), teaching, or service (i.e., outreach, departmental committees, society office, etc.);

2. Fill out the Qualtrics survey: https://udenver.qualtrics.com/jfe/form/-SV_eqvWrr3RWGsNK0B Note: you will be asked to write brief descriptions summarizing the following: (a) any professional outreach experience you have in the areas of entomology, ecology, and/or evolution (b) how you promote or represent diversity (c) what you would gain from participating in ICE 2020 (d) your abstract that you have submitted or plan to submit to ICE 2020 (e) any other financial support you have to attend ICE 2020

The PDF document should be named LastName_TravelAwardApp and submitted via email to Shannon.M.Murphy[at]du.edu by Monday September 30, 2019. We will emphasize diversity in awardees (including, but not limited to, membership in underrepresented groups, gender, women with children, and career stage). Our goal is to promote inclusion and diversity in the meeting, thus, we will select candidates based on how they can help with this goal.

We intend to notify all applicants of the outcome of their applications by November 1, 2019. Awardees will be expected to submit their travel receipts for reimbursement. Funding will cover ICE meeting registration, airfare, and partial lodging. To be reimbursed, flights must follow these policies (http://www.nsf.gov/pubs/policydocs/-pappguide/nsf16001/aag_6.jsp#VIF). Application materials and travel receipts may be made available to NSF upon request.

Any questions can be directed to the Selection Committee: Drs. Shannon Murphy (Shannon.M.Murphy[at]du.edu), Gina Wimp (gmw22[at]georgetown.edu) and Mayra Vidal (mcadorim[at]syr.edu).

– Mayra C. Vidal Postdoctoral Fellow 452 Life Sciences Complex Syracuse University http://mayravidal.weebly.com/ Mayra Vidal <mayracvidal@gmail.com>

Marseille EBM23 PosterSession

Dear all

the program of the 23rd evolutionary biology meeting has been updated. There are still possibilities to submit abstracts for the poster session. see aeeb.fr best regards Pierre

< https://twitter.com/pontarotti >

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

Marseilles EBM23 Sep24-27 deadline

Dear all

#EBM23

23rd Evolutionary Biology Meeting Marseilles : September 24-27 2019 (social events September 28-29) LATE REGISTATION DEAD LINE September 1st : http://-aeeb.fr Pierre

< https://twitter.com/pontarotti >

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

Montpellier ModelingEvolution Oct24-25

Dear all,

The next edition of Models in Ecology and Evolution seminar(MEE2019) will take place on October the 24th and 25th at the amphitheater of the delegation (CNRS campus, 1919 route de Mende) in Montpellier, France.

This seminar is organized by Ph.D. students and postdocs. It is dedicated to postdoc researchers, master and Ph.D. students, as a space to present their work

and to exchange with other students and six experts on modeling in ecology and evolution from Montpellier and other French universities. Participation in the seminar is totally free! But the inscription is required (even if you are not presenting a talk or a poster).

Are you scared by mathematical models? Join us! This is the opportunity to discuss with specialists (Ph.D. students, postdocs and keynote speakers) in modeling on different themes (genetics, ecology, parasitology). By attending the seminar, we hope you will have a better idea of how powerful and useful modeling can be, and whom you could address in case you ever want to keep working using this tool.

If you are interested in a presentation (15 min oral + 5 min of questions), we invite you to send your abstract with the registration form at this address:

https://framaforms.org/abstract-submission-for-models-in-ecology-and-evolution-2019-1565084791 The abstract submission will be open until September 28st 2019.

If you only want to assist at our seminar, please fill the registration form at this address:

https://framaforms.org/registration-for-models-in-ecology-and-evolution-2019-1565086686 You can find all information on our website:

http://www.mee.univ-montp2.fr/ You can also find us on Facebook and Twitter:

https://www.facebook.com/Models.Ecology.Evolution/ https://twitter.com/Models_Eco_Evo We wish you a lovely day and hope to see you soon!

The MEE 2019 team - models.ecology.evolution2019@gmail.com

Models Evolution and Ecology <models.ecology.evolution2019@gmail.com>

Port Townsend Washington EVO-WIBO Apr17-19

Please mark your calendars: the 2020 EVO-WIBO Conference will be held April 17th-19th, 2020, at Fort Worden State Park in beautiful Port Townsend, Washington. EVO-WIBO is a gathering of evolutionary biologists from across the Pacific Northwest. This meeting is held every other year and typically attracts 120-140 researchers for a fun weekend of presentations and discussions about all things related to evolutionary biology.

For more information on the conference visit https://www.zoology.ubc.ca/evo-wibo/. Registration will open in January 2020.

Alison Scoville, Ph.D. Associate Professor of Biology Central Washington University scoville@cwu.edu

Alison Scoville <Scoville@cwu.edu>

SanDiego AvianGenomicsPAG January2020

Dear colleagues,

There will be an "Avian Genomics" workshop at the international PAG conference in January in San Diego http://www.intlpag.org/. I will host it for the 5th time: "Avian Genomics - Gone Wild!". PAG 2020 will be from Jan 11th to Jan 15th.

"PAG brings together over 3,000 leading genetic scientists and researchers in plant and animal research, and over 130 exhibits, 150 workshops, 1100 — posters and over 1800 abstracts."

To get an overview of the last "Avian Genomics - Gone Wild!" session of 2019 here is the link:

https://pag.confex.com/pag/xxvii/meetingapp.cgi/Session/5452 1st and 2nd editions were in:

2016 - https://pag.confex.com/pag/xxiv/meetingapp.cgi/Session/3531 2017 - https://pag.confex.com/pag/xxv/meetingapp.cgi/Session/4169 2018 - https://pag.confex.com/pag/xxvi/meetingapp.cgi/Session/4741 If your work falls within the area of avian genomics, especially of birds in the wild, please send your abstract (200-300 words, no special format) to me by October 1st. Do not hesitate to ask any questions.

Best wishes, Robert

rkraus@ab.mpg.de

Seville SpanishSocEvolBiol Feb5-7

Dear Evoldir members,

It is our pleasure to announce the launch of the web site for the next biennial Meeting of the Spanish Society for Evolutionary Biology (SESBE VII 2020) to be held in Seville, 5-7 February, 2020

https://sesbe2020.com/en/home-2/ We hope indeed it will be of interest to the evolutionary community beyond Spain as a number of highly relevant speakers have been invited to deliver lectures and talks. Please, take into account that the size of the meeting is small, and the number of attendants is limited. Thus, if you are interested, register yourself asap as we follow the rule of "first come, first serve"

Hope to meet you at Seville. All the best

On behalf of the Organizing Committee Juan Arroyo

Dr. Juan Arroyo arroyo@us.es Departamento de Biologia Vegetal y Ecologia. Dept. of Plant Biology and Ecology Universidad de Sevilla Apartado 1095 -E41080 Sevilla, Spain phone: desk office: +34 954 557 058 lab: +34 955 420 845 fax: +34 954 557 059 Research group: http://grupo.us.es/grnm210/ https://-scholar.google.es/citations?user=sq1zWekAAAAJ&hl=-es orcid.org/0000-0003-4749-2519 ResearcherID: J-2562-2012 < http://www.researcherid.com/rid/J-2562-2012 > Sociedad Española de Biología Evolutiva: http://sesbe.org Peer Community in Evolutionary Biology https://evolbiol.peercommunityin.org Juan Arroyo <arroyo@us.es>

TempleU Philadelphia EPiC Sep14

We are excited to announce that the third annual Evolution in Philadelphia Conference (EPiC 2019) is scheduled for *Saturday, September 14th *at *Temple University. *We are now accepting abstract submissions and early bird registration for this full day conference.

The Evolution in Philadelphia Conference aims to bring together researchers interested in understanding the complex biological relationships that inform ecological and evolutionary processes. Past presentations have covered a broad range of topics, including genome evolution, speciation and adaptation, the genetic basis of phenotypic evolution, microbiomes and symbiosis, and organismal responses to changing environments. Students, postdocs, and faculty are all encouraged to submit abstracts for EPiC 2019.

Conference details, abstract submission, and registration information can be found on our website, here: https:/-/philadelphiaevolut.wixsite.com/epic *Early bird registration will close on August 19th* and regular registration will close on September 5th.

*The deadline for abstract submissions for posters and 5/15 minute talks is August 14th. *Submitters will be notified about presentation acceptances and formats by August 17th.

We will continue to add more details about the conference (including keynote speakers, program schedule, special events, and sponsorships) on the website and via email to registered members. Please feel free to contact the organizing committee with any questions at philadelphiaevolutiongroup@gmail.com.

We look forward to seeing you at this years EPiC 2019 meeting!

EPiC 2019 Organizing Committee

Philadelphia Evolution Group

meghan.barrett21@gmail.com

TempleU Philadelphia EPiC Sept14

Last-minute update: EPiC 2019 abstract (Aug 19) and early bird registration (Aug 21) deadlines extended

Dear Evolutionary Researchers in the Philadelphia Area,

Due to numerous requests, the deadline for abstracts will be extended through the weekend. We will accept abstracts for our annual Evolution in Philadelphia Conference (EPiC 2019) until Monday, August 19th (11:59pm EST).

Early bird registration will also be extended and will close this Wednesday, August 21. Regular registration will close on September 5th. Conference details, link to the abstract submission site, and registration information are found on our website: https://-philadelphiaevolut.wixsite.com/epic EPiC 2019 assembles researchers interested in the study of evolution from

around the Philadelphia region and beyond. This year's EPiC will be held at Temple University on Saturday, September, 14 and will include a series of 15-minute talks, 5-minute lightning talks, a poster session, and keynote talks from three distinguished guests:

Matthew Leslie, Department of Biology, Swarthmore College Daven Presgraves, Department of Biology, University of Rochester Sarah Tishkoff, Department of Genetics and Biology, University of Pennsylvania

Please feel free to contact us with any questions at: philadelphiaevolutiongroup@gmail.com.

We look forward to an EPiC meeting. Sign up now!

EPiC 2019 Organizing Committee Philadelphia Evolution Group

tuk32868@temple.edu

Toulouse AIEM Nov6-8

The annual meeting of research network AIEM (Interdisciplinary Approach of Molecular Evolution) will take place in Toulouse at the faculty of medecine, from november 6th (afternoon) to 8th (morning), 2019. The usual thematics of the network will be covered (http://-wwwabi.snv.jussieu.fr/aiem/), with a special focus this year on the analysis of time series data at different time scales (ancient DNA, cryobanks, experimental evolution ...). A call for communications (oral or poster) on these topics is now open, *submission dealine* is on *Friday, October 4th*. PhD students and postdocs are particularly encouraged to submit.

Registration is free and the organizing comitee will cover accomodation costs (on november 6th and 7th) as well as most food costs.

Registration and abstract submission are via the website:

https://aiem2019.sciencesconf.org/ whch also provides all practical information about the meeting.

Looking forward to seing you soon in Toulouse.

The organizing comitee:

Guillaume Achaz Simon Boitard Lounès Chikhi Ludovic Orlando Olivier Mazet Bertrand Servin

"simon.boitard@inra.fr" <simon.boitard@inra.fr>

Toulouse ForestAdaptation Nov19-20

The LIFE FORECCAsT project is pleased to invite project holders, scientists and stakeholders to register to and submit abstracts for oral and poster presentations, to be delivered at the "Adapting forests to climate change: methods, tools, and projects" symposium. Several travel grants will be awarded competitively based on the quality of abstract submission. The abstract submission deadline is 31 August 2019.

The "Adapting forests to climate change" symposium will feature a wide range of talks, discussions and networking opportunities with European experts in the field of forest adaptation to climate change. It will be held in Toulouse, France, from 19-20 November 2019. The first day will focus on oral and poster presentations, the second will be dedicated to optional field visits in the nearby Parc naturel regional du Haut-Languedoc. There are no registration fees and attendance is open to everyone; however, as space is limited, all attendees must register in advance to participate in this event and access will be granted on a first come, first serve basis.

For more information concerning this event, you can contact the LIFE FORECCAsT project team at coordforeccast@parc-haut-languedoc.fr or visit our website: https://forest-climate-change-symposium.eu Looking forward to seeing you next November in Toulouse,

The LIFE FORECCAsT team

UExeter InsectPathogen Mar31-Apr2

Dear all,

We are excited to announce a three day insect-pathogen workshop to be held at the University of Exeter Penryn campus < https://www.exeter.ac.uk/cornwall/about/-penryn-campus/ >, 31st March - 2nd April 2020. The workshop will cover a diverse range of topics including: immunity, ecology, evolution and control. We are happy to consider talks on other invertebrate taxa, to get a comparative perspective, and will cover mutualist-

parasite continuum (eg, microbiomes, symbionts, parasites, pathogens).

We have 30 places available to attend, and everyone attending will give a short (12min) talk in addition to longer talks by invited speakers. In addition to invited and participant talks, we will also have interactive discussion sessions on what participants see as key topics in the field, from which we hope to produce review articles and/or a special issue with the aim identifying ways of moving the field forwards.

Invited talks by:

* Elizabeth Herniou < https://scholar.google.fr/-citations?user=sqHyH_MAAAAJ&hl=en >, CNRS - Université de Tours * Carla Saleh < http://salehlab.eu/ >, Institut Pasteur Paris * Jan Engelstaedter < https:/-/engelstaedterlab.org/ >, University of Queensland * Karyn Johnson <https://biological-sciences.uq.edu.au/-profile/318/karyn- johnson>, University of Queensland * TBA

Please register for the meeting using the form on the conference website https://sites.google.com/view/insect-pathogen-meeting/home which will be updated with the latest information.

There is a 30 registration fee payable on arrival to cover food/refreshments during the day, and dinner one of the evenings. Registration deadline 1st Dec.

The provisional schedule is for the meeting to run from 09:30 on 31st March until 16:00 on 2nd April.

Participants are responsible for booking their own travel and accommodation. A travel guide for getting to Penryn can be found here < https://www.exeter.ac.uk/-cornwall/about/penryn-campus/ >.

The meeting is funded by QUEX < https://-www.exeter.ac.uk/quex/ > partnership, organised by Ben Longdon < https://benlongdon.com/ >, Jan Engelstaedter, < https://engelstaedterlab.org/ > Karyn Johnson < https://biological-sciences.uq.edu.au/-profile/318/karyn-johnson > and Ben Raymond < https://biosciences.exeter.ac.uk/staff/profile/-index.php?web_id=Ben_Raymond >.

“Longdon, Ben” <B.Longdon2@exeter.ac.uk>

GradStudentPositions

AustralianNatlU EcologyAndEvolution

Study for your PhD in Ecology and Evolution!

We are seeking expressions of interest for PhD projects at The Australian National University, Canberra, Australia.

Deadlines 12th August 2019 (international students); 16th September 2019 (domestic students)

The Division of Ecology and Evolution at the Australian National University are accepting expressions of interest from high-achieving students interested in pursuing a PhD.

Our Science: We provide an outstanding research environment with a world-class reputation. We are a global leader in evolutionary, behavioural, physiological and molecular ecology; animal behaviour and life history evolution; phylogenetics, molecular evolution, macroevolution, and comparative biology; population genetics, quantitative genetics and comparative genomics. If you are interested in pursuing a PhD in any of these areas, we encourage you to get in touch.

Our values: We work hard to provide excellent supervision and we take pride in providing an atmosphere that values intellectual rigor, inclusion, mentorship and fun. Graduate research students are well supported through internal funding, including for conference travel, and our research facilities are second to none. We have a thriving community of PhD students and Postdoctoral Fellows from around the world. Our graduates go on to productive careers in many areas of science and beyond.

Location: The ANU campus is situated in the heart of Australia's capital city, Canberra, which is ranked as the third best city in the world according to Lonely Planet (2018) and is Australia's most liveable city (Life in Australia Report 2019). The ANU has an international reputation for research excellence and is ranked among the best universities in the world (QS World University Ranking 2019). Right across the street from the ANU is the main campus of CSIRO, including herbaria and animal collections, and the Australian National Botanic Gardens.

Candidates: Fully funded PhD scholarships are highly competitive at ANU. In order to be put forward for a scholarship, all applicants will need excellent undergraduate marks. Australian and New Zealand applicants will also need a first class honours or Masters by research (or be expecting to gain one by the start of 2020) or equivalent research experience. International applicants will need a Masters by research with outstanding marks, or equivalent research experience.

Expressions of interest: To send in an expression of interest, first identify a potential supervisor by studying the research of academics in the Division of Ecology and Evolution (https://biology.anu.edu.au/research/-divisions/ecology-and-evolution). Then contact the Graduate Program Convenor, Associate Professor Rob Lanfear (eeg.hdr.convenor.rsb@anu.edu.au), by 12th August 2019 for international students and by 16th September for domestic students, with: a detailed CV, full academic transcripts, and a brief description of your research interests and how they intersect with one or more of our research groups. Suitable applicants may be invited to formally apply to the ANU. We look forward to hearing from you!

eeg.hdr.convenor.rsb@anu.edu.au

BarIlanU SexualNetworks

We are looking for a PhD student for a project on *sexual networks* and *alternative mating tactics* in the *rock hyrax*. The project involves tracking of social and sexual interactions using state-of-the-art sensors.

The student will be supervised by Dr. Amiyaal Ilany at Bar Ilan University, in collaboration with Dr. Lee Koren.

The project involves extensive fieldwork 6 months a year at the Ein Gedi Nature Reserve, Israel.

The ideal applicant has a strong background in behavioral ecology, field experience handling wildlife, and data analysis skills using R.

Starting date: flexible, around December 2019 - January 2020

Stipend: Bar-Ilan University President Scholarship

Housing: Provided during the field season

Scientific description: Sexual selection is an important agent of evolution, driving fundamental evolutionary processes such as speciation, mutation rates, and local extinction rates. The effect of sexual selection on these phenomena depends on its strength within a population. Therefore, measuring sexual selection is important to understanding key evolutionary processes. Traditionally, sexual selection is measured at the population level, assuming no population structure. In addition, most previous studies in this field focused on trait-based mate choice. However, recent evidence suggests that the social structure and intrasexual competition result in complex dynamic patterns of sexual interactions. These patterns can be summarized as a sexual network, describing the interactions among males and females. This network determines the level of local intrasexual competition experienced by each individual. Here, we will study how alternative mating tactics shape the sexual network, and the consequences of these tactics in terms of mating and reproductive success. We will build on a long-term study of a wild rock hyrax population, operating for the last 20 years. In this population, we identified three alternative mating tactics employed by males. Male hyraxes advertise their presence and their traits to rival males via acoustic signals. We will experimentally manipulate the sexual network using playback experiments. These playbacks are designed to cause males and females to switch their tactics, allowing us to examine the resulting sexual networks and their reproductive consequences. We will use novel proximity loggers to track the impact of these manipulations on sexual network dynamics in a population of marked individuals with well-known life histories. In addition, we will develop theoretical models of sexual network dynamics, and test them using the data we will collect. This study will be the first to test a set of predictions regarding the fine-scale temporal dynamics of sexual networks. It will expand our understanding of the selective forces shaping alternative mating tactics. Furthermore, it has the potential to expose biases in how sexual selection is measured in many species as a result of overlooking the temporal dynamics of sexual interactions.

Job description:

The student's tasks include:

1. Planning experiments and developing specific research questions.

2. Fieldwork: trapping, marking, and observing hyraxes; performing experimental manipulations using playbacks.

3. Analyzing data (including behavioral observations, life history, proximity loggers data, and possibly genomic data).

4. Writing scientific papers and presenting results in local & international conferences.

5. Optional: simulating sexual network dynamics.

Requirements:

- Candidates should have a Master's Degree in biology or equivalent by the starting date.

- The most important requirement is a strong interest in studying the behavioral ecology of wild animals. This requires patience, care to many small details, and willingness to spend many hours and days in the field.

References:

Bar Ziv et al. (2016) Individual, social, and sexual niche traits affect copulation success in a polygynandrous mating system < https://link.springer.com/article/-10.1007/s00265-016-2112-4 >. Behavioral Ecology and Sociobiology 70:901-912

Barocas et al. (2011) Variance in centrality within rock hyrax social networks predicts adult longevity < https://journals.plos.org/plosone/-article?id=10.1371/journal.pone.0022375 >. Plos One 6:e22375

For more information, please contact Dr. Amiyaal Ilany (amiyaal@gmail.com)

The application should include:

1. CV

2. A cover letter with field experience and interests

3. Contact information of up to three academic references.

Application deadline: September 30, 2019

– Dr. Amiyaal Ilany Senior Lecturer Faculty of Life Sciences < http://life-sciences.biu.ac.il/en >

— / —

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

CentralMichiganU 2 BenthicInvertEvolution

The Mahon laboratory in the Department of Biology at Central Michigan University has openings for two doctoral students to begin in January, 2020. These positions are available for full-time students wishing to pursue a doctoral degree focusing on Southern Ocean/Antarctic marine molecular ecology and the evolutionary biology of benthic invertebrates. Accepted applicants will work with Dr. Andrew Mahon and collaborators on projects involving population genomics, evolution, systematics, and/or phylogeography of benthic invertebrates in Antarctica. Work will incorporate modern molecular methods and bioinformatics in combination with significant field research to address important scientific questions on local, regional, and global scales. Student funding is available for both of these openings and guaranteed (with acceptable performance) for four years (12 months per year, ~$26,000/year plus full tuition waiver).

Interested parties should contact Dr. Andrew Mahon directly before applying to the program (contact information below) with a statement of interest and current CV. Additional information on ongoing research projects can be found at the Mahon Laboratory website (see below). Information and application materials for the Ph.D. program in Earth and Ecosystem Sciences (EES) is available at the CMU programs website (https://www.cmich.edu/colleges/se/EES/Pages/default.aspx).

Successful applicants will have a Masters degree (preferred) or a Bachelors of Science degree in a biological or related field.

Expertise needed: Applicants should have experience with biological research such as ecology, invertebrate zoology, molecular biology, and/or bioinformatics. Skills or interest in population genetics/genomics and/or bioinformatics are favored.

Dr. Andrew R. Mahon, Ph.D. Professor of Molecular Ecology Biosciences 3112 1455 Calumet Court Department of Biology, Institute for Great Lakes Research Central Michigan University Mt. Pleasant, MI 48859 USA

Lab Website: http://people.cst.cmich.edu/mahon2a Twitter @CMU_Antarctica

Phone: (989) 774-1177

email: mahon2a@cmich.edu

"Mahon, Andrew R" <mahon2a@cmich.edu>

CNRS France HabitatChoiceEvolution

We are accepting applications for a funded 3-year PhD position beginning January 2020 as part of the ANR CHOOSE, to study the environmental drivers of habitat choice evolution using ciliate microcosms.

Individuals that choose to leave a habitat to join another are often phenotypically different from those that stay in this habitat. The major consequences of non- random dispersal decisions that are both phenotype- and context- dependent have been recently developed under habitat choice theory. Compared to random dispersal, this theory predicts that habitat choice based dispersal should generate spatial heterogeneity of phenotypes and thus lead to drastically different consequences for a variety of ecological and evolutionary dynamics such as range distribution, metapopulation dynamics and local adaptation. However, our comprehension of what drives the evolution of habitat choice and its ensuing consequences remains weak, especially because of the lack of experimental approaches dedicated to testing theoretical predictions.

The PhD project specifically aims at testing experimentally theoretical predictions about the conditions required for habitat choice evolution, with additional perspectives regarding thermal adaptation and species interactions. The hired PhD will join a dynamic international team whose research interests range from understanding the genetic mechanisms underlying individual

phenotypes, including dispersal, to the consequences of variability in dispersal strategies and other phenotypic traits for populations and communities, using both theory and experiments. The position will be co-supervised by Staffan Jacob and Delphine Legrand (Theoretical and Experimental Ecology Station, CNRS, France). We are looking for a highly motivated and dynamic candidate with deep conceptual interests in evolutionary ecology. Previous experience in microbiology, molecular biology and cytometry are beneficial but not mandatory.

Applicants should send a cover letter (1-2 pages max describing motivation for the present project and previous and current activities) and CV (including list of publications if any) to S. Jacob (staffan.jacob@sete.cnrs.fr), before September 6, 2019. Short-listed candidates will be interviewed in mid-September.

Related publications: - Jacob et al. 2019. Variability in dispersal syndromes is a key driver of metapopulation dynamic in experimental microcosms. The American Naturalist - Jacob et al. 2018. Habitat choice meets thermal specialization: competition with specialists may drive suboptimal habitat preferences in generalists. PNAS - Jacob, Legrand, Chaine, Bonte, Schtickzelle, Huet, Clobert. 2017. Gene flow favours local adaptation under habitat choice in ciliate microcosms. Nature Ecology and Evolution

X

Staffan Jacob CNRS Researcher

Theoretical and Experimental Ecology Station UMR 5321, CNRS 2 route du CNRS, 09200 Moulis

Website: jacobstaffan.wordpress.com Twitter: @Staffan-Jacob < https://twitter.com/staffanjacob >

staffan jacob <jacobstaffan@gmail.com>

GhentU 4 EvolutionaryGenomics

Four 4-year PhD studentships are available in the Van de Peer Lab (Bioinformatics and evolutionary genomics) at the VIB Center for Plant Systems Biology at Ghent University, Belgium.

The Van de Peer lab studies the evolution of (plant) genomes and in particular the importance of gene and genome duplication for evolution and adaptation. This is done mainly using computational approaches but more recently also using evolutionary experiments and through lab work. More information can be found at our website at http://bioinformatics.psb.ugent.be/beg/ . In particular, we are looking for the following applicants:

1. One PhD student will conduct academic research (full-time) in the field of network biology. Starting January 2020.

1.a. Project: Gene duplications and particularly whole genome duplications (WGDs) affect the structure of genomes and the encoded gene regulatory networks (GRNs). While redundancy facilitates the gradual evolution and rewiring of duplicated networks for adaptation in the longer term, the more complex structure of duplicated GRNs might also allow polyploids to explore a wider evolutionary landscape, providing short-term increased opportunity to adapt to novel, different, or rapidly changing environments. Through WGD, increased complexity, modularity and functional redundancy following WGD could help explain the different behavior of polyploids and non-polyploids under stable or challenging environments. We want to develop a computational framework to study the effects of WGD on the structure of genomes and the underlying genetic networks in simulation. We want to investigate how duplicated networks affect evolvability of genomes and adaptation and evolution of their hosts. The PhD work will involve scientific research in the domain of algorithms and graph-theory, specifically linked to the field of evolution.

1.b. Profile of the candidate: The applicant should have a master's degree in bio-engineering, mathematics, physics or computer science (or equivalent) or will have obtained this degree by the start of appointment, which is January 2020. A strong interest in - and some knowledge of - evolutionary biology is required. The applicant should be proficient in programming and have proven (e.g. student project, master thesis, ...) strong analytical skills for designing models and analyzing research results. The applicant should be able to work independently and should have a strong feeling of responsibility. Very good command of the English language, and good communication skills, oral and in writing, are essential.

1.c. How to apply: Send your application to yves.vandepeer@psb.ugent.be. Your application should include a detailed CV, a cover letter (max. 2 pages, including your research interests and motivation to apply) and contact information of two referees. All documents should be merged into a single PDF.

---

2. One PhD student will conduct academic research (full-time) in the field of evolve and resequence experiments and evolutionary genomics. Starting January 2020.

2.a. Project: The potential role of whole genome duplication (WGD) in evolution is controversial. Whereas some view WGD mainly as detrimental and an evolutionary dead end, there is growing evidence that the long-term establishment of polyploidy might be linked to environmental change, stressful conditions, or periods of extinction. However, despite much research, the mechanistic underpinnings of why and how polyploids might be able to outcompete non-polyploids at times of environmental upheaval remain elusive. Different hypotheses have been proposed to explain how stressful conditions might promote the formation of polyploids, how polyploidization might confer fitness advantages, and how polyploids might adapt faster to a changing environment. Using a combination of long- and short-term evolution experiments on the greater duckweed Spirodela polyrhiza and whole genome (re)sequencing, we aim to test some of these hypotheses and to gain insights into the stabilization of a polyploid genome. The project has several components, such as creating neoautopolyploid duckweed lineages with different genetic backgrounds, testing the immediate effects of WGD on the survival, fitness and the phenotype (and its plasticity) of duckweed in different environments, and studying the genomic stabilization, transcriptional dynamics and proteomic changes subsequent to WGD.

2.b. Profile of the candidate: The applicant should have a master's degree in biology, bio-technology, bio-engineering (or equivalent) or will have obtained this degree by the start of appointment, which is January 2020. A strong interest in evolutionary biology is required and experience in both experimental research and bioinformatics is preferred. The student needs to be dedicated to carry out long-term multidisciplinary

— / —

HumboldtU Berlin EvolutionRegulatoryElements

We currently have an open position for an ERC-funded PhD student (65%, TVL-13) for a project aimed at understanding the functional consequences of regulatory mutations using a combination of population genetic modelling and single-cell RNA/ATAC-Seq data.

Our lab (www.garfieldlab.org) studies the evolution of gene regulation in development with the long-term aim of understanding how population-level processes contribute to developmental changes that define species. In our research we adhere closely to the idea that understanding how development evolves requires an understanding of how development works. As such, we maintain a close affiliation with the BIMSB and the MDC-based researchers with whom we work to improve single-cell methods for understanding development. But there are cases too in which evolution can act in the service of biomedical research. This project is one of those cases.

Rare mutations play an important role in generating phenotypic diversity and contribute disproportionately to human disease. Unfortunately, by virtue of their rarity, it is difficult to know which of the many rare mutations carried by a patient are responsible for a given phenotype/disease. This is particularly challenging in the non-coding genome where a lack of a clear genetic code makes it difficult to ascertain the consequences of mutations from sequence alone. One promising approach is to make use of a combination of population genetic data and functional annotations to predict the likely functional consequences of new mutations in specific classes of regulatory elements (e.g. PMID: 28288115).

A challenge in applying this approach, however, is that human populations have relatively few segregating mutations relative to other species, which limits the amount of information that can be obtained from segregating allele frequencies. We will thus make use of Drosophila melanogaster, a species with a vastly larger effective populations size, an order of magnitude more SNPs, and shorter blocks of linkage-disequilibrium. Specifically, in this project, we will combine population genetic datasets with a growing body of single- cell sequencing data to estimate selective constraints and the functional consequences of new mutations in different categories of regulatory element. Our ultimate goal is to understand the constraints that limit genome evolution and to contribute to predictive models of fundamental regulatory processes that we hope will translate across species.

Applications will be taken until the position is filled. Interested candidates should send a CV, a cover letter, and contact information for 2 references *as a single PDF* to dagarfield@garfieldlab.org. I'm happy to answer informal inquires in advance of a formal application.

David Garfield, PhD

Research Group Leader IRI Life Sciences Humboldt-Universität zu Berlin Philippstr. 13 (Haus 18, Rm. 108) 10115 Berlin, Germany

Office: +49 (0)30 2093-92382 Fax: +49 (0)30 2093-47908 info: www.garfieldlab.org email: david.garfield@hu-berlin.de

David Garfield <david.garfield@hu-berlin.de>

JYUFinland SexEvolTardigrade

EVOLDIR : JYUFinland.SexEvolTardigrade

PhD Title: Sexual selection in tardigrades: sex-(in)dependent mechanisms

Duration: January 2020 ' December 2023

We are looking for a highly motivated PhD candidate to join our new and enthusiastic research group led by Dr. Sara Calhim, at the University of Jyväskylä (Finland). We investigate key themes in reproductive evolutionary biology using a little studied but charismatic group of organisms ' tardigrades (a.k.a. water bears).

These transparent, microscopic (<1mm), eight-legged animals are well known for their ability to survive extreme stressors in a cryptobiotic (i.e. ametabolic) state. However, they also have incredibly diverse but largely unexplored reproductive biology which makes them the ideal study system to tackle long standing questions in the field of sexual selection and reproductive trait evolution.

Sexual selection is an important evolutionary force that acts on traits associated with the ability to access mates and/or fertilizations. It is well established that it can affect both sexes. However, most research uses study systems where the traits under sexual selection differ markedly between the sexes and/or the mechanisms by which they evolve are confounded by different aspects of the species' biology (e.g. due to marked sexual dimorphism in morphology, behavior, physiology or life-history. As a result, male and female phenotypes cannot be studied simultaneously or in a biologically relevant comparable way. Tardigrades have little sexual differentiation, short generation time, and tractable (mating) behavior and development. Therefore, they are ideally suited for researching of sex-(in)dependent mechanisms of sexual selection (i.e. using equivalent measures and experimental protocols). This PhD project will make a valuable contribution to the field beyond increased scientific knowledge, through the development of tools for quantitative assessment chemical signals and parentage assignment in this phylum.

Requirements:

A Master's degree in Evolutionary Biology, Ecology or Molecular Biology. Previous experience with handling microscopic organisms and/or using chemical or genomic laboratory and analytical tools are an advantage. The candidate must show considerable written and verbal communication skills in English, independent and creative thinking, and an ability to work collaboratively. The University of Jyväskylä promotes equal opportunities.

Apply online (DEADLINE: 31.08.2019) at: https://rekry.saima.fi/certiahome/-open_job_view.html?didV00&jc&id Documents required:

- A one-page cover letter where the motivation for applying for the position is outlined and relevant skills are described. The cover letter should clearly identify which project you are applying for (#6 in https://www.jyu.fi/-science/en/bioenv/research/doctoral- programme/phd-posts/2020/call) - The cover letter should include the contact information for 1-2 referees. Note that reference letters should be made available at very short-notice request (or included in the application). - Curriculum Vitae (CV) - Degree certificates

For more information contact Dr. Sara Calhim

Email: sara.calhim@jyu.fi

Twitter: @SaraFirebolt

“Calhim, Sara” <sara.calhim@jyu.fi>

Krakow BacteriaPhageEvolution

We are inviting applications for a research technician (with an option of becoming a PhD student) in the area of computational biology and genomics of bacteria-phage interactions. The successful candidate will join Dr RafaÃÂ Mostowy's Microbial Genomics Group (https:/-/mostowylab.com) at the Malopolska Centre of Biotechnology in Krakow. The position is available from September 2019 and funded by the Polish National Agency of Academic Exchange.

The successful candidate will work on the evolutionary genomics of bacteria-phage co-evolution. The general aim of the project is to explore the diversity and specificity of interactions between bacteriophages and opportunistic bacterial pathogens in the family of Enterobacteriaceae, with primary emphasis on Klebsiella pneumo-

niae. The PhD project itself will be focused on using cutting-edge bioinformatics to analyse hypervariable genomic regions in bacterial genomes and metagenomes (de novo assembly and assembly graphs), working with both Illumina and Oxford Nanopore sequencing data. The project will involve close collaboration with international groups with expertise in genome bioinformatics (Zamin Iqbal at EMBL, Sebastian Deorowicz at Silesian University of Technology), genomic epidemiology (Kat Holt at Monash University, Nick Thomson at Wellcome Trust Sanger Institute), experimental microbiology (Prof. Mark Enright at Manchester Metropolitan University) and structural biology (Sebastian Glatt at MCB). Results of the project will contribute to the fight against the problem of antibiotic resistance in Poland and Europe by helping understand importance of bacteriophages in emergence of bacterial resistance and virulence as well as by helping discover novel families of enzymes against virulent strains of Klebsiella.

The successful candidate will have an opportunity to influence the direction of the project depending on his/her profile and strengths. He or she will have the opportunity learn multiple new skills (e.g., working with Nanopore sequencing data) and develop international contacts, but will be expected to manifest an increasing degree of intellectual independence throughout the project.

The successful candidate will: - hold a degree in a quantitative field like biology, chemistry, physics, mathematics, computer science or similar, - have a very good knowledge of at least one programming language (e.g., R, Python, C/C++, Java), - manifest a high degree of enthusiasm for the advertised project, - have fluent oral and written communication skills in English, - have good communication skills, - enjoy support of and interaction with other group members.

The ideal candidate will also fulfil one or more of the following requirements: - demonstrate evidence of having completed scientific projects in the area of data science, machine learning, structural biology, computational biology, microbiology or virology, - have an active portfolio of developed software applications (e.g., an active Github repository), - have a track record of presenting at research conferences and/or published research, - have an active interest in the area of genomics of bacteria- phage coevolution.

We offer: - opportunity to work on an ambitious and important scientific problem, hence contributing to the fight against antimicrobial resistance, - opportunity to collaborate with world-class scientific leaders at the leading scientific institutions and with exciting companies in the biotechnology sector, - a fun and interactive working environment, - a full-time salary and a possibility of an additional PhD stipend upon a successful admission to the doctoral school at the Jagiellonian University, - participation in collaborations and scientific meetings across the globe, - flexible working time.

How to apply? Please send me an email at rafal.mostowy@uj.edu.pl with a short explanation for why you would like to join my lab and how this position fits into your interests and career aspirations. Please take your time to think about those questions. In the same email, please include your CV as well as names and contact details of at least 2 referees. The deadline for submitting applications is Friday, 13th of September 2019.

Malopolska Centre for Biotechnology (MCB) is a flagship biotechnology institute of Southern Poland and one of the most promising biomedical institutes in Central/Eastern Europe. It is part of the Jagiellonian University in Krakow and its excellence is based on three main areas: computational genomics & bioinformatics, structural biology and plant biology. The first area, computational genomics & bioinformatics, has recently been undergoing rapid growth, with a recent start of

— / —

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

LMU Munich 2
ComputationalPhylogenetics

PhD Position on Species Tree Estimation

I invite applications for a doctoral position in computational phylogenetics in my research group at the GeoBio-Center of the Ludwig-Maximilians-Universität (LMU), München. The position is funded by the DFG Emmy Noether program. The position is 75% and research only (no classes and teaching required). The position should start between 1st October 2019 and 1st April.

The main research topic for the PhD project is to develop methods for species tree estimation. Traditionally, estimates of gene trees have been used as a proxy to infer species trees. However, different genes have different evolutionary histories because of various biological

processes (e.g., incomplete lineage sorting, gene flow and hybridization, gene duplication and losses). The focus of the PhD thesis will be on developing new statistical methods to estimate species phylogenies while accounting for gene tree variation and apply these methods to estimate species phylogenies from genomic data.

Applicants should have a Master's degree, completed or completion imminent, in bioinformatics, biostatistics, computer science, evolutionary biology or a related field. The key skills required are proficiency programming (C, C++ or Java) and good communication skills (oral and written English). Basic knowledge in phylogenetics and statistical inference (especially Bayesian statistics) is beneficial but not required. Training in these skills will be provided depending on need. The thesis will be written in English. No knowledge of German is required but some basic knowledge will be helpful outside of work. Enthusiasm, determination and the capacity to work independently are essential. The candidate is highly encouraged to develop their own research ideas complementing the current research direction.

My group is broadly working on theory and computational methods for Bayesian inference of phylogeny (https://hoehnalab.github.io). The research directions include phylogeny inference, divergence time estimation, diversification rate estimation and model testing. All of our methods are implemented in the open-source program RevBayes (http://www.RevBayes.com) which is the successor software of the popular program MrBayes. The successful applicant will be part of our vibrant RevBayes group and will contribute to further development of the program. There will be opportunities for the successful applicant to work with and visit the research groups of my collaborators in Europe and the USA. Furthermore, I expect the candidate to become actively involved in our RevBayes workshops and hackathons.

My group is located at the GeoBio-Center of the LMU Munich, one of Germany's and Europe's top Universities (#32 world-wide; #8 in Europe; #1 in Germany; https://www.timeshighereducation.com/world-university-rankings/lmu-munich). The GeoBio-Center is located at the Konigsplatz which is in walking distance to the historic city center (Marienplatz) and English Garden (city park with 3.75 km' area). The GeoBio-Center is highly interdisciplinary and consists of researchers from different departments including paleontology, molecular and evolutionary biology, zoology and botany.

The position will be compensated according to the standard DFG salary scheme (75% of TVL-E13; approx. 2750€monthly gross salary; approx. 1650€monthly net salary). The salary includes benefits such as health care, 30 days of vacation per year, pension, unemployment insurance and child support (if applicable).

LMU Munich is an equal opportunity employer. We strongly encourage applications from female candidates. LMU Munich intends to enhance the diversity of its employees. Furthermore, disabled candidates with essentially equal qualifications will be given preference.

Further information can be found at (https://-hoehnalab.github.io), and questions should be directed to Sebastian Hohna (hoehna@lmu.de). Applications, including a letter of motivation and your research interests (1 page), current CV and names and contact details of two referees should be sent to Sebastian Hohna before the deadline of 31 August 2019. After the deadline I will start reviewing all applications and invite selected candidates for an interview.

PhD Position on Modeling Species Diversification

I invite applications for a doctoral position in computational phylogenetics in my research group at the GeoBio-Center of the Ludwig-Maximilians-Universität (LMU), München. The position is funded by the DFG Emmy Noether program. The position is 75% and research only (no classes and teaching required). The position should start between 1st October 2019 and 1st April.

The main research topic for the PhD project is to model species

— / —

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

Muenster InsectEvolutionaryEcol

The Institute for Evolution and Biodiversity at the University of Munster, Germany, invites applications for a

PhD Position (salary level TV-L E13, 65%) in insect evolutionary ecology

The fixed-term position can start as soon as possible, preferentially before November 2019. The work contract of this position is provided for the first 24 months with possibility of extension for one

more year. The successful candidate will join the Plant Adaptation-in-Action group, headed by Prof Shuqing Xu (https://www.unimuenster.de/Evolution/-plantadapt/people/shuqingxu.shtml). Our group studies the mechanisms and processes of adaptation and evolution using integrative approaches. Within this research framework, the new PhD student will primarily focus on a project that aims to understand how insect behavior responses contribute to insecticide resistance. As understanding evolutionary processes requires integrative approaches, we aim to train the student with interdisciplinary skills, such as in evolutionary genetics, chemical ecology, insect behavior ecology and molecular biology. The organisms the student will work on is the Colorado potato beetle (Leptinotarsa decemlineata).

During the project, in addition to learning new scientific skills/methods and gaining didactical proficiencies, the student will also get experience in project planning and management. The position offers the opportunity to acquire a PhD and serves to facilitate successful career development both within and outside of academia. The candidate will also join the Munster Graduate School of Evolution (MGSE, https://www.unimuenster.de/-Evolution/mgse/), which offers both a stimulating studying environment and opportunities to explore excellent research in the fields of biology, medicine, geosciences, mathematics, and philosophy. This project is part of an on-going DFG-funded Collaborative Research Centre Transregio NC^3, which provides excellent trainings in animal behavioral ecology. In addition, this project is in collaboration with scientists from Bayer Crop, and the student will experience research environment in both academia and industry.

Requirements: We are looking for a highly motivated researcher of any nationality with the equivalent of an MSc degree in biology, evolutionary genetics or insect behavior ecology. The successful candidate is expected to perform experiments with insects in laboratory and analyze data with a high degree of independence. Thus, a background in insect biology, biology and genetics is required. Applicants must demonstrate their skills in statistics, data analysis and problem solving. Experience with microbial biology and analyzing next generation sequencing data is an advantage. Our group consists of people from different 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 Munster is an equal opportunity employer, 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. We also welcome applications from candidates with severe disabilities. Disabled candidates with equivalent qualifications will be preferentially considered, unless their disability prevents them from carrying out project-related work.

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 two pages, (2) a detailed CV including academic and extracurricular achievements, as well as 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 Dr Shuqing Xu (shuqing.xu@uni-muenster.de) before 30th August 2019.

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

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

NorthDakotaStateU DrosophilaEvolution

I am seeking potential graduate students (masters and PhD) to join my lab at North Dakota State University. My lab studies evolutionary biology in Drosophila from a variety of perspectives including population genetics, quantitative genetics, and developmental biology. We ask questions about how Drosophila adapts to heterogeneous environmental variables such as ethanol, how evolution to the environment proceeds at the gene regulatory level (cis/trans, genetic accommodation, etc.), comparative evolution in response to environmental differences, etc. There is also potential for collaboration on an existing project in the department on native bees. Students with an interest in bioinformatics and/or experimental biology are welcome. Admissions date is flexible. North Dakota State University is a land-grant institution located in Fargo, North Dakota. If you are interested in this opportunity please send me an email at sarah.signor@ndsu.edu. Please let me know why you are interested in the lab, whether you are interested in a PhD or Masters, and attach a CV with at least two references. If you are a potential fit for the lab we can set up a Skype Interview

Sarah Signor North Dakota State University Department of Biological Sciences

"Signor, Sarah" <sarah.signor@ndsu.edu>

SmithColl UMassAmherst EvolEukMicrobes

The Katz lab at Smith College/UMass-Amherst is seeking PhD students to join projects that focus on biodiversity and genome evolution of eukaryotic microbes. Work in the Katz lab aims to elucidate principles of the evolution in eukaryotes through analyses of microbial lineages, and to assess how these principles apply (or fail to apply) to other organisms. Currently we focus on several interrelated projects including: (1) characterizing evolutionary relationships among eukaryotes; (2) exploring the evolution of germline/soma distinctions in eukaryotic genomes; and (3) describing the forces driving the biodiversity of protists (mainly ciliates and amoebae) in local environments (e.g. bogs and fens, coastal habitats). More details can be found here: http://www.science.smith.edu/katz-lab/research/ . A graduate student joining the lab would have opportunities to improve skills in field work, single-cell omics, both light and fluorescence microscopy, and bioinformatics. Interested students will be put in touch with current/past graduate students who can share their perspectives on the Katz lab, the UMass-OEB program, and Northampton.

Smith College is a member of the Five College Consortium with Amherst, Hampshire, and Mount Holyoke Colleges and the University of Massachusetts Amherst. Hence, Ph.D. students join the Katz lab through the Organismic and Evolutionary Biology (OEB; http://-gpls.cns.umass.edu/oeb) or the Plant Biology Program (PB; http://gpls.cns.umass.edu/pb), both based at the University of Massachusetts Amherst.

Prospective students are invited to email their c.v. and a brief statement of interest to Laura Katz (lkatz@smith.edu), and pursue the formal application through the UMass OEB or PB program.

Laura A. Katz, Elsie Damon Simonds Professor < http:/-/www.science.smith.edu/departments/Biology/lkatz/ > Editor in Chief, Genome Biology and Evolution < https://academic.oup.com/gbe >

Department of Biological Sciences Burton Hall 201 / 44 College Lane Smith College Northampton, MA 01063 Ph: 413-585-3825 Skype: laura_a_katz

Laura Katz <lkatz@smith.edu>

TempleU Philadelphia InvasiveSpeciesEvolution

A Ph.D. Graduate student position with Dr. Matthew Helmus is available at Temple University for Fall 2020. Dr. Helmus jointly runs the Integrative Ecology Lab, which is focused on integrating biodiversity science with human ecology to understand contemporary patterns of biodiversity and its functioning within ecosystems (https://www.iecolab.org/).

The Ph.D. student will research the eco-evolutionary drivers of invasive species spread at global, regional and local scales in general and with a focus on the invasive spotted lanternfly (Lycorma delicatula). Activities performed may include:

- Data mining and data science - Modeling in collaboration with applied mathematicians - Fieldwork in forested and agricultural ecosystems - Lab and field experimentation - Mentoring undergraduate research assistants - Quantitative method development

Applicants must have prior research experience and a bachelors and/or masters degree in biology, environmental science, or other quantitative fields. Ideal applicants are those with experience in evolution, ecology, statistics, or entomology; but most importantly, the successful applicant will be well-organized, able to work both independently and in a team setting, and motivated to learn. This position is ideal for those craving a career in the exciting, fast-paced world of biodiversity science.

Full applications are due to the Temple Graduate School on December 15, 2019 (November 15 for international applicants). However, interested applicants should initially email Dr. Helmus well in advance of the deadline (mrhelmus@temple.edu).

Include in the email: - Cover letter outlining qualifications, experience, and why you are interested in the position - Curriculum vitae - Unofficial transcript - Questions you have about the research, etc.

Applicants are strongly encouraged to first peruse the lab website prior to contact.

The Center for Biodiversity is in a new LEED-Gold certified building in historic Philadelphia. The Center provides state-of-the-art biodiversity research facilities

along with support staff with expertise in media development, GIS technology, high-performance computing, and genetics. Temple University, founded in 1884, is a public R1 university with a diverse student body of ca. 40,000 students. It is the sixth-largest provider of graduate school education in the U.S.A., is within the top 4% of research institutions in the U.S.A., and is in the top ten of the fastest gainers in ranking by the U.S. News & World Report list of Best Colleges.

Philadelphia is the birthplace of the U.S.A., filled with numerous attractions (e.g., Philadelphia Museum of Art, Philadelphia Zoo, Academy of Natural Sciences), amazing food, and a quick train ride to New York City and Washington DC. Philadelphia is nestled within an extensive national/state trail and park system and is very close to Valley Forge National Park, the Pocono Mountains, the unique Pine Barren ecosystem, and the beaches of the Atlantic shore.

Temple University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community. iEcoLab believes the crisis in biological diversity can only be addressed by scientists from diverse backgrounds and with diverse viewpoints. I strongly encourage applications from students with diverse backgrounds.

For more information see: https://www.iecolab.org/ http://www.biodiversitycenter.org/ https://-bulletin.temple.edu/graduate/scd/cst/biology-phd/
"tuf86195@temple.edu" <tuf86195@temple.edu>

TennesseeTechU ShrimpAdaptation

Masters Student Opportunity

Evolution of morphological adaptation in the snapping shrimp genus Alpheus

An MS position is available through the Department of Biology at Tennessee Tech University in Cookeville, Tennessee; starting date is January 2020. The applicant will work with a collaborative team that includes Dr. Carla Hurt from Tennessee Tech University, Dr. Kristin Hultgren from Seattle University, Dr. Arthur Anker from Universidade Federal do Ceara, and Dr. Chris Murray at Southeastern Louisiana University. The successful applicant will investigate adaptive morphological evolution and its role in species diversification in the tropical snapping shrimp genus Alpheus. The student will use geometric morphometric techniques to investigate patterns of morphological evolution and test hypotheses of adaptive convergent evolution in a phylogenetic context. This project will be funded by the National Science Foundation.

We are looking for highly motivated candidates with a B.S. in Biology or closely related field and a strong academic record. A GPA of at least 3.5 in the highest degree earned is required. The successful candidate should demonstrate an interest in morphological evolution and systematics. The student will need to possess an aptitude for research in evolutionary biology and an ability to conduct field work. Financial support (stipend and full tuition waiver) will be provided through a Teaching Assistantship and a Research Assistantship and will be renewable annually contingent upon satisfactory performance.

Interested students are encouraged to e-mail me (churt@tntech.edu). Please include a short description of your academic background, research interests and your CV, along with contact information for three references. Screening of applicants will begin immediately.

"Hurt, Carla" <churt@tntech.edu>

UAlabama EvolutionaryEcology

UAlabama.EvolutionaryEcology: An Evolutionary Ecology focused PhD position is available in Jason Pienaars laboratory at the University of Alabama, Tuscaloosa. The project will involve a combination of evolutionary modeling, phylogenetic comparative approaches, field data collection (with potential field work in South Africa, depending on study organism and interests) and "omics" approaches to studying trait evolution. The Pienaar lab centers around three lines of research 1) optimality / game theory modeling, typically using fig wasps to test model assumptions and predictions; 2) phylogenetic comparative method development and application; and 3) more recently tardigrade evolutionary ecology. Student support is primarily through a competitive 12 month GTA (Graduate Teaching Assistant) stipend, supplemented by RA (research assistance) from various sources depending on research interests.

The anticipated start date for this position is Spring 2020.

Interested applicants should have a strong academic record (GPA > 3.0), be self-motivated and have a desire to learn new skills. We are also a very diverse laboratory

with current members hailing from around the world V a strong commitment to working with a diverse group of people, both academically and culturally is a must.

For more information on the Pienaar laboratory see: https://jpienaar.people.ua.edu/ For more information on UA and Tuscaloosa see: https://www.ua.edu/ Please contact Jason Pienaar (jpienaar@ua.edu) for more information.

"Pienaar, Jason" <jason.pienaar@ua.edu>

UAlabama EvolutionaryEpigenomicsBees

PhD Positions to Study Epigenome-to-Phenome of Bumble Bee Thermal Tolerance:

Multiple PhD positions are available in the laboratories of Jeff Lozier and Janna Fierst at The University of Alabama as part of a recently awarded NSF Rules of Life project: Bumble bee cold tolerance across elevations - From epigenotype to phenotype across space, time, and levels of biological organization. PhD students will be involved in studying the links between genomic, epigenomic, and transcriptomic variation in relation to local thermal tolerance adaptation in montane bumble bees. The project will involve extensive high throughput sequencing of bees from wild populations and experimental colonies and the use of approaches like network theory to model and draw inferences from these complex data. Students will develop questions relating to ecological and evolutionary genomics within the broader project objectives. The focus of the positions is flexible, and we expect there will be a great deal of collaboration among project personnel.

We are looking to recruit highly motivated students with interests in applying modern molecular and computational tools to address ecological and evolutionary questions in a non-model organism. Applicants should have a strong academic record (GPA $>$ 3.0), an ability for clear verbal and written communication, and a desire to learn new skills! Students funded off the grant will participate in both laboratory molecular work (primarily generation of RNAseq and genome sequencing libraries) and computational analyses, and applicants should thus have some degree of experience or interest in both aspects of the project.

The project will involve collaborations with Drs. Michael Dillon and Franco Basile at the University of Wyoming, and James Strange at Ohio State. As part of these collaborations there will be opportunities for field work or experimental work with bumble bees, depending on student interests and expertise.

Contact Jeff Lozier (jlozier@ua.edu) or Janna Fierst (janna.l.fierst@ua.edu) for more information. Anticipated start date will be Fall 2020, but we can be flexible.

Useful Links: Lozier Lab: lozierlab.ua.edu Fierst Lab: jfierst.people.ua.edu U Alabama Biological Sciences: bsc.ua.edu

jlozier@ua.edu

UAmsterdam 2 EvolutionaryBiology

Two PhD positions in evolutionary biology

Project title: Developing attract & infect strategies against the Fall Armyworm in Africa

Where: Two PhD positions are available at the University of Amsterdam (PhD1) and Wageningen University (PhD2) to develop region-specific attract & infect strategies against the Fall Armyworm (/Spodoptera frugiperda/) in East Africa (Kenya) and West Africa (Togo-Benin) by a) identifying region-specific pheromone lures (PhD1) and b) investigating species-specific viruses (PhD2), based on field experiments, in collaboration with local farmers and an international network of academic and industrial partners. Field work (10-15 months in total) will be conducted in collaboration with /icipe/ in Kenya and IITA in Benin and Togo.

What: The Fall Armyworm (FAW) /Spodoptera frugiperda/ (Lepidoptera, Noctuidae), a major pest in staple crops in North and South America, recently invaded Africa and is spreading with incredible speed. Currently, control of this pest insect mainly depends on chemical insecticides, which negatively affect the environment and non-target species and, in addition, resistance towards these insecticides has already been reported. Therefore, there is a urgent need for safe, sustainable, environmental friendly alternative control measures that can be easily applied in the field by local farmers. Biological control methods that are currently used to control lepidopteran insect pests include pheromone trapping (trapping male moths using female pheromones) and the spraying of baculoviruses (killing caterpillars). This project aims to combine both methods, as this may yield exciting opportunities for

biological control, surpassing the effectiveness of each single method.

For sustainable pest management development, the evolution of both the pest and the virus should be taken into account. Specifically, sexual signals or responses likely vary in different geographic locations, due to interactions with local species and environmental conditions, so that region-specific lures will need to be developed. In addition, developing a successful attract-and-infect strategy will depend on the genetic insect variants present. To identify possible host and pathogenicity factors, full sequences of virus strains differing in host specificity and pathogenicity will be compared. It is also important to determine if, and at what speed, virus resistance can develop and to understand the mechanism(s) through which this can occur. Full genome analyses of susceptible and resistant /Spodoptera/ spp should identify virus resistance markers. These markers will allow selection of best virus strains, and help in the early identification of possible resistance development in /Spodoptera/ populations. Furthermore, strategies involving alternation of virus isolates will be tested, to minimize the risk of resistance development.

More information can be found in the links below.

Application site for PhD1: https://www.uva.nl/en/-content/vacancies/2019/08/19-511-phd-candidate-evolutionary-biology.html Application site for PhD2: https://www.wur.nl/en/vacancy/PhD-position-Developing-attract-and-infect-strategies-against-the-Fall-Armyworm-in-Africa.htm < http://ibed.uva.nl/-content/research-departments/epb/epb.html >

Astrid Groot <a.t.groot@uva.nl>

UArkansas NeuroEvoDevo

The Nakanishi lab at the University of Arkansas seeks applicants interested in pursuing a MS or PhD in evolutionary developmental biology of animals to start in Spring or Fall 2020. Current research efforts of the lab are focused on reconstructing conserved and divergent mechanisms of how nervous systems develop and function by using cnidarians V sea anemones and jellyfish in particular. Student's research projects may involve gene expression analyses (e.g. in situ hybridization and immunohistochemistry), reverse genetics (e.g. CRISPR-Cas9), embryology (e.g. descriptive morphology, cell-lineage tracing and tissue transplantation), genomics (e.g. RNA-seq and ChIP-seq), and advanced microscopy (confocal and electron microscopy, and live-cell imaging). Research and teaching assistantships are available.

Requirements: Bachelors degree in biology or related field. The ideal candidate will have a strong interest in evolutionary biology, and experiences in molecular biology, developmental biology, neurobiology, genomics/bioinformatics and/or microscopy techniques. Knowledge of invertebrate zoology is a plus but not required.

Please contact Nagayasu Nakanishi (nnakanis@uark.edu) before submitting a formal application to U of A Graduate Admission.

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

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 2020. Our research focuses on the computational analysis of genomic and transcriptomic data generated by next-generation sequencing platforms from non-model forest tree species. 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 Ph.D. 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, unofficial undergraduate/graduate transcripts, and GRE scores to Jill Wegrzyn (jill.wegrzyn@uconn.edu). Qualified candidates will be contacted directly for Zoom interviews following review. Selected candidates will be invited for a campus visit. Applications will be reviewed starting December 20th.

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.

jill.wegrzyn@uconn.edu

UCopenhagen FungalEvolutionaryGenetics

Open PhD Position in Comparative and Population genomics of insect-pathogenic fungi

We are seeking a candidate to fill a fully funded PhD position for a period of 3 years in the Applied Evolutionary Ecology research group led by Henrik H. De Fine Licht at the University of Copenhagen, Denmark (https://-plen.ku.dk/english/research/organismal_biology/aee/).

We are looking for a committed and enthusiastic graduate student to work with insect-pathogenic fungal genetics, evolution and ecology. We specifically aim to explore the genomic basis of phenotypic variation in virulence and host specialization using insect-pathogenic fungi as a model. Fungi in the genus Metarhizium show remarkable diversity between species in terms of host range and capacity for plant-root colonization. There is also ample diversity within species among isolates in pathogenic capacity, toxin production, and nutritional growth characteristics. The project aims to investigate the genomic components of the present diversity between and within Metarhizium species, and how this genomic diversity is related to the capacity for making a host shift to a new insect species. The project will use comparative genomics and population genomics coupled with bioassays in the laboratory. A large in-house collection of viable insect-pathogenic fungal isolates from the genus of Metarhizium will be used in combination with international culture collections, but there is also possibility for sampling new material.

The successful PhD student will thus obtain competences within mycology, fungal genomics and population genomics, and applied bioinformatics. We are looking for candidates with experience in any or all of the following areas: Fungal pathogen biology, mycological techniques, population genetics/genomics, molecular genetic laboratory techniques, and computational analysis of genomic sequence data (programming, e.g. Perl, Python, Bash, R; genome/transcriptome assembly; comparative genomics). Most importantly, the successful candidate is enthusiastic, has a good grasp of population and evolutionary biology and is interested in host-pathogen evolution.

The project is funded by a Danish Research Council Sapere Aude Starting Grant and involves researchers at

University of Copenhagen and University of Maryland (USA). The PhD student will be supervised by Associate Professor Henrik H. De Fine Licht and co-supervised by Associate Professor Nicolai V. Meyling.

To apply, please first contact Henrik H. De Fine Licht (Email: hhdefinelicht@plen.ku.dk, include subject-line in email: "PhD student fungal population genomics"). This way, Henrik H. De Fine Licht and the potential applicant can discuss the formal application and requirements before submission (e.g. applicants with English as second language need to provide a copy of a specific English test score sheet, the documentation of academic degrees obtained (diplomas) must be in English/officially approved translation to English, and applicants cannot have lived in Denmark for more than one year out of the past three years at time of application).

The deadline for formal application is 1 October 2019, so contact Henrik H. De Fine Licht as soon as possible if you are interested.

Many thanks for your attention.

Henrik H. De Fine Licht, PhD. Associate Professor University of Copenhagen, Department of Plant and environmental Sciences, Section for Organsimal Biology, Thorvaldsensvej 40, 3rd Floor, 1871 Frederiksberg, Copenhagen, Denmark Phone: +45 35320097 (office), +45 61685769 (mobile) E-mail:mailto:HHDeFineLicht@plen.ku.dk; mailto:HenrikLicht@gmail.com

Website https://sites.google.com/site/-henrikdefinelicht/ Editorial board member BMC Evolutionary Biology: https://-bmcevolbiol.biomedcentral.com/ Fungal Ecology: https://www.journals.elsevier.com/fungal-ecology Henrik Hjarvard de Fine Licht <hhdefinelicht@plen.ku.dk>

UDuisburg Essen AquaticMolecularBiodiversity

About the position A position as a PhD Research Fellow in aquatic ecology is avilable at the Faculty for Biology, Department Biodiversity, led by Prof. Jens Boenigk. The focus of this group is on the evolution and taxonomic and functional diversity of aquatic microorganisms. Expertise of the members within the group covers a broadness of methods ranging from classical plankton ecology and limnology to molecular amplicon diversity, transcriptomics and genomics further to metatranscripomics and Vgenomics including the bioinformatics tools for dealing with such data.

The fellowship will be for a period of 3 years. Scholarship amount: 1500 EUR / month Starting date: As soon as possible Application deadline: 15.10.2019

Job description The candidate will work on a project entitled "Differential potential of metabarcoding, metatranscriptomics, and metagenomics for the assessment of lake water quality", financed by the Bauer und Stemmler foundations. The overall objective of this project is to assess the potential of molecular data from microbial communities (metabarcoding, metagenomics and metatranscriptomics) to act as indicators of water quality. This work will be based on an existing dataset comprising samples from 250 european lakes and further field sampling and laboratory work is planned within the project to extend the dataset. The project entails field sampling, molecular lab work, bioinformatic analyses of amplicon/metabarcoding, metagenomic and transcriptomic data, as well as statistical analysis of gradients in the data (both in terms of taxonomic and functional diversity), and correlations between these gradients and environmental (physicochemical) variables. The focus of the PhD-thesis will be on the bioinformatics and statistical analyses, while the sampling and molecular work will be a joint effort with another PhD project. The main emphasis can be adjusted according to the research interests and qualifications of the successful candidate. Further description of the project can be provided upon request.

We are looking for a candidate with a strong interest in the ecology of aquatic microorganisms, experience with bioinformatics, and who is interested in further developing their skills in bioinformatics and statistical analysis of meta*omics data.

Qualifications A masters degree or equivalent in biology, ecology, bioinformatics or related fields Experience with (statistical) programming languages such as R or Python, and/or experience with bioinformatic processing of amplicon/metabarcoding, metagenomic- or metatranscriptomic data is a requirement Experience with field sampling and molecular lab work (DNA/RNA isolation, PCR) is an advantage Fluent English or German

How to apply Interested candidates should send a brief statement of research interests/motivation, CV, certificates/transcripts of grades and names and contact information of two references, as one pdf file to Dr. Daniela Beisser (daniela.beisser@uni-due.de).

Elianne Dunthorn Egge <elianne.egge@uni-due.de>

UFrancheComt UrbanBiodiversity

Three-years PhD position (funded)

Subject: Assessing the capacity of urban form to preserve biodiversity: A simulation-based approach

Context and objectives: The PhD is part of the REFUGE project (CNRS 80|PRIME call) about biodiversity inside urban agglomerations. The aim is to compare several types of urban extensions according to their ability to preserve animal populations in the long run. The main hypothesis is that under specific conditions, fractal urban form provides interesting ecological properties. More broadly, urban forms are expected to differ according to their capacity to provide a suitable framework to animal populations.

The methodological plan of this work is to compare differentiated scenarios of urban development in a prospective approach, and, for each of them, to evaluate the evolution of genetic diversity of several species. This approach will rely on the combination of a model devoted to the simulation of urban growth (changing model's parameters to simulate different urban forms) and a simulation model of gene flow used in dynamic way according to the land cover changes defined in the first model. The case studies will involve both theoretical cities and a real urban agglomeration (city of Lyon, France).

Key words: Urban form, Fractal city, Ecological impact, Landscape genetics, Simulation.

Supervision and resources: The PhD will be supervised by Jean-Christophe Foltête (University of Franche-Comté, UMR ThéMA) and Stéphane Garnier (University of Burgundy, UMR Biogéosciences). It will benefit from the budget of the REFUGE project and scientific support will be provided by the staff of this project: spatial modelling, geomatics and application development at TheMA, and population genetics and landscape genetics at Biogéosciences.

Skills and instruction to apply The candidate needs to have: (1) either a master in geography, (2) or a master in ecology or evolutionary biology. In the first case, we expect a geographer specialized in environmental modelling (knowledge in landscape ecology will be a plus). A training in concepts and methods of population genetic will be necessary. In the second case, we expect a biologist or an ecologist with skills in population genetics and in spatial analysis (or who will learn these methods). In all cases, the candidate should have a strong interest for theoretical approaches.

Applications including a CV and a cover letter must be sent by the 20th of September 2019 to the following address: jean-christophe.foltete@univ-fcomte.fr

Further information can be obtained from Jean-Christophe Foltête (jean-christophe.foltete@univ-fcomte.fr) and Stéphane Garnier (stephane.garnier@u-bourgogne.fr).

– Stéphane Garnier

UMR CNRS 6282 Biogéosciences Université Bourgogne 6 Bd Gabriel 21000 Dijon - France

stephane.garnier@u-bourgogne.fr Tel: +33 (0) 3 80 39 90 58 Fax: +33 (0) 3 80 39 62 31

stephane.garnier@u-bourgogne.fr

UGraz EvolutionaryParasitolGenomics

PhD: UGraz.EvolutionaryParasitolGenomics

ï¿¼PhD position in Evolutionary Parasitology at University of Graz, Austria and Hasselt University, Belgium (joint PhD)

A 3-year PhD position in Evolutionary parasitology is available at the Institute of Biology, University of Graz, Austria. The degree is organized co-tutelle with Hasselt University, Belgium. The successful candidate will be based in Austria (with a stay of at least 6 months in Belgium via the co-tutelle), and supervised jointly by Dr. Christoph Hahn (Uni Graz) and Dr. Maarten Vanhove (UHasselt). An additional 4th year (to be based in Belgium) of PhD grant can be applied (competitive) for at UHasselt.

We are seeking a highly motivated PhD candidate with a MSc degree in Biological sciences or related disciplines and a vivid interest in evolutionary biology. The successful candidate will be supported by a team of dedicated supervisors with highly complementary expertise (bioinformatics/genomics, phylogenetics, parasitology) and develop skills in flatworm alpha taxonomy and biology, processing/analysing of large NGS datasets (programming, e.g. Perl, Python, Bash, R; genome/transcriptome assembly; comparative genomics), and phylogenomics. Previous experience in any of these fields is beneficial

but not a formal requirement. The project is a multidisciplinary and collaborative effort involving partners from 15 countries around the world. The candidate will have the opportunity to conduct field work and present her/his work in collaborating labs and at international scientific conferences.

Project description: Deep evolutionary genomics of Monogenea The Neodermata (Platyhelminthes) are a highly diverse assemblage of obligate parasitic flatworms (estimated 40,000 - 100,000 species), comprising Cestoda (tapeworms), Monogenea, and Trematoda (flukes), many of biomedical, veterinary and economic importance. Together, they span an impressive range of hosts and parasitic lifestyles. Despite decades of research, however, the relationships between the main parasitic lineages remain contentious. Recent work has sought to resolve the controversy by means of phylogenomic inference, but particularly Monogenea remain vastly underrepresented in these datasets, despite their importance and ubiquity. With their simple, direct life cycles, monogeneans are key for understanding the shift towards obligate parasitism of vertebrates, the evolutionary history of ecto- and endoparasitism, and the emergence of complex life cycles in Neodermata. We will assemble draft genomes for 50+ representatives of the Monogenea (Platyhelminthes; Neodermata), aiming for complete coverage of all monogenean families, based on a combination of short and long NGS read data. Genes will be identified in the genome assemblies using a combination of existing and newly generated (RNAseq) physical evidence and ab initio gene prediction. Phylogenetic relationships of the Neodermata and especially the Monogenea, will be inferred based on the newly assembled and previously published gene complements. We will investigate patterns of gene/gene family loss/expansion and conservation/disruption of metabolic pathways associated with shifts in parasite life history traits.

ï¿¼The city of Graz is the second largest city in Austria, with a population of >300k residents and roughly 60,000 students across 6 Universities. Graz is located at the eastern slopes of the Alps offering numerous cultural activities (theaters, opera, art galleries, concert halls) as well as easy access to pristine nature. Or you can hop on a direct bus or train and reach other Austrian cultural hubs, like Vienna (2.5 h) or Salzburg (3.5 h), for a day- or weekend trip. With 31,000 students and 4,300 employees the University of Graz contributes significantly to the vibrant (night-)life in the city. The University is in walking distance to several parks as well as the city centre which offers a wide variety of bars, pubs, and restaurants (Graz was City of Culinary Delights in 2008). The Institute of Biology at the University of Graz has a strong focus on evolutionary biology, with several international research groups investigating aspects of molecular evolution in a wide variety of organisms, including, but not limited to, arthropods, fishes, flatworms, fungi and lichens, using large-scale genomics and transcriptomics approaches. The institute has a fully equipped molecular biological laboratory. Computational infrastructure at the institute includes PCs, Macs, and a number of high-spec Linux machines for data analyses. Members of the institute have access to dedicated High Performance computing (HPC) infrastructure of the University of Graz.

The PhD position is fully funded for three years by the Austrian Science Fund (FWF). Monthly gross salary in Austria is 2.162,40 EUR. A fourth year of PhD grant can be applied for at UHasselt, and, if granted, the candidate

— / —

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

UHelsinki InsectSymbiosis

PhD position - Symbiont host-breadth and host-shift in a natural insect community ' The University of Helsinki, Finland

APPLY HERE: https://www.helsinki.fi/en/open-positions/doctoral-student-symbiont-host-breadth-and-host-shift-in-a-natural-insect-community The University of Helsinki, founded in 1640, is one of the best multidisciplinary research universities in the world. The University of Helsinki is an international academic community of 40,000 students and staff members. It operates on four campuses in Helsinki and at 15 other locations. The high-quality research carried out by the university creates new knowledge for educating diverse specialists in various fields, and for utilization in social decision-making and the business sector.

The Faculty of Biological and Environmental Sciences (https://www.helsinki.fi/en/faculty-of-biological-and-environmental-sciences) is Finland's most high profile and extensive hub of research and teaching in the field. The Faculty is comprised of three research programmes ' Ecosystems and Environment, Molecular and Integrative Biosciences, and Organismal and Evolution-

ary Biology ' the latter with focus areas on Ecology and Evolution of natural populations, population genetics and dynamics, and Climate Change.

The Laboratory of Dr. Anne DUPLOUY (www.anneduplouy.net) is part of the Organismal and Evolutionary Biology programme, and studies host-symbiont interactions and insect communities to investigate diverse evolutionary and ecological processes. We now invite applications for a fixed term position (up to 4years) as DOCTORAL STUDENT funded by the Academy of Finland. Highly motivated students showing independent thinking, and ability to learn and implement new skills from different research fields are highly encouraged to apply.

Remove all symbiotic mycorrhizal fungi, chloroplasts or gut-microbes and we loose all 25,000 species of orchids, most of plants or our ability to digest food. Symbionts are microorganisms that live in intimate association with almost all Eukaryotes. Their ubiquitousness is mainly explained by various means that symbionts have evolved to promote their own fitness, to spread or survive in their host population, and to ensure their transmission through generations (i.e. vertical transmission). The symbiont-induced phenotypes include manipulating the hosts' reproductive system and other life-history traits, such as host fecundity, dispersal abilities or response to pathogen and environmental extremes. Depending on the study system, the phenotypes are beneficial or costly to the host. Although many studies suggest that around 60% of all insect species are infected by heritable symbionts, those microorganisms have rarely been considered within the complexity of insect communities. Consequently, we lack a full understanding of how natural communities work, and how symbionts may play a key role in the shaping of those communities.

In this project, the PhD candidate will enquire about the dynamics of two symbionts (Wolbachia and Microsporidia) in a natural insect community. The candidate will investigate the favored routes of transfer of the symbionts (between and within species), and the main biotic and abiotic factors affecting symbiotic transfers (e.g: temperature, competition). The study system will be the well-characterized insect community associated with the ribwort plantain, in the Sland islands (between the coasts of Finland and Sweden). The candidate will be asked to perform fieldwork, and various experiments using ecological approaches in the field and in the laboratory, as well as using various tools in the molecular laboratory. The system includes many species whose ecology has been studied for over 15years, e.g. the host plant (Plantago lanceolata), the Glanville fritillary butterfly (Melitaea cinxia), several associated parasitoid wasps (Hyposoter horticola, Cotesia melitearum), and others. The project is highly collaborative and should allow the candidate to build an international research network. All findings will be published in Open Access international journals, and the candidate is expected to present in scientific meetings.

Successful candidates will be employed on a full-time, fixed term four-year contract starting September 2019 or by agreement, however no later than January 2020. For more information on degree requirements and the application process, please visit https://www.helsinki.fi/-en/research/doctoral-education . The salary is based on levels 2'3 of the job requirement scheme for teaching and research personnel in the salary system of

— / —

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

UIllinois CoevolutionaryPhylogenomics

I am recruiting Ph.D. students for Fall 2020 with interests in host-symbiont coevolution, bioinformatics, and phylogenomics. Students would be enrolled in either the graduate Program in Ecology, Evolution, and Conservation Biology (PEEC) or the Entomology graduate program at the University of Illinois, Urbana-Champaign. Full support is available in the form of Research Assistantships, Fellowships, or Teaching Assistantships.

Opportunities exist to analyze large genomic datasets from feather louse parasites of birds and their bacterial endosymbionts to study coevolution. Funding is available through an NSF Dimensions US-China award, including opportunities for travel to China.

Current research topics in the lab include: - bird/louse cophylogenomics - phylogenomics of hemipteroid insects - insect symbiont genome evolution - mitochondrial genome evolution and rearrangements - bioinformatics of insect transcriptomes and genomes

Interested students are encouraged to apply to either the PEEC (http://peec.illinois.edu/prospective/apply) or Entomology (http://www.life.illinois.edu/entomology/-admissions.html) programs at the University of Illinois depending on core interests. Applicants should indicate their interest in my lab in application materials.

For more information contact Kevin Johnson kpjohnso@illinois.edu

"Johnson, Kevin P" <kpjohnso@illinois.edu>

UKentucky ExtremeAdaptations

Graduate Assistantships in the Biology of Antarctic Insects

Location: Department of Entomology University of Kentucky, Lexington, KY

Contact: Nicholas Teets Email: n.teets@uky.edu Phone: (859)-257-7459 Lab website: www.teetslab.com Description: The Teets Lab at University of Kentucky is seeking MS and PhD students with a focus on comparative physiology and genomics of extreme-adapted insects. The students will conduct field work in Antarctica and use physiological and genomic approaches to identify evolutionary adaptations that allow select insects to cope with Antarctica's harsh terrestrial environments. This NSF-funded project also emphasizes outreach and education, and students will contribute to efforts to improve STEM education. This project is an international collaboration including researchers from the US, UK, Chile, and France. For more information on the Teets Lab, visit the lab website (www.teetslab.com).

Department: 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.

Qualifications: Qualified candidates should possess at least a bachelor's degree in biology, entomology, or a related field. Preference will be given to students with previous research experience, either through completion of a Master's degree or undergraduate research. Information on graduate admissions at University of Kentucky can be found at: www.research.uky.edu/gs/-prospectivestudents/admission.html Start Date and Compensation: The successful applicants will start any time between January and August 2020, as mutually agreed upon. The assistantship includes a competitive stipend, tuition, and health coverage.

Application Procedures: Interested applicants should submit 1) a CV (including GPA and GRE scores), 2) a cover letter detailing research experience, interests, and career goals, and 3) the name and contact information for three references to n.teets@uky.edu. Screening will begin immediately and continue until suitable candidates are found. The successful applicant will also be required to apply to the University of Kentucky Graduate School, although application to the graduate school can come at a later date.

"Teets, Nicholas" <n.teets@uky.edu>

UKent UK MeioticDriveGenomeEvolution

This is a FULLY FUNDED project sponsored by the Leverhulme Trust, co-supervised by Dr Peter Ellis < https://www.kent.ac.uk/biosciences/people/-1036/ellis-peter > and Dr Marta Farre-Belmonte < https://www.kent.ac.uk/biosciences/people/1035/-farr–belmonte-marta > at the University of Kent, Canterbury, UK.

Transmission ratio distorters, or drivers are genes that break the first law of Mendelian genetics, manipulating the processes of gametogenesis and/or fertilisation so that they are passed on to more than 50% of offspring. Driving genes on the sex chromosomes cause sex ratio skewing, while driving genes on other chromosomes can lead to the selfish spread of chromosome rearrangements and contribute to speciation. Although recent strides have been made in understanding drive arising during female meiosis, the mechanisms of male drive remain elusive despite the existence of several well-established model systems. This project seeks to understand male drive from three complementary perspectives; how individual genes cause drive, how genome rearrangements contribute to drive, and the evolutionary consequences of drive for genome structure.

The specific aims of this project are to: - Investigate how haploid selection in male gametes biases reproductive processes to skew transmission ratios away from a Mendelian 50:50 ratio, using cutting-edge single-cell omics analysis. - Study how silencing of unsynapsed chromatin in postmeiotic cells potentially contributes to haploid selection using RNA- Seq and ChIP-Seq - Reconstruct evolutionary patterns of genome rearrangement and link these to the underlying selective dynamics that

promote or restrict the spread of chromosomal changes.

More information here: https://www.findaphd.com/-phds/project/how-non-mendelian-inheritance-sculpts-genome-evolution/?p109128 The candidate: We are looking for a highly motivated student, ideally with Masters level bioinformatics experience in some aspect of genomics.

How to apply: Applications can be made using the online University application page: https://www.kent.ac.uk/-courses/postgraduate/286/genetics-phd where the project title should be entered as the proposed area of research and Dr Peter Ellis as supervisor. Please include a CV and a cover letter.

Applications must be received by 6 September 2019. The start date is January 2020.

Marta Farr Belmonte, PhD | Lecturer in Molecular Biosciences School of Biosciences, University of Kent Stacey Building G17 Canterbury, Kent, CT2 7NJ, UK

ORCID: https://orcid.org/0000-0001-9170-5767 Lab web: http://www.farre-evogenomicslab.com/ M.Farre-Belmonte@kent.ac.uk

ULausanne EvolutionaryBiology

Subject: PhD opportunities in ecology and evolution, University of Lausanne, Switzerland

The Faculty of Biology and Medicine, University of Lausanne, Switzerland, offers studentships for study towards a PhD in one of its labs. Labs include several with strengths in evolutionary biology, including, and especially, in the Department of Ecology and Evolution (https://www.unil.ch/dee/home/menuinst/-research–education/research.html).

Evoldir members might like to forward the following link to potential candidates for these attractive studentships; the website provides details of the scheme and the application process: www.unil.ch/fbm-phd . John Pannell Department of Ecology and Evolution Biophore Building University of Lausanne CH-1015 Lausanne Switzerland

Phone: + 41 (0) 21 692 4170 Fax: + 41 (0) 21 692 4265 web: http://www.unil.ch/dee/page86963_en.html John Pannell <john.pannell@unil.ch>

ULeipzig EvolutionaryNicheDifferentiation

PhD position foraging ecology and evolutionary niche differentiation of Galápagos marine iguanas

University of Leipzig, Institute of Biology, Molecular Evolution and Systematics of Animals, Leipzig, Germany

This PhD position investigates the importance of foraging ecology for evolutionary divergence and targets for candidates with a Application deadline: September, 15th 2019

Galápagos marine iguanas have adapted to the marine environment as no other lizard worldwide and are endemic to the islands of the Galápagos archipelago. One of their key adaptations to exploit the resources of the marine environment involves the ability to dive and graze the tidal and intertidal zones of islands for edible algae that are digested with the help of a specialized gut microbiome. Although the consumption of algae represents a key element of the ecology and evolution of marine iguanas, we know little with regards to which species are consumed and whether island populations of marine iguanas differ in their foraging niche.

This PhD project aims to fill this important knowledge gap by exploring the extent to which island populations differ in regard to their foraging niche, and how this has impacted the evolutionary divergence of populations. Based on a specifically developed metabarcoding approach ' which can identify the consumed algae species from faecal samples ' we aim to obtain the first archipelago-wide inventory of consumed algae species. In a second step, stable isotope analysis will be combined with metabarcoding to explore differences in the foraging niche of marine iguanas on a fine geographical scale among populations from San Cristobal Island. For this project part, we aim to determine differences in the foraging niche of marine iguanas that relate to annual season, life stage, and sex. Finally, we are going to integrate how whether the evolutionary divergence of populations is shaped by niche differentiation.

We are looking for a highly motivated PhD candidate with a strong interest in ecology and molecular methods related to ecology. Spanish language skills and experience with challenging field work would be advantageous.

This project is part ofUniversidad San Francisco de

Quito (Prof. Dr. Juan M. Guayasamin, Prof. Dr. Diego Páez-Rosas), the Technische Universität Braunschweig (Prof. Dr. Miguel Vences, Dr. Sten Anslan, Prof. Dr. Dieter Jahn and Dr. Martina Jahn), the University of Leipzig (Prof. Dr. Sebastian Steinfartz and Dr. Amy MacLeod) and the Galápagos National Park. The candidate will join an international team of leading scientists in the field of Ecology, Evolution and Microbiology and will work both in Ecuador as well as in Germany.

The position (50% TV-L E13) will start at the beginning of November 2019 and is funded for three years. The first field trip to the Galápagos is scheduled for January/February 2020.

Please send your application before September 15th 2019, including a curriculum vitae, a letter of motivation, and the contact details (e-mail addresses and telephone numbers) for two referees as a merged PDF to:

Professor Dr. Sebastian Steinfartz University of Leipzig Institute of Biology Molecular Evolution and Systematics of Animals

Phone: +49 341 9736725

E-mail: steinfartz@uni-leipzig.de

We expect to interview candidates in the second half of September and first half of October 2019. Please feel free to contact me if you have any questions.

Professor Dr. Sebastian Steinfartz University of Leipzig Institute of Biology Molecular Evolution and Systematics of Animals Talstrasse 33 04103 Leipzig Germany

Phone: +49 341 9736725 Fax: +49 341 9736789 E-mail: steinfartz@uni-leipzig.de webpage: https://-biologie.lw.uni-leipzig.de/institut/ag/spzoo/ Co-Editor of Amphibia-Reptilia http://www.brill.nl/amphibia-reptilia Sebastian Steinfartz <steinfartz@uni-leipzig.de>

UMontpellier BatEvolution

This PhD thesis is part of an ANR project (REPAST, 2019-2024): "Retro-observatories of animal biodiversity during the Anthropocene: how have global changes affected populations and communities?".

Context

The populations of many European bat species experienced a dramatic decline in the 1950s-1970s, and most of them are currently considered to be vulnerable or endangered species. Several species, widespread in all Europe before the 1940s, became locally extinct. Scientists failed to clearly identify the causes of such a decline. In the absence of long-term data, international groups of bat experts listed the most likely causes of bat decline. This hypothetical list of causes of decline includes land-use changes, disturbance and loss of roosts, environmental pollution, climate changes, decline of insect preys, loss of genetic diversity, and infectious diseases. Although these are credible, they are poorly supported by field data, and are geographically and temporally variable. Moreover, these causes may act simultaneously, as none of them can explain alone the decline.

In this context, REPAST propose to crossbreed methods generally used in paleoecology, environmental history and ecology to reconstruct long-term history of bat populations and some of the hypothetical causes of their decline, using three types of archives: 1) Bat guano accumulations. All bat populations exhibit a yearly life cycle: the location of their roosts varies in time (i.e. season) and space. However, bats are known to be highly philopatric: individuals, at least females, come back every year in their natal roost where they can form large (and sometimes multispecies) colonies. Some roosts have been sheltering hundreds of bats for decades, centuries or even millennia. In these roosts, the droppings (guano) fall to the ground and accumulate chronologically until reaching substantial thickness over time. If these guano accumulations have not been disturbed (trampled or mixed for instance), they can constitute historical archives containing temporally situated information about bat populations, environmental context, and human pressures.

2) Historical archives. The scientific literature does not contain global long-term surveys of bat populations before the 1990s, for most of the >40 European species, and most of the European countries. Bat decline was first reported in the literature in 1970, after some scientists demonstrated that colonies of several species decreased or disappeared in all European countries. Before the 1970s, scientists essentially focused on bat biology and reproduction, and not on the dynamics of populations and their long-term health evolution. However, some historical archives can help to reconstitute global patterns of bat demography from the 1940s to nowadays. Information about colony size, population distribution range, and global demographic trends can be found in atlases, national specialized journals, archives of natural history museum reports or naturalist society reports, etc.

3) Museum specimens. During the last decade, the use

of museum specimens for biological conservation purposes has substantially increased, mainly due to the advent of molecular genetic approaches. Because most specimens stored in collections are from the 19th and the beginning of the 20th Century, museum specimens offer unique opportunities to quantify evolutionary or microevolutionnary changes that occurred since the 19th Century, for the reconstruction of population history. Particularly, the study of gene pools in museum specimens and nowadays samples can help to determine whether a low genetic variability is the consequence of recent population declines, or represents an ancestral state.

REPAST will (i) use biological archives (both guano accumulation and museum specimens) for reconstituting the temporal dynamics of populations and environmental parameters explaining the loss of animal biodiversity, (ii) use methods of monitoring that inform about key population and environment features that scientists failed to assess by regular monitoring over time. Overall, the underlying hypothesis of REPAST is that one or several stressors (habitat or climate changes, exposure to pollutants) will be associated to temporal variations of biological responses (pathogen prevalence, shift in diet, genetic diversity, bat richness). The nature and the pattern of this association (what stressor(s) is(are) linked to what response(s) and how (from long and continuous associations to sudden shifts) will improve our understanding of the mechanism(s) of bat decline. As some past environmental stressors still persist nowadays, this project will contribute to the prioritization of the current threats to animal species and their habitats and will ultimately guide conservation measures. This retrospective study will be used to parameterise predictive scenarios of the evolution of animal

— / —

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

UMuenster PlantEvolutionaryEcol

The Institute for Evolution and Biodiversity at the University of Munster, Germany, invites applications for a

PhD Position (salary level TV-L E13, 65%) in plant evolutionary ecology

The fixed-term position can start preferentially before January 2020. The salary will be provided for 36 months.

The successful candidate will join the Plant Adaptation-in-Action group, headed by Prof Shuqing Xu (https://www.unimuenster.de/Evolution/plantadapt/-people/shuqingxu.shtml). The group studies the mechanisms and processes of plant adaptation using integrative approaches. Within this research framework, the new PhD student will primarily focus on a DFG-funded project that aims to understand the evolutionary ecology of herbicides resistance in plants. As understanding evolutionary processes requires integrative approaches, we aim to train the student with interdisciplinary skills, such as in evolutionary genetics, chemical ecology and molecular biology. The organisms the student will work on is the giant duckweed (Spirodela polyrhiza).

During the project, in addition to learning new scientific skills/methods and gaining didactical proficiencies, the student will also get experience in project planning and management. The position offers the opportunity to acquire a PhD and serves to facilitate successful career development both within and outside of academia. The candidate will also join the Munster Graduate School of Evolution (MGSE, https://www.unimuenster.de/-Evolution/mgse/), which offers both a stimulating studying environment and opportunities to explore excellent research 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 an MSc degree in biology, evolutionary genetics or computer science. The successful candidate is expected to perform experiments in laboratory and analyse a large amount of data with a high degree of independence. Thus, a background in bioinformatics, biology and genetics is required. Applicants must demonstrate their skills in statistics, data analysis and problem solving. Experience with analysing next generation sequencing data is an advantage. Our group consists of people from different 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 Munster is an equal opportunity employer, 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. We also welcome applications from candi-

dates with severe disabilities. Disabled candidates with equivalent qualifications will be preferentially considered, unless their disability prevents them from carrying out project-related work.

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 two pages, (2) a detailed CV including academic and extracurricular achievements, as well as 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) before 15th August 2019.

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

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

UNeuchatel EvolutionaryParasitology

Two PhD positions in the evolutionary ecology of host-parasite interactions are available for up to 4 years in Prof. Jacob Koella's lab at the University of Neuchâtel, Switzerland.

I am looking for enthusiastic, motivated, and independent biology graduates whose MSc degree has a strong component in evolution, ecology or parasitology. My lab currently works on (i) the effect of infection by malaria on the behavioural and physiological responses of mosquitoes to insecticides, and (ii) the role of oxidative stress in linking the life-history of mosquitoes and their immune response against malaria and microsporidians. We consider these topics (and host-parasite associations in general) with a strong evolutionary perspective, but work on them with a combination of genetics, physiology, immunology, behavioural ecology and mathematical modelling. The details of your project will be adapted to suit your interests, and you will be expected (and given the time) to have considerable input in developing the project. My lab is strongly collaborative, so you can expect to be involved to some degree in other projects going on in the lab.

The positions require some teaching of biology labs for undergraduate (in French) and graduate (in English) students, and you will have the opportunity to supervise student projects.

The starting dates are flexible, but not earlier than November 1, 2019 The starting salaries are about 41000 Fr..

Neuchâtel is an attractive city in the French part of Switzerland with a high quality of life. It is located on the shore of Lake Neuchâtel with the Jura mountains to the North and a view of the Bernese alps to the South. For outdoors enthusiasts, this is an excellent area for outdoor activities such as hiking, climbing or skiing.

If you are interested in the position, please send me (jkoella@gmail.com) a 1-2 page cover letter indicating research interests and background, your CV, and two letters of reference before September 7, 2019.

Jacob Koella <jkoella@gmail.com>

UNevada Reno EvolutionaryBiol

I am seeking potential graduate students (masters and PhD) to join my lab (www.evolutioninthetropics.com) at the University of Nevada, Reno, starting in the fall semester of 2020. We are an evolutionary ecology lab that studies a broad range of topics, including:

1. Contemporary (rapid) evolution and eco-evolutionary dynamics
2. Adaptation to climate change
3. Behavior and sexual signal evolution
4. Evolution of microbiomes
5. Genomics and quantitative genetics of adaptation to rapid environmental change
6. Biophysical ecology
7. Tropical ecology and evolution

I am looking for enthusiastic, self-motivated students who are interested in exploring these or similar topics. I am particularly interested in students who would like to work in one of our experimental island systems in Panama and/or The Bahamas. In these locations, we have transplanted thousands of lizards to small islands that vary in key environmental variables, and we track local adaptation in real time from the level of the genome to the level of the population. Ample research funding is currently available in the lab for students to conduct fieldwork in these locations.

Potential PhD students will apply to the interdisciplinary Ecology, Evolution, and Conservation Biology (EECB) program (https://www.unr.edu/eecb), whereas potential masters students will apply to the Department of Biology, but both will be based in the Logan Lab. The application deadline for potential PhD students is December 1st, 2019, whereas the application deadline for masters students is February 1st, 2020 (both for a Fall 2020 start date). Thus, PhD students must contact me by November 1st, 2019, and potential masters students must contact me by December 15th, 2019, so that we have time to communicate and establish compatibility prior to the respective application deadlines.

UNR is Nevadas flagship, land-grant institution. It is an R1 university with world-class facilities. The Biology Department at UNR (https://www.unr.edu/biology/-people) has a number of cutting-edge research laboratories working at the interface of ecology and evolution, across a diversity of vertebrate and invertebrate systems. Reno itself is a wonderful place to live. It is sandwiched between the Sierra Nevada mountains to the west and the Great Basin Desert to the east, providing ample opportunity for hiking, camping, biking, skiing, and mountain climbing. Reno is only a 30-minute drive from Lake Tahoe, and only a few hours drive from San Francisco.

If you are interested in this opportunity, please send me an email at mike.logan1983@gmail.com. Please write a brief paragraph explaining why you are interested in joining the lab, whether you would like to earn a PhD or masters degree, and attach a CV with contact information for at least two references. If you are a potential fit for the lab, I will set up a Skype interview.

– Michael L. Logan Assistant Professor Dept. of Biology University of Nevada, Reno www.evolutioninthetropics.com Michael Logan <mike.logan1983@gmail.com>

UPotsdam SnailBiogeographyGenomics

A funded (3 year) PhD position is available in comparative genomics and biogeography at the University of Potsdam, Unit of Evolutionary Biology & Systematic Zoology, Institute for Biochemistry & Biology, Potsdam, Germany.

More information about the research group and our publications can be found here: www.adennis5.wordpress.com https://www.uni-potsdam.de/ibb-evolutionsbiologie/index.html Our university campus is located close to historical Potsdam and is well connected to Berlin by train. This is a fantastic part of Germany to live and work in, with a large international community. The working language of the group is English, but knowledge of German is useful in daily life and courses are available at the university.

We are investigating the basis of different geographical range limits in cryptic species of Melampus. These small marsh snail species have broad geographical ranges and complex patterns of range overlap. We are looking for a highly motivated PhD student with interests in the adaptive evolution, genome assembly, comparative physiology and/or biogeography. In the first part of the project, we will work to complete the de novo assembly of the Melampus bidentatus (N) genome and use this as a reference for genome-wide comparisons between species. In the second part of the project, we will use field surveys to examine range limit stability over time and to compare physiological limits among populations.

Required qualifications: -MSc/MS degree in relevant field (biology, evolution, zoology, bioinformatics, etc.) -Fluent written and spoken English

Desired qualifications: -Familiarity with molecular lab methods -Experience generating and analyzing next generation sequencing data -Statistical knowledge and familiarity with R -Basic bioinformatics experience, familiarity with Linux -A valid drivers license

To apply: Applications should be written in English and include (1) A letter of motivation (2 pages max) addressing qualifications listed above (2) Complete CV (3) Transcripts from previous coursework (official not necessary) (4) Contact details for two references

Please send the application as a single PDF to: alicebdennis@gmail.com

The deadline for application is 16th of September, 2019. Skype interview will take place shortly after.

Informal inquiries are welcome at the contact details above!

–

Alice Dennis alicebdennis@gmail.com

Evolutionary Biology & Systematic Zoology Institute for Biochemistry & Biology University of Potsdam Karl-Liebknecht-Str. 24-25, House 26, Room 2.77 14476 Potsdam, Germany

https://adennis5.wordpress.com/ A Dennis

<alicebdennis@gmail.com>

UVermont GrassFloweringTimeEvolution

Graduate position: UVermont.GrassFloweringTimeEvolution

The Preston lab in the Department of Plant Biology at the University of Vermont is seeking applicants to fill two MSc/PhD positions on the evolution of temperate grass flowering time starting fall semester 2020. Work in the Preston lab (https://jillpreston.weebly.com) aims to elucidate important traits that have led to major niche shifts over ecological time, and to decipher the developmental and genetic basis of variation in these traits. The main motivation is to better understand potential constraints to future adaptation/exaptation and plant breeding.

The positions will be funded by a mix of research and teaching assistantships, and funding will be guaranteed over the 2+ year MSc/5+ year PhD timeframe, given adequate progress of each candidate toward their degree. Activities of successful applicants will likely include, but not be limited to, conducting plant growth experiments under different environmental conditions, genotyping and phenotyping transgenic and CRISPR-edited plants, analyzing transcriptome and methylome datasets, and reconstructing ancestral flowering time traits in a phylogenetic framework. It is expected that the data generated will be presented yearly at national meetings and written up for peer-reviewed publications.

For more details on the project and/or the graduate program at UVM please send inquiries with a statement of interest to Dr. Jill Preston (Jill.Preston@uvm.edu). Applications are due by the 1st December 2019 through the Graduate College. See https://www.uvm.edu/cals/-plantbiology/phd-and-ms-plant-biology on how to apply.

Jill C. Preston, Associate Professor of Plant Biology, UVM, 311 Jeffords Hall, 63 Carrigan Drive, Burlington, VT 05405 Monitoring Editor, Plant Physiology, www.plantphysiol.org Jill.Preston@uvm.edu

Jill Preston

Associate Professor University of Vermont 301/311 Jeffords Hall 63 Carrigan Drive Burlington, VT 05405 http://jillpreston.weebly.com/ Jill Preston <Jill.Preston@uvm.edu>

UVictoria ProtistEvolution

Graduate position (M.Sc/Ph.D): Evolution and Cell Biology of Microbial Eukaryotes in the Department of Biology at the University of Victoria.

I am looking for an enthusiastic candidate for either a M.Sc. or a Ph.D research project in the Department of Biology at the University of Victoria (https://-www.uvic.ca/science/biology/), commencing in January 2020, or as soon as possible thereafter.

Our lab focuses on questions related to the origin and evolution of mitochondria, and the genetic diversity of microbial eukaryotes (???protists???). A variety of potential projects are available, ranging from proteomic investigations of protist mitochondria, to development of molecular genetic tools in an emerging model protist, and single-cell genomics of wild-caught marine microbes. Depending on the student???s interest, the project would include a combination of next generation sequencing, molecular biology, microscopy, and bioinformatics.

These projects are ideal for a student with a strong background in cell and molecular biology and an interest in the application of the techniques in understanding eukaryotic evolutionary cell biology. Previous experience with protists is not required. The student will be supervised by Dr. Ryan Gawryluk (https://-protistlab.weebly.com), and will have opportunities to interact with other researchers at the University of Victoria.

Preference will be given to a student with an excellent academic standing, and an appropriate background. Applications are open to international candidates as well as Canadian citizens or permanent residents of Canada.

Interested applicants should submit a CV, copies of university transcripts (undergraduate and graduate as appropriate ??? unofficial copies are adequate) and a brief statement of scientific and academic interests to Dr. Ryan Gawryluk (ryangawryluk@uvic.ca).

Ryan Gawryluk Assistant Professor Department of Biology University of Victoria Email: ryangawryluk@uvic.ca Website: https://protistlab.weebly.com Ryan Gawryluk <ryangawryluk@uvic.ca>

Alejandro Rico-Guevara

a.rico@berkeley.edu

UWashington Coevolution

I am recruiting PhD students to join my starting lab at UW, Seattle (http://www.alejorico.com/-Ecophysics_Lab.html). If any of the research fronts listed below resonates with your interests, please contact me at colibri@uw.edu

1) Nectar-feeding animals as a study model to bridge the gap between our knowledge of ecological and coevolutionary patterns and their underlying mechanisms.

2) Studying plant-pollinator biomechanics, morphology, and related physiological and natural history traits, to link coevolutionary and speciation patterns to ecological and genetic variation.

3) Understanding the selective pressures acting on sexually dimorphic traits, for instance in particular cases of bill dimorphism (trade-offs between fighting and nectar extraction abilities), and more generally in the evolution of intrasexually selected weapons across animals.

4) Deciphering the causal mechanisms for social dominance and intra- plus inter-specific competition outcomes, and how variation in behavioral strategies (e.g., interference vs. exploitative competition) maximizes net energy gain.

5) Performing comparative studies along gradients from trait development (e.g. weapons achieved only until adulthood) and interindividual variation (e.g. polymorphisms), to parallel (e.g. independent appearances of weapons in hummingbirds) and convergent (e.g. in other nectar-feeding birds) evolution.

6) Quantifying the physiological and biomechanical trade-offs among hummingbird feeding, breathing, and locomotion, that constrain the highest mass-specific metabolic rates in vertebrates.

7) Technology and software development employing mechanical engineering, electronics, and computer vision, among others, in order to pioneer methods to push the current limits of the field.

When you contact me, please describe why you would like to join the Behavioral Ecophysics lab and attach your CV (including contact info of up to 3 references). The deadline for submitting the admission materials is December 1st 2019 (so establishing contact is time-sensitive), to start the program in September 2020. Looking forward to your message!

UWesternAustralia Mixing Island Mammal Pops

UWA is now accepting applications for international PhD Scholarships, including graduates suited to this project in the Mitchell lab:

Project title: Mixing mammal populations for conservation Coordinating Supervisor: Dr Nicola Mitchell Location: School of Biological Sciences, The University of Western Australia, Perth, Australia

UWA's School of Biological Sciences (https://-www.uwa.edu.au/science/schools/school-of-biological-sciences) is home to almost 100 academic staff and 120 graduate students, and is ranked 1st in Australia and in the top 50 in the world for Biological Sciences. The PhD project forms a key component of a well-funded research partnership between Australian museums, conservation organisations and universities, and will be co-supervised by Dr Kenny Travouillon (Western Australian Museum) and Dr Kym Ottewell (Western Australian Department of Biodiversity, Conservation and Attractions).

Background: Remnant populations of many threatened mammal species in Western Australia have been isolated for between 50 - 8000 years. Substantial differences in body size, skull morphology and life history traits exist among remnant populations, with some even recognized as separate subspecies. Recently (<20 years ago), some of these populations were translocated and bred together for conservation purposes. For at least one species, comparison of purebred vs hybrid individuals at a mixed introduction site has revealed that body size differences between source populations has a strong genetic basis. Whether such differences reflect divergent adaptation or are effects of genetic drift is unclear. Managers are concerned about outbreeding depression if distinctive populations are to be mixed. Consequently we need to reassess how distinct each population is before more mixing is done. Comparing how mixed populations differ morphologically from the original populations will be a large focus of this research, to help understand how particular traits are passed on.

PhD project: You will use quantitative methods to assess morphological differences between remnant and

pre-decline populations of several mammal species. This will involve measuring body size and skull shape (obtained by three-dimensional morphometrics on CT-scans of museum specimens) to infer phenotypic variation in traits such as locomotion, diet, growth and predator vulnerability. For some species, the genetic basis of variation can be assessed via annotated reference genomes. Potentially, markers associated with trait genes could be analysed, and their correlation with habitat and climatic variables determined. The PhD student will be expected to play a central role in developing research ideas and methods and should have a demonstrated capacity for research (including publications) and a thorough knowledge of statistical and programming software. A background in morphometric analysis and/or genomics is highly desirable.

Expressions of interest from suitable applicants should be lodged at this link: https://www.uwa.edu.au/-projects/phenotypic-divergence-in-island-mammals—can-morphology-infer-adaptation-and-inform-conservation The best candidate will be invited to apply for a PhD scholarship valued at AUD30,000 p/a (for up to 3.5 years, and also including tuition fees and health insurance) in forthcoming scholarship rounds at UWA: International students (deadline 31 August) and Domestic students (likely deadline 31 October). The project can start between January and March 2020.

nicola.mitchell@uwa.edu.au

VirginiaTech PoplarGenomics

Ph.D. assistantship available at Virginia Tech

The Holliday Lab in the Department of Forest Resources and Environmental Conservation at Virginia Tech is seeking an Ph.D. student for an NSF funded project to study the genomics of hybridization in the Populus genus.

Natural Populus hybrid zones provide a 'living laboratory' in which there has been a long history of natural selection testing the genomic and phenotypic outcomes of hybridization. We will sample across replicated Populus hybrid zones to robustly capture the history of Genome x Genome x Environment interactions along environmental gradients, and couple this sampling with genome-wide re-sequencing and computational approaches to address the following questions: (i) How is introgression arrayed across the genome and landscape? (ii) What genomic regions control hybrid fitness and what are their environmental drivers? (iii) Can adaptive introgression be recapitulated using controlled crosses? We will combine extensive short and long-read genome resequencing to exhaustively characterize genomic variation across the hybrid zones. We will then use admixture mapping to associate genomic ancestry with climate gradients and adaptive phenotypes, predict hybrid performance across a range of field test sites, and evaluate the contributions of environment and space in explaining patterns of hybridization. Finally, we will test the repeatability of hybrid outcomes using controlled crosses among Populus species, assess the predictive value of the loci identified as being involved in hybrid vigor/heterosis, and assess the role of allele-specific expression in generating hybrid phenotypes. This project will provide the most comprehensive picture to date of the genomics of hybridization and heterosis in a tree species, and enhance our understanding of the relationship between introgression and fitness across environments.

This project is a collaboration among four US universities, with each tackling a different aspect of the questions above. At Virginia Tech, we will be particularly focused on structural variation assessed using PacBio CCS. Candidates should have a background in evolutionary biology, genetics/genomics, bioinformatics, computational biology, or a related field, and be interested in learning the necessary computational and statistical tools to complete this project. Some field work will be necessary as well, including evaluating poplar common gardens near Virginia Tech, as well as potential travel to field sites in western North American for sampling.

Start date could either be spring or fall 2020, with potential for a paid, temporary appointment prior to enrollment. Please send expressions of interest and CV to Dr. Jason Holliday (jah1@vt.edu).

"Holliday, Jason" <jah1@vt.edu>

WageningenU MicrobeEvolution

Two PhD positions on Asgard archaea and the origin of eukaryotes.

The research group of Prof. Dr. Thijs J. G. Ettema is looking for highly motivated and curiosity-driven candidates to fill in 2 PhD and 2 postdoctoral researcher positions within the framework of the ERC project "PRO2EUK". The aim is to gain a more profound insight into the evolutionary transition of prokaryotic to

eukaryotic life using various (meta)genomics, phylogenomics and (co-)cultivation approaches. The project builds on the recently discovered Asgard archaea, a deeply-branching archaeal superphylum that currently represents the closest prokaryotic relative of eukaryotes in the Tree of Life (e.g. see Spang et al, Nature 521, 173-178 (2015) and Zaremba-Niedzwiedzka et al. Nature 541, 353-357 (2017)). The ERC project will have a total duration of 5 years, during which various aspects of Asgard archaeal diversity, physiology, cell biology and evolution will be investigated.

We are looking for the following profiles: - Profile 1 ("Phylogenomics"): A candidate with a strong level of expertise large-scale analyses of biological (microbial) sequence data (bioinformatics) and phylogenetics (genome-scale phylogenetic analyses, e.g. using maximum-likelihood and Bayesian methodology). - Profile 2 ("Metagenomics"): A candidate with a strong background in bioinformatics and metagenomics, including reconstruction of microbial genomes from large metagenomics datasets. Preferentially also experienced in using long-read sequencing technologies (PacBio, Nanopore, 10XGenomics). - Profile 3 ("Microbial genomics"): A candidate experienced in analyses of large biological datsets, such as (meta)genome, (meta)transcriptome, and (meta)proteome data. Substantial knowledge of microbial metabolism and cell biology is required, as is experience with programming in Python, Perl and/or R. - Profile 4 ("Microbial physiology"): A candidate with advanced knowledge of anaerobic microbial metabolism and demonstrated experience with (anaerobic) microbial cultivation/enrichment methods. Experience with cell labelling and visualisation techniques (e.g. FISH) and/or with cell sorting approaches (e.g. FACS) is regarded beneficial.

Note that all profiles mentioned above are suitable for both PhD students or postdoctoral researchers. State clearly in your application if you are applying for a PhD student or Postdoc position.

We ask: - For the PhD position a Master degree in Biology, Microbiology, Bioinformatics, Biotechnology, Molecular Life Sciences or a related field. - For the postdoc position a PhD degree in Biology, Microbiology, Bioinformatics, Biotechnology, Molecular Life Sciences or a related field.

For both: - You are an ambitious and enthusiastic scientist with the ability to work together in multidisciplinary team in an international environment and to work independently. - You are a person with a pro-active attitude. - Good communication and presentation skills are required. - Fluency in English (both spoken and written) is a requirement. For international applicants (non-native English speakers) it is necessary to have: TOEFL internet-based 90 with a minimum of 23 for speaking, or IELTS (academic version) 6.5, with a minimum of 6.0 for speaking.

You can apply online at: https://www.wur.nl/en/-Jobs/Vacancies/Show/2-PhD-positions-in-microbial-genomicsevolution-.htm This vacancy is open until suitable candidates have been found for each position, although no later than October 1st 2019. Please note that applications sent by email will not be considered.

Please submit: - Motivation letter (1 page max), outlining your motivation and suitability for the position (PhD student or Postdoc) and profile (see above) of your choice, as well as your personal qualities and experience; - Curriculum vitae (2 pages max), including an abstract of master thesis (250 words max) and contact details of two or more references; - A copy of your degree certificates.

More information: - For more information about this position, please contact Prof. Dr. Thijs J. G. Ettema, email: thijs.ettema@wur.nl. - For more information about the contractual aspects, please contact Mrs. J. van Meurs, HR advisor, telephone number +31 317480101

https://www.wur.nl/en/Jobs/Vacancies/Show/2-PhD-positions-in-microbial-genomicsevolution-.htm
http://www.ettemalab.org/ daniel.tamarit@wur.nl

WesternSydneyU FruitfliesEvolutionaryEcology

Two PhD positions, Hawkesbury Institute for the Environment (HIE), Western Sydney University, Australia

Two PhD scholarships are available to study life history traits of Australian tephritid fruit flies from ecological and evolutionary perspectives. Queensland fruit fly (Qfly) is Australias most significant horticultural pest. Substantial efforts are currently placed on the development of the sterile insect technique (SIT) for Qfly. However, there are still several knowledge gaps about the biology and evolutionary ecology of this species, and Australian tephritids more in general. Two PhD research projects are currently available at HIE for highly motivated candidates to investigate aspects of thermal biology and life history traits of Qfly.

One PhD project will investigate thermal biology, condi-

tioning and sensitivity of Qfly across its development in the context of life history theory and SIT applications. Exposure to different temperature regimes and extremes during critical developmental stages of Qfly (e.g. egg, larva, pupa) will affect adult fly fitness and performance. It can potentially prime Qfly to withstand stress, or, conversely, negatively affect fitness, performance and health (e.g. via viruses naturally present in some fly populations).

The other PhD project will investigate Qfly pupation biology and ecology. Pupation is part of complete metamorphosis and a key evolutionary innovation of insects, with massive changes in morphology, physiology, microbiomes and behaviour. In nature, late Qfly instar larvae pupate in the soil, but little is known about the details of Qfly pupation biology and ecology. This project will study Qfly pupation biology and ecology in natural environments, assess optimal densities and climatic conditions in controlled environments, and test alternative pupation substrates (sand and plant-derived fibres) for rearing of SIT Qfly to evaluate their impact on life history traits, performance and health.

Both PhD positions are based at the Hawkesbury campus of Western Sydney University in Richmond, in the Sydney Basin and at the foothills of the Blue Mountains. Our collaborating partners are Primary Industries and Regions South Australia (PIRSA), the national SIT Qfly facility in Port Augusta and other research partners. Since its foundation HIE has rapidly built a strong research reputation in ecology and evolution, and a vibrant team of over 50 academic research scientists and 80 PhD students with access to a unique suite of world-class research facilities and laboratories.

Below a links to the website with the advertisement/application portal:

https://www.westernsydney.edu.au/-graduate_research_school/grs/scholarships/-current_scholarships/current_scholarships/-hie_thermal_biology_and_conditioning_of_queensland_fruit_fly

https://www.westernsydney.edu.au/-graduate_research_school/grs/scholarships/-current_scholarships/current_scholarships/-hie_pupation_biology_and_ecology_of_queensland_fruit_fly

APPLICATION DEADLINE: 31 August 2019.

For further information please contact Associate Professor Markus Riegler <m.riegler@westernsydney.edu.au>

M.Riegler@westernsydney.edu.au

Jobs

BarnardC NewYork EvolutionaryBiology

Lecturer Position in Organismal and Physiological Biology

The Department of Biology at Barnard College, Columbia University, seeks a full-time Lecturer, starting July 2020, with a specialization in Organismal and Physiological Biology. Teaching duties include laboratory sections of Introductory Biology and existing or new upper-level lecture and laboratory courses in the candidates area of expertise. Example courses include, but are not limited to: Comparative Vertebrate Anatomy, Biomechanics, or Physiology. Applicants with a background in field or urban biology are also encouraged to apply.

A Ph.D. is required; teaching experience is desirable. Applicants should submit a CV, cover letter, contact information for three references, and research, teaching and diversity statements. The research statement should include description of how the applicants past research experience will inform their teaching, and the teaching statement should include discussion of the upper-level lab and lecture courses the applicant could teach (both existing offerings and new courses). The diversity statement should include an outline of past and/or planned contributions to promoting diversity, equity, and inclusion.

Review of applications begins October 1. Please submit applications through the online portal: https://careers.barnard.edu/postings/4569 Contact: mflores@barnard.edu Melissa Flores, Department Administrator, Department of Biology, Barnard College

jmansfie@barnard.edu

CarnegieMuseum Pittsburgh InsectCollectionManager

Carnegie Museum of Natural History (CMNH) seeks a new COLLECTION MANAGER - INSECTS. Due to retirements, we are searching for both a head curator and a collection manager to join the additional section of invertebrate zoology staff of: a second collection manager, two scientific preparators (one preparator position is vacant and to be filled by the new curator), a laboratory assistant, and a curatorial assistant. Carnegie Museums of Natural History is interested in candidates who, through their experience and collaborations, will contribute to diversity and excellence of the Carnegie Museums. The section of invertebrate zoology contains among the world's best collections of Lepidoptera and Coleoptera. A candidate with notable expertise in one of these two groups will receive especially close attention. A high-ranking candidate will have demonstrated experience supervising staff, managing budgets, public outreach, and understanding of current best practices in arthropod collection stewardship.

Applications will be reviewed starting August 30, 2019.

TO APPLY: Visit http://www.carnegiemuseums.org/opportunities, Click on Search Jobs, and locate the job posting for Collection Manager-Insects (Requisition #285). Click on Apply - and follow the guided application instructions.

IMPORTANT: Please upload a single pdf that includes a cover letter summarizing your strengths, a curriculum

vitae, and the names and contact information for three references.

Applicants with a strong record of research, funding and publication will be considered and performance expectations will be adjusted accordingly

Qualifications: The successful candidate will 1) have a Ph.D. or 2) an M.S. with extensive knowledge acquisition post-degree, or 3) demonstrated equivalent knowledge and experience overall gained through other means, in some aspect of entomological expertise related to taxonomy and phylogenetics and collection stewardship. Successful candidates will have experience in public science outreach. The curator will play a strategic role in collection stewardship, and therefore should be knowledgeable in the current best practices in museum collection management, grant acquisition, and have interest in and knowledge of arthropods in general. The curator will supervise staff in the section of invertebrate zoology, as agreed upon with the new head curator. The collection manager is further expected to integrate their understanding of insect natural history with the three outward-facing themes of the museum: the history of life, the interconnected web of life, and the future of life. CMNH has a strong emphasis on life at the dawn of the Anthropocene. The successful candidate will need to show the search committee that they can be successful in collaborations with education, programming and exhibit staff to engage in the museum's work towards a more sustainable place for humans in the earth's systems.

Carnegie Museum of Natural History is one of the four Carnegie Museums of Pittsburgh, including Carnegie Science Center, Carnegie Museum of Art, and Andy Warhol Museum. CMNH has approximately 22 million specimens and artifacts in its collections (half in arthropods), has hired five new curators in the past four years (the sixth and seventh searches are underway) and endowed its collection manager positions. With the museum's placement within blocks of six universities (including two major research institutions: University of Pittsburgh and Carnegie Mellon University), there is ample opportunity for collaboration and application of insect natural history to fundamental and applied research. CMNH is located in the bustling Oakland neighborhood of Pittsburgh, with easy access to shops, dining, transportation, major universities and cultural attractions. From the Visit Pittsburgh website, "Pittsburgh's affordable standard of living, top-notch health care facilities and world class cultural attractions combine to make it America's 'Most Livable City."'

For cost of living comparisons, visit: https://money.cnn.com/calculator/pf/cost-of-living/index.html . Carnegie Museums of Pittsburgh is interested in candidates who, through their experience and collaborations, will contribute to diversity and excellence of the Carnegie Museums community.

The following PA Act 153 clearances, or proof of application of clearances, are required beginning employment and as a condition of continued employment:

* Pennsylvania Child Abuse History Clearance * Pennsylvania State Police Criminal Record Check * FBI Fingerprint Criminal Background Check Obtaining the required clearances is completed as part of the new hire process.

Carnegie Museums is an Equal Opportunity-Affirmative Action Employer - Minorities / Females / Veterans / Individuals with Disabilities / Sexual Orientation / Gender Identity

— / —

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

CBI Cameroon 2 ConservationBiol

Research Fellow ' GCRF Trade, Development and the Environment (TRADE) Hub, Cameroon

The University of California Los Angeles (UCLA) and the International Institute of Tropical (IITA) are leading a multi-institutional initiative to develop the Congo Basin Institute (CBI), which is a model for how universities, NGOs, and private business can partner in international development. The CBI's mission is to find integrative breakthrough solutions that conserve the environment and meet the vital needs of the developing world.

The CBI invites applications for a Research Fellow position for its Global Challenges Research Fund (GCRF), a UK Research and Innovation (UKRI) Collective Fund project. The candidate will be based out of the IITA/CBI Campus in Yaoundé and should have an excellent foundation in the theory and methods of the ecological costs and benefits of trade in internationally-traded agricultural commodities as well as experience in applied analysis of agricultural, agribusiness, and/or resource economics problems. The successful applicant will be a member of GCRF's multi-institutional team in Central Africa.

The Research Fellow is expected to work independently to manage duties and tasks outlined in the project. These include, but are not limited to, designing, developing and implementing field protocols to study the economic issues related to public and private decision making in agriculture, the food sector and natural resources.

Job Duties:

* Measure and model the ecological costs and benefits of trade in internationally-traded agricultural commodities (Import Trade Auxiliary Communications System, ITACs; Cocoa, Oil Palm); * Measure and model ecological costs (changes in wildlife or ecosystem function) and benefits (human wellbeing) of trade in wild resources (wild meat, select wild flora such as Irvingia gabonensis); * Training and mentoring undergraduate and graduate students to ensure ongoing, sustainable research-led solutions to TRADE's intractable challenge; * Developing proposals - both independently and in coordination with other colleagues at CBI- and secure funding from government and philanthropic sources; * The incumbent will attend professional and stakeholder meetings to present their findings through preparation of oral presentations, scientific papers in peer reviewed journals; * Literature searchers and meta analyses of available scientific data and literature to understand supply to demand-end agricultural commodity trade pathways, volumes and characteristics, within and exported from Development Assistance Committee (DAC) countries * Participate in the administration and management of the project against the grant deliverables and of CBI as appropriate * Coordinate with country Director of IITA and CBI on administrative tasks

Required Qualifications:

* Ph.D. in Agricultural Economics, Animal/plant Science, Nutrition, Biology, or related fields. * Knowledge of wildlife trade from DAC countries (live animals, skins, non-timber products, wildmeat) * Excellent analytical, statistical and modeling skills, including experience with handling of large datasets. * Excellent communication, organization, personnel management and mentoring skills. * Ease of working in oral and written English and/or French with further language proficiency advantageous. * Experience working in Africa, with a preference for candidates that have lived and worked in Central Africa.

Contract Period

Expected start of work: October 1 2019 (but an earlier or later start may also be possible). The contract period will initially last two years; with the possibility of extension contingent upon satisfactory performance. The post is full-time and requires residence in Yaoundé, Cameroon. The salary package will be commensurate with experience

How to apply

If you are interested please send a cover letter with: 1) curriculum vitae, 2) a personal statement describing research and career goals, and 3) contact information for 3 references to Ms Gomez cgomez@lifesci.ucla.edu on or before August 31, 2019

Application materials should be combined into a single pdf file. Reviews of applications will begin September 1st 2019.

Research Assistant position - GCRF Trade, Development and the Environment (TRADE) Hub, Yaoundé, Cameroon.

The University of California Los Angeles (UCLA) and the International Institute of Tropical (IITA) are leading a multi-institutional initiative to develop the Congo Basin Institute (CBI), which is a model for how universities, NGOs, and private business can partner in international development. The CBI's mission is to find integrative breakthrough solutions that conserve the environment and meet the vital needs of the developing world.

— / —

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

ClemsonU Bioinformatics

Position Description The Clemson University Genomics and Bioinformatics Facility (CUGBF) is a research, service, and educational facility tailored to design, facilitate data collection, conduct experimental analyses and education of faculty, staff, graduate, and undergraduate students. The facility provides rounded expertise in areas that focus on the discovery and functional analysis of important genes, networks, and genomic regions from plants, animals, fungi, and especially microbes, through genomics and bioinformatics. A critical short- and long-term focus is to establish and expand a solid bioinformatics core through infrastructure and intellectual resources. This position is funded by an Institu-

tional Development Award from the National Institute of General Medical Sciences of the National Institutes of Health granted to Clemson University???s Eukaryotic Pathogen Innovation Center (EPIC). The CUGBF Bioinformaticist will report directly to the Director of the Facility, and be available to support the research goals of the EPIC faculty. The position requires an individual with a superior understanding of biology, computer science, and the latest trends in analyzing big data. The individual will have outstanding interpersonal skills, excellent organizational skills, and solid management skills. The Bioinformaticist will work closely with CUGBF scientists and clients to develop new revenue generating streams in bioinformatics and work with the bioinformatics staff in the completion of research and service projects.

Qualifications

Requirements: - Ph.D. degree in a relevant field of study - Peer-reviewed publications - Teaching experience

Preferred: - Bachelors degree or equivalent experience in computer science, microbiology, or statistics - Minimum of 3 years experience in programming and bioinformatic data analysis of next-generation sequencing data - Strong experience in data management and parallel processing - Solid understanding of various biological systems - Strong troubleshooting/problem solving and analytical skills - Strong project management skills - Excellent oral and written communication and organizational skills with ability to work effectively in a cross-functional team, communicate findings/insights, and meet commitments for deliverables including group presentations - Ability to manage multiple projects amid shifting priorities - Ability to work independently and in group settings

Application Instructions

Please submit the following application materials tohttp://apply.interfolio.com/67510by September 30, 2019:

1. Cover Letter

2. CV

3. One sheet listing 2 to 3 references and contact information

4. Up to 3 papers (listed as other documents).

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 PlantEvolution

Colorado State University has an open search for a faculty position in Plant Pathology at the Assistant or Associate level

Assistant to Associate Professor in Plant Pathology

The Department of Bioagricultural Sciences and Pest Management (BSPM) at Colorado State University (CSU) invites applications for a tenure-track Assistant/Associate Professor faculty position in Plant Pathology. This position is a 60% research, 15% teaching, and 25% extension/service appointment on a 9-month contract.

We seek applications from dynamic and motivated scientists who have expertise in plant pathology and a strong research record. Candidates are sought with demonstrated capacity to integrate new technologies and large datasets with classical field- and laboratory-based approaches in their research program. The successful applicant will be expected to build a nationally and internationally recognized research program that integrates modern and conventional methods to study and reduce plant pathogens in important crops. Potential research topics include, but are not limited to, computational biology, epidemiology, modeling, and population genetics. CSU has critical research mass in the areas of Ag Tech, microbiomes, data science, and soil health. Being interdisciplinary in nature, BSPM values cooperative and collaborative efforts with other units within the University, as well as other relevant entities in Colorado and beyond. Excellent opportunities exist for working with field crop growers in the State on a wide variety of plant pathogens.

The successful candidate will teach undergraduate and graduate level courses in the candidates area of expertise. Graduate student training, participation with undergraduate advising and recruiting, and contributions toward extension, outreach and service activities are expected.

See full job announcement and application instructions at http://jobs.colostate.edu/postings/66699. CSU is an EO/EA/AA employer and conducts background checks on all final candidates.

“McKay,John” <John.McKay@ColoState.EDU>

CornellU EvolutionAnimalBehavior

Cornell University Assistant Professor: Evolution of Behavior

The Department of Neurobiology and Behavior (NBB) invites applications for a tenure-track position as Assistant Professor of Behavior. We seek broad thinkers with a strong understanding of evolutionary biology who can show how their research helps answer major questions in animal behavior and why they are particularly suited to tackle these questions. We encourage candidates whose aim is to discover general principles underlying the evolution of behavior that link to other areas of biology. The successful candidate is expected to establish a vigorous, externally funded, internationally recognized research program, and to teach at the graduate and undergraduate levels.

Apply: https://academicjobsonline.org/ajo/jobs/14110 . Questions can be directed to Prof. Kerry Shaw, Search Committee Chair, NBB, Cornell University, Ithaca, NY 14853, jkh222@cornell.edu. Application deadline, including 3 letters of recommendation: 30 September 2019.

Diversity and Inclusion are a part of Cornell Universitys heritage. The College of Arts and Sciences at Cornell embraces diversity and seeks candidates who will create a climate that attracts students and faculty of all races, nationalities, and genders. We strongly encourage women and underrepresented minorities to apply. Cornell University is a recognized EEO/AA employer and educator, valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

Michael J Sheehan

Assistant Professor Nancy and Peter Meinig Investigator in the Life Sciences Neurobiology and Behavior Cornell University W303 Mudd Hall 215 Tower Rd Ithaca NY, 14853 (607) 254-4302

Michael Sheehan <msheehan@cornell.edu>

CornellU EvolutionaryMicrobiology

Cornell University Assistant / Associate Professor in Environmental Microbiology

The Department of Microbiology at Cornell University (https://micro.cornell.edu/) invites applications for a tenure-track position at the assistant or early associate professor level in environmental microbiology. Microorganisms drive the foundational processes upon which all life on Earth depends. Understanding these processes at a fundamental level can help inform sustainable and practical approaches to maintain healthy ecosystems. The successful applicant will develop a well-funded, internationally recognized innovative research program in environmental microbiology. Examples of relevant research topics include, but are not limited to, microorganisms that govern biogeochemical cycles, microbial biotransformations and biodegradation, aquatic and terrestrial microbial community ecology, as well as mechanistic studies of how microbial populations sense, respond to, and ultimately alter environments. The ideal program will embrace a combination of molecular, genetic, physiological and/or data-intensive approaches [e.g. (meta)genomics, (meta)transcriptomics, and (meta)proteomics] to develop a mechanistic understanding of microbial systems in an environmental context. The applicant will be expected to teach in the general area of environmental microbiology and will contribute to both the Microbiology major and to the Environment and Sustainability major. The position will have 50% teaching and 50% research responsibilities on a 9-month academic year basis.

Qualifications: Ph.D. in Microbiology or related discipline and a minimum of two years post-doctoral experience. A well-qualified candidate is expected to have a record of peer-reviewed publication in environmental microbiology or a related field. The candidate must be able to work in a multi-disciplinary, multi-cultural setting and create a collegial professional environment.

Applications and Starting Date: Anticipated starting date is July, 2020. Applications are to be submitted to Academic Jobs Online (https://academicjobsonline.org/ajo/jobs/14213) including: 1) a cover letter briefly summarizing your background and qualifications; 2) a statement of research interests (3-page maximum); 3) a teaching statement outlining experiences, philosophy and interests (2-page maximum); 4) a diversity statement of

how, through your research, teaching and/or service, you can contribute to diversity, equity and inclusion in support of Cornells mission of any person any study; 5) a detailed curriculum vitae, and 6) the names and contact information for three references (letters will be requested after applications have been reviewed). Inquiries may be sent to Professor Esther Angert, Search Committee Chair (era23@cornell.edu). Initial screening of applications will begin September 16, 2019 and continue until the position is filled.

era23@cornell.edu

EastCarolinaU 2 TeachingBiology

Two fixed-term faculty positions are available in ECUs Department of Biology. Applicants with a background in evolutionary biology could be appropriate for these positions:

http://ecu.peopleadmin.com/postings/30441 http://-ecu.peopleadmin.com/postings/30443 The Department of Biology (www.ecu.edu/biology) is a comprehensive department that emphasizes an integrative approach to the study of the life sciences. We offer undergraduate majors in Biology and Biochemistry and graduate opportunities at both the M.S. and Ph.D. levels.

The Department of Biology supports more than 1,200 undergraduate Biology and Biochemistry majors and has a diverse, interdisciplinary faculty and growing doctoral and masters graduate programs that will soon be housed in a new, state of the art Life Sciences and Biotechnology building. Opportunities for collaboration in cell and developmental biology and pedagogy research exist both within the department (www.ecu.edu/biology) and across the university, including with faculty in the Brody School of Medicine. Department of Biology resources, which support both research and instruction, include expertly staffed core facilities for microscopy, molecular, genomic, and water chemistry analyses, and high-performance computing and plant growth facilities.

BALAKRISHNANC@ECU.EDU

FloridaMaryland 2 ResTech AnnelidEvolution

Dear colleagues,

Two research technician positions are available (one in Florida, one in Maryland) to develop functional approaches for studying regeneration in annelids, opening open up avenues for studying annelid regeneration in a comparative, functional context. These positions are part of an NSF-funded project focused on developing approaches to test gene function in post-embryonic (juvenile and adult) stages of several annelid species. The project is a collaboration between Alexa Bely (U Maryland), Duygu Ozpolat (Marine Biological Laboratory, Woods Hole), and Elaine Seaver (U Florida, Whitney Marine Lab).

See position descriptions below. You can also find further information about this project at: https://-wormsontheedge.weebly.com/ Please help us reach strong potential candidates by forwarding to individuals you think could be interested in working with us.

Thanks!

Alexa

- - - Alexandra Bely Associate Professor Department of Biology University of Maryland, College Park

*****

Research technician position (Florida) Functional approaches in annelid regeneration

- lab of Elaine Seaver - Whitney Laboratory for Marine Bioscience University of Florida - St. Augustine, Florida

Research technician position available for a project focused on functional technique development in annelid worms, with a conceptual focus on evo-devo and regeneration biology. This position is part of an NSF-funded project focused on developing approaches to test gene function in post-embryonic (juvenile and adult) stages of several annelid species. The project is a collaboration between Alexa Bely (U Maryland), Duygu Ozpolat (Marine Biological Laboratory, Woods Hole), and Elaine Seaver (U Florida, Whitney Marine Lab) and there are substantial interactions among the three lab groups.

This position is in the lab of Elaine Seaver, with primary focus on the annelid Capitella teleta. Position is for 1 year, with possibility of renewal for a second year, and

with a start in Fall 2019.

Required qualifications: bachelor's degree in biological sciences or related field, at least 1 year research experience in molecular or developmental biology, good fine-motor skills, ability to troubleshoot and persevere, effective time management and organizational skills, and team-oriented outlook. Preferred but not required: experience with microinjection, electroporation, and approaches to disrupt gene function.

Through this position, the successful candidate will gain valuable experience in the development of novel methods, will gain experience in both molecular and organismal research, and will be part of a highly interactive and supportive team.

To apply: send a cover letter, CV, and name and contact information for three references to Elaine Seaver at seaver@whitney.ufl.edu.

*****

Research technician position (Maryland) Functional approaches in annelid regeneration

- lab of Alexa Bely Department of Biology University of Maryland College Park, Maryland

Research technician position available for a project focused on functional technique development in annelid worms, with a conceptual focus on evo-devo and regeneration biology. This position is part of an NSF-funded project focused on developing approaches to test gene function in post-embryonic (juvenile and adult) stages of several annelid species. The project is a collaboration between Alexa Bely (U Maryland), Duygu Ozpolat (Marine Biological Laboratory, Woods Hole), and Elaine Seaver (U Florida, Whitney Marine Lab) and there are substantial interactions among the three lab groups.

This position is in the lab of Alexa Bely, with primary focus on the annelid Pristina leidyi. Position is for 1 year, with possibility of renewal for a second year, and with a start in Fall 2019.

Required qualifications: bachelor's degree in biological sciences or related field, at least 1 year research experience in molecular or developmental biology, good fine-motor skills, ability to troubleshoot and persevere, effective time management and organizational skills, and team-oriented outlook. Preferred but not required: experience with microinjection, electroporation, and approaches to disrupt gene function.

- Through this position, the successful candidate will gain valuable experience in the development of novel methods, will gain experience in both molecular and organismal research, and will be part of a highly interactive and supportive team.

To apply: send a cover letter, CV, and name and contact information for three references to Alexa Bely at abely@umd.edu.

abely@umd.edu

FloridaSouthernC MarienEvolution

Assistant Professor - Marine Biology

Posted on 7/25/2019

Accepting applications

About this position

Florida Southern College invites applications for a full-time, tenure-track Assistant Professor of Marine Biology position to begin in August 2020. The successful candidate will be expected to teach undergraduate courses in introductory marine biology, oceanography, and other courses that support students in the marine biology and biology majors. The area of research specialization is open, though the successful candidate will be expected to provide mentorship to undergraduate researchers. The position will also require advising students aspiring to careers in marine biology and related fields.

Review of applications will begin immediately and continue until the position is filled, but only complete applications received by September 15th, 2019 can be assured full consideration. A complete application consists of a cover letter, curriculum vitae, teaching philosophy (up to 1000 words), research statement involving undergraduate students (up to 1000 words), names and contact information of three referees, and unofficial graduate transcripts.

About our ideal candidate

Qualified candidates will have completed a Ph.D. degree in marine biology, biology, zoology, or related fields and have a strong commitment to teaching and mentoring undergraduate students. The successful candidate will demonstrate a commitment to excellence and innovation in undergraduate teaching and be skilled in methods of engaged learning, the use of instructional technology, and directing original undergraduate research. In addition, FSC faculty members participate effectively in advising, committee work, and other activities supporting FSC's teaching and learning community.

APPLY HERE < https://portal.flsouthern.edu/ICS/-Employment_App/Default_Page.jnz >

Sincerely,

Jason Macrander, PhD < https://www.flsouthern.edu/-faculty/macrander-jason.aspx > Assistant Professor of Marine Biology Florida Southern College 111 Lake Hollingsworth Drive, Lakeland, FL 33801 863.680.4351

Gothenburg Sweden 5 EvolutionaryBiol

Dear all,

Five full time, permanent, research&teaching positions as Senior Lecturers are available at the Department of Biological and Environmental Sciences, Gothenburg University, Sweden (including the Marine Research Station Kristineberg).

Most welcome to apply and to spread to all potential candidates!!

Animal Ecology/Evolutionary Biology/Population Dynamics a bit quantitative touch: https://www.gu.se/english/about_the_university/job-opportunities/vacancies-details/?idC27 Biodiversity https://www.gu.se/english/about_the_university/-job-opportunities/vacancies-details/?idC31 Zoological Physiology https://www.gu.se/english/-about_the_university/job-opportunities/vacancies-details/?idC29 Zoological Systematics https://www.gu.se/english/about_the_university/job-opportunities/vacancies-details/?idC30 Environmental Science/Ecotoxicology https://www.gu.se/english/-about_the_university/job-opportunities/vacancies-details/?idC28 We look forward to welcome a group of new energetic interactive scientist in the coming year!

Best wishes, Dept of Biological and Environmental Sciences University of Gothenburg

Johan Uddling Fredin <johan.uddling@bioenv.gu.se>

InstitutPasteur 5 Bioinformatics

Five permanent positions in bioinformatics/biostatistics (M/F) at the Institut Pasteur (Paris)

The Hub of Bioinformatics and Biostatistics, created in 2015 to provide support in these domains to the Units and Platforms of the Institut Pasteur, is recruiting five bioinformaticians to continue the support activities and taking over the increasing requests for the analysis of biological data.

The recruited engineers will be allocated for part of their time to Research Units and/or Technology Platforms. Teaching missions (academic and/or professional education, possibly internationally) may also be requested.

Tasks and responsibilities: The main mission is to provide support to Research Units and Platforms for the bioinformatics and/or biostatistics analysis of their data. This support includes : - advising and guiding the implementation of methods and tools for the analysis of biological data, - maintaining an active bibliographic survey and evaluating published tools and methods, - developing, when necessary, new analytical methods and tools, - analyzing data in collaboration with the Units and Platforms, - participating in the development of national and international collaborative projects, - ensuring the transfer of tools and expertise to the Units and Platforms, - delivering training courses in bioinformatics and biostatistics, - maintaining the methods and tools developed by the Units, and ensuring their integration into core software solutions like Galaxy or Snakemake, - interacting with the Institut Pasteur International Network (IPIN, 33 institutes around the world), in particular for trainings and data analysis, - participating in the writing of scientific articles.

Job profiles: Several needs have been identified and the following profiles are expected: - Analysis of standard HTS data (variant calling, genome assembly, differential expression, ...), - Metagenomics, metatranscriptomics, - Single-cell analysis , - Analysis of metabolomic data, - Epigenomics and epitranscriptomics - Flux cytometry data analysis - Biological databases - Proteomics (main affiliation to the UTechS Mass Spectrometry for Biology) - Omics data analysis and integration (affiliation to the Hearing Institut)

Candidate profiles and conditions: It is necessary to satisfy one of the two following profiles: - Bac+5 level (Master, engineer or equivalent) in bioinformatics, statistics, applied mathematics, or a related field, followed by a professional experience of at least 3 years in research or support for research in bioinformatics, biostatistics, or biological data analysis, - PhD in bioinformatics, statistics, applied mathematics or a related field, followed by at least 2 years of professional experience in research or research support in bioinformatics, biostatistics, or biological data analysis.

Teaching experience in bioinformatics/biostatistics will be appreciated.

The Hub and Institut Pasteur are committed to foster gender equality, so female candidates are encouraged to apply.

To apply: Applications (cover letter, detailed CV, and reference contact) should be submitted online via the following URL:

https://c3bi.pasteur.fr/jobs/hub-2019-available-positions/hub-2019-job-application/ The deadline for applying is September 8 of 2019. Candidate pre-selection will be on October 1st . Successful candidates will be received for interviews between October 8 to 10 of 2019 (please, make sure to be available for these dates). Hiring date is planned between December 2019 and March 2020.

Olivier GASCUEL <olivier.gascuel@pasteur.fr>

IowaStateU ComparativeAnimalPhysiology

Tenure-Track Faculty Position in Comparative Animal Physiology

Reposting because the application deadline has been updated to September 3, 2019

The Department of Ecology, Evolution & Organismal Biology (EEOB) in the College of Liberal Arts and Sciences at Iowa State University seeks a comparative animal physiologist specializing in the evolution and ecology of animal physiology. The ideal candidate will have an integrative physiology research program using any mixture of classic and modern tools. The successful candidate is expected to advance excellence in comparative functional biology at ISU by establishing a major, externally-funded research program and contributing to undergraduate and graduate education, including teaching in human and comparative physiology. This is a tenure-track position at the rank of assistant professor, with a tenure-home appointment in EEOB (100%). Candidates must hold a Ph.D. by the time of appointment.

All applications must be submitted electronically at https://isu.wd1.myworkdayjobs.com/IowaStateJobs (job #R160, full link below*). Please be prepared to attach a letter of application and concise teaching and research statements (as a single PDF file), a curriculum vitae, and the names and contact information of three referees. The position will remain open until filled. Full consideration will be given to applications received by 3 September 2019. Iowa State University is an EO/AA employer. For additional information please email physiol@iastate.edu.

Iowa State University is an EO/AA employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, or protected Vets status. Iowa State University is an AAU-member comprehensive, land grant, Carnegie Doctoral/Research Extensive University with an enrollment of 35,000 students. The university is located in Ames, IA, one of the nation's most highly rated metropolitan areas of its size (http://www.iastate.edu/-about/ames.php) and is only 35 miles north of Des Moines. ISU is committed to achieving inclusive excellence through a diverse workforce and is dedicated to supporting work-life balance through an array of flexible policies.

*Position URL: https://isu.wd1.myworkdayjobs.com/en-US/IowaStateJobs/job/Ames-IA/Assistant-Professor-in-Comparative-Animal-Physiology-EEOB_R160-1
Tracy Heath <trayc7@gmail.com>

KentStateU ResTech AvianAdaptiveEvolution

Dear Colleagues,

The Lamichhaney lab at Department of Biological Sciences at Kent State University is seeking a full-time Research Technician to join our team. The successful applicant will provide assistance in setting up a new molecular genetics lab and will be involved in research projects that utilizes genomics methods to study adaptive evolution in birds.

Requirements for this position include,

- At least Bachelor's degree in molecular biology, biotechnology or related field (master's degree preferred)

Additional relevant skills include

- At least one year's experience of working in a molecular lab - Interest in doing field-work if necessary - Some experience with genomic techniques is preferred, but not required - Good leadership, organizational, and interpersonal skills

Application must include a cover letter describing experience and interest in the job, CV and names and contact address of two references. Please send applications to Dr. Sangeet Lamichhaney (slamichh@kent.edu). Review of applications will begin immediately and con-

tinue until the position is filled. A highly competitive salary plus annual leave and medical benefits will be offered.

A key question in evolutionary biology is to understand how an organism responds to novel environments. Such organismal persistence generally occurs through genetic adaptation, phenotypic plasticity or combination of these two processes. Ongoing research in Lamichhaney lab focus on integrating cutting-edge comparative 'omics' tools (genomics, transcriptomics, epigenomics, proteomics and metabolomics) with knowledge about ecology and natural history to explore relative roles of phenotypic plasticity and genetic adaptation that underlie an organism's response to changing environment. We work with variety of animal systems including birds, lizards, frogs and mammals.

Previous research in the lab has focused on understanding the genetic basis of adaptive traits in vertebrates ranging from fish (Atlantic herring), reptiles (squamates) and birds (Darwin's finches & ruff), both at micro and macro-evolutionary scales. Specific research themes include convergent evolution of traits and adaptive radiation, role of structural variants in adaptive diversification, impact of interspecies gene flow on trait evolution and hybrid speciation. Our previous work on the Darwin's finches for instance, represents an example of how genomics can be effectively integrated with the long-term field studies on ecology and natural history to reveal unique insights into genetic basis of adaptive radiation in Darwin's finches that has been one of the textbook example for variety of topics in evolutionary biology.

Additional details about previous and ongoing research in the lab can be found at https://www.kent.edu/-biology/sangeet-lamichhaney Thanks, Sangeet

Sangeet Lamichhaney Assistant Professor Department of Biological Sciences Kent State University www.kent.edu/biology/sangeet-lamichhaney Sangeet Lamichhaney <sangeetvet@gmail.com>

LundU 2 BioinformaticsStaff

Dear all,

We are happy to announce two exciting openings for full-time permanent bioinformatics staff at NBIS/SciLifeLab, Lund University, Sweden. The National Bioinformatics Infrastructure Sweden at SciLifeLab (www.nbis.se, www.scilifelab.se) is a large, distributed national infrastructure in rapid development, now expanding our node in Lund. The NBIS Bioinformatics Support team is a unique state-of-the-art unit for analysis of large-scale genomics and related omics data, providing the opportunity to work in a vibrant research environment on a range of interesting projects together with research groups across Sweden. In addition, you will engage in tools development and bioinformatics training. We believe that you have extensive experience of advanced analysis in areas such as transcriptomics, epigenetics, and proteomics, possibly including single-cell and spatial omics.

Apply no later than September 5, 2019! https:/-/lu.mynetworkglobal.com/en/what:job/jobID:279454 For questions, please contact Bjorn Nystedt, Bioinformatics Support manager bjorn.nystedt@scilifelab.se NBIS/SciLifeLab

Bjorn Nystedt, PhD Joint head of facility Bioinformatics Long-term Support (WABI) National Bioinformatics Infrastructure Sweden at SciLifeLab www.nbis.se, www.scilifelab.se/platforms/bioinformatics

BMC E10:3206, entrance C11 Husargatan 3, SE-752 37 Uppsala

Phone: 018 - 471 4413 E-mail: bjorn.nystedt@scilifelab.se

När du har kontakt med oss på Uppsala universitet med e-post så innebär det att vi behandlar dina personuppgifter. For att läsa mer om hur vi gor det kan du läsa här: http://www.uu.se/om-uu/dataskydd-personuppgifter/ E-mailing Uppsala University means that we will process your personal data. For more information on how this is performed, please read here: http://www.uu.se/en/about-uu/data-protection-policy bjorn.nystedt@scilifelab.se

MarineBiolLab EvolutionAging

Research Assistant I, II, or III - Biology, Ecology, and Evolution of Aging and Maternal Effects

Description: The Marine Biological Laboratory seeks a highly motivated individual to join the laboratory of Dr. Kristin Gribble in the position of Research Assistant I, II, or III. The successful applicant will contribute to our projects on the biology of aging, maternal effects on offspring health and lifespan, life history, evolution, and ecology using an aquatic invertebrate model system.

The Gribble lab is housed within the Josephine Bay Paul Center, a collaborative research group addressing questions of microbial diversity, molecular evolution, and comparative genomics. Information about our research may be found at: http://mbl.edu/jbpc/gribble < http://mbl.edu/jbpc/gribb >

Additional Information: Responsibilities for this position include, but are not limited to, designing and conducting experiments, rotifer and phytoplankton culture, PCR, qPCR, protein extraction and analysis, microscopy, data entry and analysis, and general laboratory maintenance and organization. This position requires occasional work on weekends to accomplish long-term life table experiments. The position will be for one year but may be extended beyond this period contingent upon progress and funding.

Basic Qualifications: Applicants should have a B.A./B.S., or M.A/M.S. in biology, cell/molecular biology, biochemistry, or a related field. This position requires an independent, organized, and self-motivated individual with robust problem-solving skills. Excellent written, verbal, and interpersonal skills; attention to detail; and a strong work ethic are essential. Position level and salary will depend upon education and experience.

Preferred Qualifications: The ideal candidate will have one or more years of experience working in a research laboratory and will be familiar with standard laboratory practices and equipment. Previous experience with DNA, RNA, and protein extractions; next-generation sequencing library construction; PCR and qPCR; protein analysis; RNAi; microscopy; and bioinformatics is preferred. An understanding of basic molecular biology concepts is important.

Instructions: Please apply on the MBL website and provide the following required documents: (1) Cover letter describing your interests, skills, prior research experience, and motivation for joining the lab; (2) Curriculum vitae; (3) The names and contact information for three references (Please do not send letters at this time; we will contact references directly).

https://recruiting.ultipro.com/MAR1033MBL/-JobBoard/4c3007c3-6354-41de-a13f-d95be60d91e9/-OpportunityDetail?opportunityId=414e0d9d-fd1d-42c2-b576-415db1d89776 Research Assistant/Associate - Rotifer Genome Editing

Description: The Marine Biological Laboratory seeks a motivated, creative and innovative Research Assistant or Research Associate to join the laboratories of Kristin Gribble and David Mark Welch in the Josephine Bay Paul Center for Comparative Molecular Biology and Evolution. Our research combines comparative genomics, biochemistry, and life history to study aging, maternal effects, and DNA damage prevention and repair using rotifers, a novel aquatic invertebrate model system for studies of aging, neurobiology, genome evolution, and ecology. The successful candidate will develop genome editing techniques in rotifers, including CRISPR/Cas9, as part of a broad initiative at the MBL to advance new aquatic and marine models for biological discovery. Research will take place in the Bay Paul Center, with extensive DNA sequencing and bioinformatic resources, and in the NSF-funded Genome Editing Facility in the Marine Resources Center, where MBL scientists are developing new genetic and genomic tools for a wide range of marine invertebrates. We invite individuals with experience in genome editing in other animals to join this expanding program.

Basic Qualifications: Research Assistant applicants should have a B.A., B.S., or Master's degree in biology, cell/molecular biology, biochemistry, or a related field. Research Associate applicants should hold a Ph.D. or have commensurate laboratory experience. This position requires proficiency and previous experience in molecular biology, microscopy, microinjection, and CRISPR/Cas9 methodology. We are seeking an independent, organized, enthusiastic, and productive individual with robust problem solving skills. Excellent interpersonal skills, attention to detail, and a strong work ethic are essential. Position level and salary will depend upon education and experience.

Preferred Qualifications: The ideal candidate will have working familiarity with RNAi and transgenic protocols. Proficiency in

— / —

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

MortonArboretum 3 ResAssist TreeConservation

Position Available: Research Assistant I Tree Conservation Biology

*Classification: *Full-time, Non-Exempt

*Department: *Science and Conservation

General Summary: Research Assistants participate in laboratory and/or field operations for research programs

in the Center for Tree Science, a global hub of research and expertise focused entirely on trees. Research Assistants at The Morton Arboretum are involved in all aspects of research: designing studies, planning and executing laboratory and field work, utilizing a variety of scientific instruments, assisting with lab management, testing protocols, training volunteers, organizing data, performing analysis, reading scientific literature, interpreting results, and editing manuscripts. The Morton Arboretum strongly emphasizes professional development. There will be opportunities to collaborate on scientific publications, present research at scientific meetings, and build new skills.

Desired Skills and Experience for Tree Conservation Biology Position: Bachelor's degree in ecology/evolution, geography, plant conservation, informatics, spatial statistics or similar field is required; a Master's degree is preferred. Applicants should have some experience with DNA lab work (e.g. PCR, etc.) and basic computer programming. Preferred experience includes one or more of: genetic/genomic data analysis, laboratory management, mathematical modeling or geospatial work (e.g. ArcGIS, niche modeling, etc.). Experience performing PCR, DNA extraction, NGS, labeling and organizing samples, supervising or training others, and/or troubleshooting lab protocols is desired. Experience using statistical software (SAS, JMP, STATA, R etc.) and working with large or complex data is beneficial. Strong attention to detail, meticulous record keeping (e.g. lab notebooks, coding), and an interest in plant conservation is essential. Application review will start Sept 1. Position will be open until filled.Please contact Sean Hoban (shoban@mortonarb.org) for more information

Sean Hoban | Tree Conservation Biologist | The Morton Arboretum

4100 Illinois Rt 53, 3rd Floor Research Bldg, room 324, Lisle, IL 630-719-2419 | shoban@mortonarb.org | Tweets @seanmhoban

research webpage: http://sites.google.com/site/hoban3/ ResearchGate Profile: http://www.researchgate.net/profile/Sean_Hoban/ food blog: http://cuisineraveclevin.blogspot.it/ blog about invasive species: http://invasivore.org/ Sean Hoban <shoban@mortonarb.org>

NewZealand Bioinformatician

Bioinformatician The Food Assurance Team within Fonterra's Research and Development Centre is a multidisciplinary team working on global leading projects covering Microbiology, Chemistry and Biochemistry with a broad range of expertise that is both applied and academic. As the Bioinformatician, you will have an eye for genomic data sets, a passion for research and a need to successfully delivery key insights to achieve greatness across our products. You will love talking numbers and providing facts to assist scientists. More so, you will love the direct engagement with stakeholders across the team.

Your Purpose:

Your main objective is to provide accurate, factual data insights by analysing large data sets, taking snap shots and providing data driven outcomes for our research projects. You will understand research projects, requirements and want to offer solutions with key data.

You will savour the opportunity to join a passionate team of experts delivering innovative world leading science supporting Food Safety and Quality for our global business

What achievements you will have: Your strong communication skills and ability to tell a story using numbers and data is key. Your experience in computational biology is key, however we are open for the industry you come from, whether that be Agricultural science, Plant and Food, FMCG or Computer Science.

With a passion for delivering results, engaging across the business and bringing numbers to life, this is where you will shine.

Key attributes will be:

* Degree (Masters/PhD) in Biological Science, Computer Science, or Statistics is favoured * Experience in process improvement, continuous improvement * Experience across a range of systems and tool sets.

Our Story As New Zealand's largest business, and a world-leading dairy exporter, Fonterra's high-quality dairy ingredients and branded dairy products are consumed in over 100 countries around the globe.

Located in Palmerston North, New Zealand, the Fonterra Research and Development Centre (FRDC) is home to a highly collegial team of around 300 qual-

ified scientists, technologists and engineers - many of whom are the world's leading experts in dairy science - and it is investing in new techniques with cutting edge technology right now! To apply, please click < https://fonterra.taleo.net/careersection/-2/jobdetail.ftl?lang=en&job7420&src=ML-13621 >. If you know someone who could be interested in this opportunity, please forward this email to them or for more information contact Gayle Martin, Senior Sourcing Consultant, Fonterra Resourcing Services on 09 369 9676 or gayle.martin@fonterra.com

"Biggs, Patrick" <P.Biggs@massey.ac.nz>

NHM Utah MuseumEducator

Job Description Executive Director Salt Lake City, UT

As the designated state museum of natural history, the Natural History Museum of Utah serves rural and urban communities across the state through its exhibits, educational programs, citizen science, and broad outreach activities. By providing access to these collections and through its insights into Utah's rich natural history, the Museum serves as a threshold to all that Utah's natural places have to offer, inspires curiosity, and communicates science to wide audiences.

The Museum seeks an innovative and visionary leader who demonstrates a passion for engaging others in a lifelong learning agenda while delivering a high-quality experience that is financially sustainable through solid program, engagement, fundraising and business practices. A deep understanding, appreciation for, and connection to the natural world through collections-based science is required.

A high level of experience in building and sustaining community, national and international partnerships with other educational and cultural stakeholders, public and private, is necessary. The Museum seeks a dynamic, energetic communicator who can influence others to action, be they staff, faculty, board members, donors, elected officials, corporate executives, members, volunteers, and other supporters.

The ideal candidate will show evidence of successful fundraising leadership or will address how he/she/they have the aptitude to be successful with acquiring major gifts and grants from foundations, corporations, individuals and the public sector at the local, state and national level. A background of launching innovative, groundbreaking programs resulting in long-term funding and stable revenue streams, world-class research, and dynamic public engagement is highly valued.

A Master's degree is required. Formal education in science is preferred, but not required. Demonstrable leadership experience in public or private institutions concerned with informal education, natural history/science or related professions is highly valued.

Applications and nominations are being received by Kittleman & Associates, LLC. To apply, submit a current resume, letter of interest, and a diversity statement (a document that addresses your commitment to diversity, equity, and inclusion through work, professional activity or service) to Kittleman at https://-/ww2.kittlemansearch.com/Jobs For more information about the Natural History Museum of Utah, visit https://nhmu.utah.edu/ Diversity & Inclusion Statement At the Natural History Museum of Utah, we recognize that our strength and sustainability as an organization stems from diversity and inclusion. For this reason, we are committed to fostering equity, recruiting and retaining a diverse workforce that reflects the communities we serve, and empowering staff members in developing an accessible and inclusive work environment.

Joyce Rowe <jrowe@kittlemansearch.com>

NorthCarolina Museum CuratorOfMammalogy

The North Carolina Museum of Natural Sciences (Raleigh, NC) is searching for a Research Curator of Mammalogy

Full Job Posting at: https://www.governmentjobs.com/-careers/northcarolina/jobs/2530010/research-curator-mammalogy?keywords=curator&pagetype=-jobOpportunitiesJobs Description of Work: The Research Curator, Mammalogy, conducts original research on mammals and serves as Principal Curator for the Research Collection under care of the Mammalogy Unit. Duties include, but are not limited to: * Conducting competent research with a demonstrable value to the scientific community, the NCMNS, and the state of North Carolina * Publishing the results of research in scientific, peer-reviewed journals, in reports to appropriate agencies, and in popular media outlets * Providing expertise and establishes guidelines for the curation of the mammal collections * Acquiring

mammal specimens and related materials, and associated data * Maintaining budgets for the Mammalogy Unit, including for research, travel, equipment, and supplies * Conducting/participating in educational public programs and NCMNS events, including conducting visitor tours of the Mammalogy collections, providing services such as species identifications and workshops, presenting seminars and lectures, writing popular articles and participating in media events as needed, and providing programs for clubs and civic organizations * Serving as a liaison to other public and private institutions including serving on appropriate interagency committees, holding adjunct position(s) with universities and/or assisting with co-advising students, participating in joint activities with public and private resource management and museums, and regional and international organizations * Responding to requests for information from private and public sources in a timely manner with accuracy * Other related duties as assigned

Knowledge, Skills and Abilities / Competencies ** To receive credit for your work history and credentials, you must provide the information on the application form. Any information omitted from the application form, listed as general statements, listed under the text resume section, or on an attachment will not be considered for qualifying credit. **

To qualify for this position, you must meet ALL the following KSAs listed below: * Demonstrated experience with the curation of mammal specimen collections * Superior levels of knowledge of mammalogy in general and a specialty discipline or area of study (e.g., taxonomy, systematics, ecology, behavior, genetics) * Demonstrated knowledge of requirements and procedures for the principles and practices of ethical scientific research, including knowledge of laws and regulations pertaining to mammalogy research, and peer-reviewed publication of scientific results. * Working knowledge of external grant proposal preparation * Proficiency in effective communication, public speaking, and public presentation

Management Preferences: * PhD in mammalogy, taxonomy, systematics, ecology, behavior, or genetics * Positive attitude to interact effectively with supervisors, coworkers, colleagues in research and resource management communities, and the general public * Working knowledge of materials and equipment used in mammalogy research, including fieldwork * Familiarity with the diversity and distribution of mammal species of NC and the southeastern US Physical Requirements: * Ability to lift items weighing upwards of 25-60 pounds * Ability to work in hot, cold, and/or inclement weather when conducting fieldwork Minimum Education and Experience Requirements * Master's degree in biology, zoology, or a science curriculum related to area of expertise from an appropriately accredited institution and three-years experience in specialty area -OR- * An equivalent combination of education and experience.

Supplemental and Contact Information The Department of Natural and Cultural Resources (DNCR) selects applicants for employment based on required education and experience and job-related knowledge, skills, and abilities without regard to race, religion, color, national origin, sex, age, disability, genetic information, political affiliation or political influence.

Please be sure to complete the application in full. Resumes may be

— / —

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

OxfordU Parttime HIVProjectManager

Dear all,

We are looking for a par time Project Manager Communication at the Li Ka Shing Centre for Health Information and Discovery, Big Data Institute, Old Road Campus, Headington, Oxford. The position will be grade 7, 32,236 - 39,609 p.a. (pro rata). The closing date is 12 noon on 4th September 2019.

This is an exciting opportunity to join a team studying HIV in sub-Saharan Africa. You will support the project manager of the PANGEA consortium (www.pangea-hiv.org) in many aspects of the work for the consortium, in particular with regard to training and communication. You will lead the project management of the PX study which aims to help explain the results of the HPTN 071 PopART trial. Both the PX study and the HPTN 071-02 PopART Phylogenetics ancillary study are members of PANGEA and contribute HIV sequences to the consortium. You will report to the project manager of the PANGEA consortium, Dr Lucie Abeler-Dörner, and join the Pathogen Dynamics group led by Professor Christophe Fraser at the Big Data Institute in Oxford.

This is a broad role that requires excellent communication and interpersonal skills. It involves co-ordinating a

study and liaising with a large number of collaborators on three different continents. The ideal candidate will be someone who is excited by the projects, is willing to learn to understand their scientific context and is able to communicate it within and beyond academia. Experience in a multidisciplinary environment, preferably within a scientific context is highly desirable.

You must be educated to degree level, preferably in a related subject e.g. biology or genetics. In addition, you will have experience of working in the scientific sector, either in industry or academia. You will have excellent project management skills and the ability to understand complex operational issues. Experience of working with a wide range of audiences from different academic institutions or companies is desirable. Excellent time management skills, including the ability to work effectively to tight deadlines within the context of a team are essential.

For informal inquiries about the position, please contact Lucie Abeler-Dörner lucie.abeler-dorner@bdi.ac.uk

This part-time position is fixed-term until 31 October 2021 in the first instance.

Further particulars, including details of how to apply, can be obtained from the document below. Applications for this vacancy should be made online.

https://my.corehr.com/pls/uoxrecruit/-erq_jobspec_version_4.display_form?p_company=-10&p_internal_external=E&p_display_in_irish=-N&p_process_type=&p_applicant_no=-&p_form_profile_detail=&p_display_apply_ind=-Y&p_refresh_search=Y&p_recruitment_id=142122
The closing date for applications is 12.00 noon on Wednesday 4 September 2019.

Best wishes, Lucie

Lucie Abeler-Dörner Nuffield Department of Medicine | University of Oxford Big Data Institute | Li Ka Shing Centre for Health Information and Discovery Old Road Campus | Headington | Oxford | OX3 7LF | United Kingdom lucie.abeler-dorner@bdi.ox.ac.uk

Lucie Abeler-Dorner <lucie.abeler-dorner@bdi.ox.ac.uk>

PennsylvaniaStateU EvolutionaryGenomics

Title: Tenure/Tenure Track Evolutionary Genomics Faculty

The Department of Biology in the Eberly College of Science (www.bio.psu.edu) at The Pennsylvania State University seeks applicants for a tenure-track or tenured faculty position in Evolutionary Genomics. The evolutionary analysis of rapidly expanding genomic datasets requires development and implementation of rigorous computational and statistical approaches. The successful applicant is expected to develop a strong, independent, externally funded research program leading to novel insights and paradigms in evolution from the analyses of complex genomic datasets. We are particularly interested in candidates developing the theoretical foundation of evolutionary and/or population genomics. The primary appointment will be in Biology, but could include joint appointments in either the Statistics or Mathematics departments. The applicant must have a Ph.D. in biology, computer science, statistics, or a related field. The successful applicant is expected to teach and perform research in a collaborative environment, with the opportunity to join one of the Centers in the Huck Institutes of the Life Sciences and to supervise students from interdisciplinary graduate programs. This position features competitive start-up package. Applications must be submitted electronically at https://psu.jobs and must include a cover letter that highlights significant graduate and postdoctoral scientific accomplishments, goals or vision for your research program at Penn State, and qualifications that make you well-suited to achieve these goals; Curriculum vitae; Research interests statement; Teaching interests statement; A diversity statement that describes past, current, and future contributions to equity, diversity, and inclusion at the teaching, research, or professional level; and Contact information for at least three professional references. Review of applications will start immediately and continue until the position is filled. Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status. Apply online at https://psu.jobs/job/-89966 To review the Annual Security Report which contains information about crime statistics and other

safety and security matters and policies, please go to https://police.psu.edu/annual-security-reports, which will also explain how to request a paper copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.“

”Barth, Kelsey J“ <kjb5535@psu.edu>

PrincetonU ResSpecialist EvolutionaryBiol

Research Specialist Position Akey Lab

Lewis-Sigler Institute for Integrative Genomics

Princeton University

The Akey Laboratory in the Lewis-Sigler Institute for Integrative Genomics seeks applicants for a Research Specialist I / Research Specialist II. We study the evolutionary, functional, and phenotypic consequences of DNA sequence variation in yeast, dogs, and humans. We leverage a wide variety of experimental methods including DNA and RNA sequencing, functional genomics (such as ChIP-Seq), and gene editing.

We seek a motivated and highly organized individual to contribute to large-scale functional genomics and various support activities in the lab. One immediate goal for this technician will be helping to set up the Akey wet lab in newly renovated laboratory space. Responsibilities will therefore include ordering equipment and supplies, setting up experimental devices, and establishing organizational systems for lab reagents. In addition, this technician will be expected to contribute to research efforts and analysis of data.

The ideal candidate is one who seeks professional development and is therefore interested in reading the current scientific literature and thinking critically about experimental design. The role has great potential for the advancement of skills in sought after research technologies.

The rank and salary will be commensurate with experience. Salary will include the full benefits package.

The position is open and review of applications will begin immediately. This is a one-year term position, with the possibility of renewal based on available funding and satisfactory performance.

Specific duties may include:

- Lab organization, including equipment and supply purchasing, reagent management and inventory, communication and negotiation with vendors. - Molecular biology, including DNA/RNA preparation, PCR, single-cell RNA- sequencing, and NGS library preparation. - Cell biology, including tissue culture and flow cytometry. - Participation in research projects and gathering of publication quality data.

Essential Knowledge, Skills and Abilities: - A bachelor’s or master’s degree in biology or related field. - Demonstrated skills in molecular biology and / or genomics. - Ability to work effectively in a team, clearly communicate ideas, and keep an organized and detailed laboratory notebook. - Ability to think critically and troubleshoot. - Ability to comprehend experimental work flow. - Meticulous attention to detail.

Preferred Qualifications:

- Previous experience with library prep in next generation sequencing experiments. - Experience with sequencing-based data analysis and / or basic programming is a huge plus.

How to Apply: - Please apply online at: https://-research-princeton.icims.com/jobs/10784/research-specialist-i/job

The final candidate will be required to pass a background check. Princeton University is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity or expression, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Laura Gallagher-Katz <lgallagh@Princeton.EDU>

QueensU AnimalEvolution

Department of Biology - Integrative Animal Biologist

The Department of Biology at Queen's University invites applications for a tenure-track faculty position at the rank of Assistant Professor with specialization as an integrative animal biologist. The preferred start date is July 1, 2020.

Queen's is a research-intensive university, with a diverse Department of Biology that encompasses observational, experimental, and theoretical approaches, on questions ranging from genes to ecosystems. The department seeks a broadly-trained integrative animal biologist who uses molecular approaches to explore important research questions. Examples of research areas could include, but are not limited to: neurobiology, immunology, energetics, and endocrinology. The successful candidate will complement and broaden the department's existing expertise and strengths and will contribute to teaching in core and elective courses especially in areas related to animal physiology. Applicants with an integrative approach and/or strong potential for collaboration with colleagues from diverse fields of biology, and across scales of biological organization, are especially encouraged to apply.

Candidates must have a PhD or equivalent degree completed at the start date of the appointment. The main criteria for selection are academic and teaching excellence. The successful candidate will provide evidence of high-quality scholarly output that demonstrates potential for independent research leading to peer assessed publications and the securing of external research funding, as well as strong potential for outstanding teaching contributions at both the undergraduate and graduate levels, and an ongoing commitment to academic and pedagogical excellence in support of the department's programs. Candidates must provide evidence of an ability to work collaboratively in an interdisciplinary and student-centred environment. The successful candidate will be required to make substantive contributions through service to the department, the Faculty, the University, and/or the broader community. Salary will be commensurate with qualifications and experience. This position is subject to final budgetary approval by the University.

The University invites applications from all qualified individuals. Queen's is committed to employment equity and diversity in the workplace and welcomes applications from women, visible minorities, Aboriginal peoples, persons with disabilities, and LGBTQ persons. All qualified candidates are encouraged to apply; however, in accordance with Canadian immigration requirements, Canadian citizens and permanent residents of Canada will be given priority.

To comply with federal laws, the University is obliged to gather statistical information as to how many applicants for each job vacancy are Canadian citizens / permanent residents of Canada. Applicants need not identify their country of origin or citizenship; however, all applications must include one of the following statements: "I am a Canadian citizen / permanent resident of Canada"; OR, "I am not a Canadian citizen / permanent resident of Canada". Applications that do not include this information will be deemed incomplete.

A complete application consists of:

* a cover letter (including one of the two statements regarding Canadian citizenship / permanent resident status specified in the previous paragraph);

* a current Curriculum Vitae;

* a summary of research interests that highlights your three most significant contributions (maximum 1 page);

* a summary of your future research directions (maximum 1 page);

* a statement of teaching interests and experience (maximum 1 page);

* a diversity statement describing your past and planned commitment to promoting diversity, inclusion, and equity in your research programs and outreach activities (maximum 1 page); and

* three letters of reference to be sent directly to Brian Cumming, Professor and Head, Department of Biology, c/o Anne Dumont (ad142@queensu.ca).

The deadline for applications is September 9, 2019. Applicants are encouraged to send all documents in their application packages electronically as PDFs to Anne Dumont at ad142@queensu.ca, although hard copy applications may be submitted to:

Brian Cumming Professor and Head The Department of Biology Room 3102, BioSciences Complex 116 Barrie St. Queen's University Kingston, Ontario CANADA K7L 3J9

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant's accessibility needs. If you require accommodation during the interview process, please contact Brian Cumming in

The Department of Biology, at cummingb@queensu.ca.

Academic staff at Queen's University are governed by a Collective Agreement

— / —

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

RiceU EvolutionaryBiology

Assistant Professor Positions in Evolutionary Biology and Global Change Biology: The Department of BioSciences at Rice University (https://biosciences.rice.edu/) invites applications for two tenure-track, assistant professor positions to begin July 1, 2020. We aim to fill positions in two areas of research.

-Evolutionary Biology : We seek to hire an evolutionary biologist studying mechanisms governing evolutionary processes and dynamics. We welcome applicants whose research spans diverse systems and approaches including field, lab, computational, theoretical work or a combination thereof. Research areas can include but are not limited to animal behavior, coevolution, evolutionary ecology, evolutionary genetics/genomics, evolutionary modelling, evolutionary paleobiology, experimental evolution, microbial evolution, sexual selection, evolutionary developmental biology, life-history evolution, population genetics, molecular evolution, evolution and plasticity, or phylogenetics and systematics.

-Global Change Biology : We also seek to hire a global change biologist whose research in behavior, ecology or evolution is relevant to our conceptual understanding of the causes and consequences of large-scale environmental changes (past, present or projected). Research focal areas can include but are not limited to ecosystem changes, evolutionary adaptation in the Anthropocene, behavioral responses to changing environments, mechanisms of species and ecosystems resilience, invasive species, wildfire, impacts of climate change on natural systems or species interactions, land-use change, loss of biodiversity, and biological feedbacks on climate change.

For both positions, we welcome applicants who employ theory, empirical work, or some combination thereof. Preference will be given to candidates whose work complements strengths of current faculty and contributes to the excellence of our academic community. Rice University is committed to a culturally diverse intellectual community. In this spirit, we particularly welcome applications from all genders and members of historically underrepresented groups who exemplify diverse cultural experiences and who are especially qualified to mentor and advise all members of our diverse student population.

To apply, please submit the following materials on line at http://jobs.rice.edu/postings/20741: (1) cover letter; (2) curriculum vitae; (3) research statement (3 pages or less); (4) statement of teaching philosophy (2 pages or less); (5) contributions to diversity statement (1 page); and (6) names and contact information for three references. Application review will commence September 20th, 2019 and will continue until the positions are filled.

The contributions to diversity statement should discuss any past experience, activities and future plans to advance diversity, equity and inclusion, in alignment with our Universitys mission to meet the educational needs and interests of its diverse student population. Once the search committee has determined the initial short list of candidates, the search committee chair will request letters of recommendation at that time. For additional information, please contact the search chair, Dr. Amy Dunham at aed4(at)rice.edu. Applicants will be notified when the final candidates have been selected.

Rice University is an Equal Opportunity employer with commitment to diversity at all levels, and considers for employment qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national or ethnic origin, genetic information, disability, or protected veteran status.

Lisa

Lisa Evans <lisa.r.evans@rice.edu>

RowanU NewJersey EvolFunctionalMorphologist

The Department of Biological Sciences at Rowan University is seeking to hire a qualified individual to fill a tenure-track assistant professor position beginning September 2020. We are interested in hiring a candidate who would contribute expertise in understanding the relationship between organismal form and function to the department. Candidates should have a Ph.D. in the biological sciences or a closely related field and a record

of research. We are particularly interested in candidates with research focusing on functional morphology, biomechanics, or animal physiology. Postdoctoral or other relevant research experience is expected. Successful candidates are expected to develop an independent, sustainable, externally funded research program. Successful candidates must also demonstrate the ability to contribute to teaching in the introductory core curriculum (a four course sequence in evolution, genetics, cell biology, and ecology) in addition to offering upper-level courses in their area of expertise.

The College of Science & Mathematics dedicates itself to excellence in undergraduate and graduate education, as well as research. It promotes a student-centered approach to learning in a research-rich environment, both inside and outside of the classroom. The College is committed to providing students with outstanding degree programs in basic and applied sciences as well as mathematics, and to increasing the number of students choosing STEM fields of study. Our programs prepare students to function in a multi-cultural and economically interdependent world and to succeed in any career they choose. The Biological Sciences department adheres to the mission of the College, and offers high quality programs including a BS in Biological Sciences, a BA in Biological Sciences, and several accelerated BS/MS programs offered in collaboration with the Graduate School of Biological Sciences at the Rowan University School of Osteopathic Medicine.

The application must be submitted through our online application system as a single '.pdf' file containing a cover letter, curriculum vitae (CV), a statement of teaching experience and philosophy, and a statement of current and future research interests. The contact information for three professional references should be included in the CV. Review of applications will begin immediately. All complete applications received by October 1, 2019 will receive full consideration.

Qualifications:

A Ph.D. in the biological sciences, or closely related discipline, is required. Postdoctoral experience is expected. Research experience and a record of publications are expected. Teaching experience is strongly desired. Starting Date: September 1, 2020

Application Deadline: 10/01/19

Candidates must be legally authorized to work in the US, and the university will not sponsor an applicant for a work visa for this position.

Rowan University values diversity and is committed to equal opportunity in employment.

All positions are contingent upon budget appropriations.

"Holbrook, Luke T." <holbrook@rowan.edu>

SouthAfrica ResAssist KarooRat

Paid Research Assistant Position (1.5 years)

What we are looking for: An extremely motivated and independent biology student to join the striped mouse project as research assistant until at least December 2020 to run our field site on bush Karoo rats. Start time will be as soon as possible but latest beginning of 2020. Research assistants get free accommodation at the station, and R3500 to R4750 /month to cover their daily costs. Travel costs will be refunded by a maximum of 100 Euro /month based on the time spent at the research station.

The job: You will run our monitoring of a bush Karoo rat population which overlaps with our striped mouse field site where we have been working for 19 years (< http://www.stripedmouse.com > www.stripedmouse.com). You will work together with the research and the station managers of the Succulent Karoo Research Station (SKRS), but run the bush Karoo rat field site independently after being trained in all techniques. Tasks will include trapping and observing of bush Karoo rats to study their social system. You will also do some plant monitoring. One main task will be to use mini GPS on bush Karoo rats to determine their social system, daily range sizes and overlap., for which you have to analyse the data. If you wish you can use these data to write a scientific publication on which you become co- or first author, depending on your contribution. In addition, it is expected that you will assist the managers at SKRS with maintenance and possible small repairs.

Desired skills from student

Ability to work hard and independently. Good ability to handle small mammals; the research assistant must be able to put the mini GPS on by himself / herself. Good English skills. Knowledge in any of these fields would be an advantage: animal behaviour, ecology, experimental design and statistical analysis, of GIS software such as QGIS and Google Earth. Handyman skills would be an additional plus for work at SKRS.

Skills student will learn

Several techniques of field work (trapping, marking and radio-tracking of small mammals), collection of

behavioural data, working with GIS, research management skills (project and time management). This is an ideal position for somebody who wants to continue with a PhD in animal behaviour afterwards.

Time period and place

Preferred start is November 2019, but a later start can be negotiated. Minimum stay is until end of 2020, but a period of up to three years is possible.

Compensations and cost

The research assistant will receive R3500 / month for cost of living and free accommodation, which is sufficient to maintain a good standard of living at SKRS. After the initial training period of 3 months. this will rise to R4500/month, with a possible increase of R250/month after every 6 months, depending on performance. The student needs to cover medical aid (approx. Euro 150/ year for Europeans) and visa fees, but can be refunded for this later. For each month present at the research station, 100 Euro will be refunded for travel costs and any other costs (visa, medical aid etc).

Details of where the project will be carried out

Succulent Karoo Research Station (SKRS) in Goegap Nature Reserve, near Springbok in the Northern Cape of South Africa: < http://stripedmouse.com/site1_2_2.htm > http://stripedmouse.com/site1_2_2.htm. An international team of students, including a research and a station manager, are present at the station.

Trial period

An evaluation will take place after 2.5 and after 5.5 months to evaluate whether the student is coping well and enjoying the stay at the field station.

How to apply

Send a motivation letter (1-2 pages stating why you are the perfect candidate), list of a minimum of 2 referees, and your CV to: Dr. C. Schradin, director Succulent Karoo Research Station, succulent.karoo.research.station@kabelbw.de.

Deadline: There is no official deadline but we will continue searching until a suitable applicant is found. First interviews are planned for the second halve of September, so for full consideration send you application before the 9th September.

Dr. Carsten Schradin

Director of the Succulent Karoo Research Station (South African non-profit organization), Goegap Nature Reserve, PO Box 541, 8240 Springbok, South Africa

< http://www.stripedmouse.com/ > http://www.stripedmouse.com

Description: Description: Logo_June 2014

Director Succulent Karoo Research Station <succulent.karoo.research.station@kabelbw.de>

Stockholm EvolutionaryEcol

Dear colleagues,

Please note our opening for a Senior Lecturer in Animal Ecology at the Department of Zoology, Stockholm University (full time, permanent, research+teaching). Welcome to apply and feel free to forward to any potential candidates you know!

Application deadline: Sep 16 2019.

Full details and instructions to apply in the link: https://www.su.se/english/about/working-at-su/-jobs?rmpage=job&rmjob-17&rmlang=UK Best regards, Niklas Janz

– Niklas Janz Professor, Head of Ecology Division Department of Zoology, Stockholm University, 106 91 Stockholm, Sweden Phone: +468 16 4022

Science: [http://research.niklasjanz.se] Fiction: [http:/-/niklasjanz.se] Niklas Janz <niklas.janz@zoologi.su.se>

StPetersbrug FL InvertCollectionManager

https://jobs.myflorida.com/job/SAINT-PETERSBURG-FISHERIES-&-WILDLIFE-BIO-SCIENTIST-II-77070339-FL-33701/580585600/ Job Description

The Florida Biodiversity Collection at the Fish and Wildlife Research Institute seeks a Manager for the Marine Invertebrate Collection. The strengths of the collection include Annelida, Arthropoda, Echinodermata, and Mollusca, with geographic coverage primarily in and around State waters of Florida, the Gulf of Mexico, and Caribbean Sea. The collection manager reports to the Curator and will support the maintenance, growth and services provided by the Florida Biodiversity Collection, and will lead or collaborate on research projects involving the collection. Tasks include: supervising

the collection technician; collecting, fixing, preserving, identifying and cataloging invertebrate specimens; monitoring and requesting purchases of supplies as needed; processing, tracking, and recalling specimen loans; fulfilling data requests, consultations for FWC researchers and Law Enforcement, and the public; creating and participating in outreach events, including internships, social media content, tours, and public presentations.

Minimum Qualifications

A bachelor's degree from an accredited college or university with a major in one of the biological sciences and one year of professional biological experience in a field or laboratory program; or a master's degree from an accredited college or university in one of the biological sciences. Possess a valid driver license.

**Preference may be given to candidates that hold a master's degree in biological sciences with a research focus on marine invertebrates, two years' experience in natural history collection work, and successfully published peer-reviewed research. Preference may also be given for those with a knowledge of local marine biodiversity including the identification of preserved marine invertebrate specimens, use of catalog database software (Specify, in particular), and knowledge of, and adherence to best-practices in the archival maintenance of dry- and wet-preserved invertebrate specimen collections. Experience collecting and analyzing DNA sequence data for systematic or taxonomic research is desirable.

A resume, a cover letter, and a list of contact information for three references must also be submitted in People First as attachments. Incomplete applications will not be considered

Paul Larson, PhD Curator of Collections Florida Biodiversity Collection < https://myfwc.com/research/saltwater/specimen-collections/ > SEARCH < http://webportal.specifycloud.org/fwri/ > Invertebrates SEARCH < http://webportal.specifycloud.org/fwrf/ > Ichthyology Florida Fish and Wildlfe Conservation Commission Fish and Wildlife Research Institute 100 8th ave SE St. Petersburg, FL 33701 P 727 892 4136

"Larson, Paul" <Paul.Larson@MyFWC.com>

TempleU EvolutionaryBiol

TEMPLE UNIVERSITY

Department of Biology

Faculty Positions in Integrative Biology

The Department of Biology at Temple University invites applications for faculty positions in the area of Integrative Biology. These positions will complement existing strengths in the Department [http://bio.cst.temple.edu/-], including Computational Biology, Ecology and Evolution, Cell/Molecular Biology, and Neuroscience. Candidates who meld molecular and organismal biology, and those who combine wet lab or field research with theory and computation are especially encouraged to apply. Integrative computational scientists who combine evolutionary, genomic, and functional information in one or more of the above areas will also be reviewed. We anticipate hiring at the Assistant Professor level, but outstanding candidates at the Associate or Full Professor level will be considered. New hires are expected to develop an externally-funded research program and contribute to the teaching mission of the Department and University. Faculty positions at Temple University come with competitive laboratory space, salaries, and startup packages.

Required Minimum Basic Qualifications: A Ph.D. or equivalent degree is required by date of application.

Additional Qualifications: A track record of research excellence, originality, and productivity, and interest/experience in undergraduate and graduate teaching as well as public outreach.

Applicants must submit their curriculum vitae, a brief summary of current and future research programs, a statement of teaching philosophy, and contact information for three references as a single document to Tania Stephens (tania.stephens@temple.edu). Review of applications will begin immediately and will continue until the positions are filled, with priority given to applications received by Oct. 15, 2019. For additional information see bio.cst.temple.edu. Temple University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community (AA, EOE, m/f/d/v).

David A Liberles <tuf77157@temple.edu>

Trondheim VertebrateBiodiversity

Reminder: Deadline 15. Aug. 2019 (not Aug 3 as stated in one advertisement)

The Department of Natural History, NTNU University Museum, Norwegian University of Science and Technology, invites applications for the following permanent position:

Associate Professor of Vertebrate Biodiversity.

To fill this position, we are seeking excellent scientists within the field of molecular biodiversity of vertebrates, with main emphasis on birds and/or mammals.

The NTNU University Museum is aiming to be a leading international institution within the field of molecular biodiversity.

The city of Trondheim is a modern European city with a rich cultural scene, and easy access to breath-taking natural landscapes. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world.

We invite both senior and more junior candidates to apply. This means that candidates at all stages in their career post PhD will be considered in light of their achievements, given their level of seniority and time since PhD dissertation.

The gross salary for the position of Associate professor is normally from NOK 524 200 - 658 300 (€54,249 - 68,167) before tax per year,â€depending on qualifications and seniority.

Questions about the position can be directed to Head of Department Prof. Hans K. Stenoien, telephoneâ€+ 47 91897592, email stenoien@ntnu.no.

Please find advertisement here: https://-www.jobbnorge.no/en/available-jobs/job/170408/-associate-professor-of-vertebrate-biodiversity Prof. Hans K. Stenoien Head of Department, Dept. Natural History, NTNU University Museum http://www.ntnu.edu/employees/hans.stenoien hans.stenoien@ntnu.no

UCambridge Tech MicrobialEvolution

Link: http://www.jobs.cam.ac.uk/job/22977/ The Ecosystems and Global Change Group led by Dr Andrew Tanentzap at the University of Cambridge (www.ecosystemchange.com) is seeking a full-time Research Laboratory Technician in Microbial Evolution. The Technician will join an exciting new project funded by the European Research Council investigating the ecological and evolutionary importance of molecular diversity in dissolved organic matter (DOM).

The main objective of the position is to support the daily operation of a long-term evolution experiment. This experiment aims to test how a model bacterium (Pseudomonas fluorescens) adapts under different biogeochemical conditions created by different DOM sources and with competing Proteobacteria. More broadly, this experiment will answer questions about the repeatability and pace of evolutionary adaptation and how evolutionary responses vary with ecological interactions.

The Technician will initially be responsible for optimising the experimental design (e.g. inoculum density, growing conditions, competitor renewal), with the bulk of the position spent maintaining the experimental cultures, carrying out daily transfers into fresh media, and regularly preserving colonies. Media will be amended with DOM sourced from different European lakes, and the Technician will have the opportunity to visit these lakes to collect appropriate water samples. The Technician will also run regular competition assays to assess the relative fitness of preserved colonies. Finally, the Technician will be expected to maintain and operate laboratory equipment and support student and postdoctoral research.

The successful candidate must have considerable experience in bacterial culture techniques and media. They will ideally have an undergraduate degree in the Biological Sciences, preferably microbiology or related. Experience with molecular biology, water chemistry, and/or field work is desirable, but not necessary.

Fixed-term: The funds for this post are available for 3 years in the first instance.

Once an offer of employment has been accepted, the successful candidate will be required to undergo a health assessment.

Click the 'Apply' button at http://-www.jobs.cam.ac.uk/job/22977/ to register an account with our recruitment system (if you have not already) and apply online.

For queries on the role please contact Dr Tanentzap ajt65@cam.ac.uk. If you have had no response one month after the closing date you should consider that your application has been unsuccessful on this occasion.

Please quote reference PD20470 on your application and in any correspondence about this vacancy.

The University actively supports equality, diversity and inclusion and encourages applications from all sections of society.

The University has a responsibility to ensure that all employees are eligible to live and work in the UK.

Further details are available at: http:/-/www.jobs.cam.ac.uk/job/22977/file/-further_information_hr7+template.pdf "A.J. Tanentzap" <ajt65@cam.ac.uk>

UEastAnglia SeniorResearchAssoc WarblerEvolution

Senior Research Associate - Microbiota variation, fitness and senescence in the Seychelles warbler

University of East Anglia - School of Biological Sciences Location: Norwich, UK Salary: 33,199 to 39,609 per annum Closes: 5th September 2019 Job Ref: RA1630

Are you an ambitious researcher with expertise in evolutionary ecology or microbiology, and an enthusiasm to understand what drives individual variation in fitness within wild populations?

Fundamental gaps exist in our knowledge of the role that the gut microbiota (GM) plays in the health and evolution of its host. Indeed, we have very little understanding of the causes or - perhaps more importantly - the consequences of individual GM variation within natural populations.

This novel and exciting project now plans to use the uniquely tractable system provided by the Seychelles warbler to undertake a comprehensive investigation into what determines individual GM variation - and how that impacts reproduction, survival and senescence - within a wild vertebrate population.

The Seychelles warbler system is an excellent model as it provides a closed system (no migration in or out) in which we can monitor all individuals - and key parameters of their varying environment - across their entire lives. This includes longitudinal screening of GM composition, measures of individual condition (including telomere dynamics) and accurate measures of reproductive success and survival (to estimate fitness and senescence). A molecularly-verified pedigree also allows us to disentangle the influence of genes and the environment on the GM traits and fitness components.

Candidates need to hold a PhD, or near completion (or equivalent experience) in evolutionary biology, ecology or microbiology, have an excellent understanding of evolutionary concepts, expertise in the analysis of complex data sets (including fitness components and/or microbiome diversity). Experience in molecular lab work, statistics and bioinformatics would be beneficial, as would experience in (and enthusiasm for) fieldwork on animals, and be able to fulfil all the essential criteria in the person specification.

Based in Prof D.S. Richardson's (DSR) group in Biological Sciences (BIO) at UEA (https://people.uea.ac.uk/-david_richardson), the PDRA will also collaborate with Prof Matt Hutchings (MH: an expert in microbiology). They will also be part of the international 'Seychelles Warbler Project' team (http://seychelles-warbler-project.group.shef.ac.uk) and work closely with Dr Hannah Dugdale https://hannahdugdale.wordpress.com/ (an expert on analysing fitness and heritability in wild populations). Within BIO they will actively participate in DSR's and MH's vibrant research groups and in departmental activities, including research development meetings, departmental seminars and journal clubs. BIO provides excellent research facilities and offers a diverse and stimulating research environment with many research groups working on questions related to this project. The Norwich Research Park - home of BIO - also hosts a number of other world-leading research institutions including the Earlham Institute, the John Innes Centre and the Quadram institute (which focuses on gut biology and health)

The full time NERC funded post is for a fixed term of 36 months and is due to commence on 1 November 2019.

Closing date: 5 September 2019.

https://myview.uea.ac.uk/webrecruitment/pages/-vacancy.jsf?vacancyRef=RA1630 David S Richardson Professor in Evolutionary Ecology and Conservation, School of Biological Sciences, Norwich Research Park, University of East Anglia, Norwich NR4 7TJ (44) 01603 591496 e-mail: david.richardson@uea.ac.uk http://biobis.bio.uea.ac.uk/biosql/fac_show.aspx?ID25 Gold (Teaching Excellence Framework 2017) UK Top

15 (The Times/Sunday Times 2017 and Complete University Guide 2018) World Top 200 (Times Higher Education World University Rankings 2017)

"David Richardson (BIO - Staff)" <David.Richardson@uea.ac.uk>

UHI Inverness PopulationGenomics extended

Job: UHI_Inverness.SeniorResearcher.PopulationGenomics

The Rivers and Lochs Institute (RLI), Inverness College UHI, seeks a Senior Researcher in the field of molecular population genomics. Reporting to the RLI Director, the successful candidate will take over management and oversight of an existing portfolio of research projects on the use of genomic technology in the sustainable management of freshwater biodiversity, including leading the supervision of PhD students. Working with the RLI Director, they will also work on the strategic development and sourcing of funding for infrastructure and new projects in this key area of freshwater science, ecology and biodiversity management.

To support our work we are recruiting to the following role: Senior Researcher - Population Genomics Salary range Grade J (?42,367 - ?47,334 per annum) Duration Permanent Working hours 35 hours per week (Monday - Friday) Location Inverness College UHI Closing Date 16th September 2019 (midnight)

The successful candidate will lead a small team of post-doctoral researchers, post-graduate students, and technical support staff within the RLI working on the application of molecular markers to the genetic characterisation of population level biodiversity and its detection, using a range of methodologies. The central focus of the research is on advancing understanding on the nature and extent of direct and indirect genetic impacts on populations of factors such as exploitation, interactions with aquaculture, aquatic invasives, water pollution and climate change. Current work relates primarily to fish biodiversity but the team?s remit is to extend the taxonomic scope of its work to the broader aquatic community. The team also contributes population genomic expertise to projects in the marine and terrestrial sectors working in collaboration with other UHI research groups.

The work of the RLI has a strong emphasis on the Highlands and Islands biogeographic region, but extends to the rest of Scotland and the Holarctic generally. At a regional and national level, the RLI collaborates and has strong links with the freshwater management sector including local fisheries Trusts and Boards as well as regulatory agencies (Scottish Environmental Protection Agency, Scottish Natural Heritage, Marine Scotland Science), water industry (Scottish and Southern Electricity) and aquaculture companies.

RLI genomics work is supported by its state-of-the-art Biodiversity Management Applied Genomics laboratory including a MiSeq Nextgen sequencer and a dedicated eDNA sample processing room, high speed Linux server for data processing, and field study support laboratory, vehicles and boats.

The successful candidate will have a strong record in the development, management and completion of various research projects and in the publication of peer-viewed papers in the field of molecular population genomics. Their project management experience needs to encompass scientific, financial and personnel management. They should also bring to the job a high level of knowledge and expertise in the use of R and R packages for population genetic analysis, experience in programming including Linux and other languages such as Python, as well as in bioinformatics more generally. They also need to bring significant laboratory experience using PCR, Nextgen sequencing, qPCR, in microsatellite and SNP discovery, marker screening, and DNA barcoding and meta-barcoding, the latter in the context of eDNA analysis. Previous experience of working with fish, and particularly salmonids, is highly desirable but not essential but preference will be given to those with a background in and experience working with aquatic organisms.

For informal enquiries regarding the nature of the position, contact:

Professor Eric Verspoor (eric.verspoor.ic@uhi.ac.uk) or Dr Melanie Smith (melanie.smith.ic@uhi.ac.uk) Further information on the position is available at: https://www.inverness.uhi.ac.uk/staff/vacancies/-senior-researcher—population-genomics.html Further information on the RLI is available at: https://-www.inverness.uhi.ac.uk/research/centres/rivers-and-lochs-institute/contact-us/ Inverness College UHI is a key partner in Scotland?s newest University, the University of the Highlands and Islands. As a tertiary institution, the College delivers the further and higher education provision in this part of Scotland. Inverness College UHI delivers one of the widest ranging curricula in Scotland at all levels from basic vocational skills to university Masters Degrees and Doctorates. Delivery takes advantage of the newest technologies; online, blended and face to face learning. The university is

growing, Inverness College UHI is growing,

— / —

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

UKansas Tech EvolutionOfImmunity

Assistant Researcher position in the Unckless Lab at the University of Kansas

The Unckless lab at the University of Kansas invites applications for an assistant researcher that will focus on the evolution of immune peptides. We recently found that several Drosophila antimicrobial peptides show signatures of balancing selection (the adaptive maintenance of multiple alleles). This position would involve dissecting the mechanisms of balancing selection on these peptides using a combination of approaches including population genetics (examining signatures of balancing selection on immune genes), genetics (allele replacement using CRISPR/Cas9 genome editing with subsequent fitness and infection assays), microbiology (minimum inhibitory concentrations, zone of inhibition assays) and biochemistry (structural and functional studies using circular dichroism, NMR, etc.). The goal is to understand how balancing selection maintains alleles from the ecological to the biochemical level.

The successful candidate should have experience in some of the approaches listed above and would be able to develop skills in some of the other approaches. A bachelor's degree in biology or a related field is required.

The Unckless Lab studies evolutionary genetics in general with a focus on the evolution of immunity and selfish genetic elements (meiotic drive). The University of Kansas is home to both the Department of Molecular Biosciences and the Department of Ecology and Evolutionary Biology and members of the lab interact directly with other labs spanning biochemistry, microbiology, genetics, genomics, evolution and ecology. Lawrence, Kansas is a vibrant college town with plenty of good food, cultural events and a wonderful downtown area. The cost of living is very reasonable. We are about 45 minutes from Kansas City.

For more details including required and preferred qualifications and directions about how to apply, please visithttps://employment.ku.edu/staff/15470BR < https://employment.ku.edu/staff/XXXXXBR > . Inquires concerning the postiion can be made to Rob Unckless (unckless@ku.edu). Initial review of applications will begin on Septembet 6, 3019. The position will begin in September 2019.

The University of Kansas prohibits discrimination on the basis of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, retaliation, gender identity, gender expression and genetic information in the University's programs and activities. The following persons has been designated to handle inquiries regarding the non-discrimination policies and are the Title IX Coordinators for their respective campuses: Director of the Office of Institutional Opportunity and Access, IOA@ku.edu, Room 1082, Dole Human Development Center, 1000 Sunnyside Avenue, Lawrence, KS, 66045, 785-864-6414, 711 TTY (for the Lawrence, Edwards, Parsons, Yoder, and Topeka campuses; Director, Equal Opportunity Office, Mail Stop 7004, 4330 Shawnee Mission Parkway, Fairway, KS 66205, 913-588-8011, 711 TTY (for the Wichita, Salina, and Kansas City, Kansas medical center campuses).

"Unckless, Robert L" <unckless@ku.edu>

UMissouri DirectorEvolutionaryBiology

University of Missouri DIRECTOR OF BIOLOGICAL SCIENCES

The University of Missouri (MU) invites nominations and applications for the position of Director of the Division of Biological Sciences (DBS). DBS is housed in the College of Arts and Science, the largest and most academically diverse unit on campus, and the Director will report to the Dean.

The new Director will have the opportunity to lead an established and vibrant biological sciences Division with a strong and successful commitment to research, undergraduate and graduate education, and outreach to the broader community. We seek an individual who will support and contribute to the Divisions strategic vision that builds on its demonstrated strengths in research, teaching, and commitment to inclusive excellence.

The Director is responsible for all aspects of the Division. We seek a dynamic individual who will provide vision,

leadership, and guidance for academic and research programs; recruit high-caliber faculty, students and staff; develop resources to strengthen the long-term viability, efficiency, and effectiveness of the Divisions research and teaching programs; promote collaborative research within the Division and across MU; lead inclusion and diversity efforts within the Division; administer the Divisions budget; collaborate with the dean on fundraising; be an advocate for the department; and mentor faculty at different stages of their careers.

The successful candidate will have an earned doctorate in an appropriate discipline. In addition, the ideal candidate would have a record that could include:

- An established record of excellence in research and teaching in an area that complements departmental strengths

- Program leadership

- Experience with strategic planning, budgetary responsibilities and human resources

- Promoting intra- and inter-departmental collaboration

- Working cooperatively with faculty with a transparent, approachable leadership style respective of the principles of shared governance

- Experience with alumni and donor relations

- Understanding of the dual missions of a Land Grant and AAU Research 1 university

- Experience advancing inclusion and diversity for faculty, staff and students

- A record of leading graduate and undergraduate training programs

- Familiarity with national trends in undergraduate and graduate education

- Be qualified for tenure at the rank of professor at MU.

The Division of Biological Sciences at MU is noted for its excellence in research and teaching. We are distinctive in the breadth and depth of our research and the integrative approaches we take to fundamental problems in biology, ranging from genomes to ecosystems, using a diversity of organisms. We share faculty with an interdisciplinary Life Sciences Center as well as with the Donald Danforth Plant Sciences Center in St. Louis; are active research partners with faculty in

engineering, veterinary medicine, agriculture and natural resources, as well as with research scientists from state and federal agencies, including the Missouri Department of Conservation, the USGS, and USDA-ARS; and are active members of various interdisciplinary academic programs and groups, including the Interdisciplinary Plant Group, the Interdisciplinary Neuroscience Program, the Genetics Area Program, the MU Informatics Institute, the Missouri Maize Center, and the Evolution and Social Sciences Group.

Our faculty members are internationally known researchers and prize-winning teachers and include a Nobel Laureate, a National Academy of Sciences member, a Presidential Early Career Award for Scientists and Engineers recipient, 6 AAAS Fellows, and multiple members of disciplinary societies and honorary organizations.

Our undergraduate major attracts a large (~1100 majors), diverse (12% URM), and talented pool of students, including those interested in graduate, medical and other professional schools. Our graduate program is also vibrant and diverse (22% URM). All of our graduate students receive a competitive stipend, health insurance, and tuition.

Additional information about the Division can found at biology.missouri.edu.

Please apply online at https://hrs.missouri.edu/find-a-job/academic, position number 30843. Use the online application and be prepared to upload (compiled into a single PDF) a detailed curriculum vitae; cover letter summarizing your experience in higher education; a description of research plans and teaching interests; a diversity statement describing your professional experience advancing inclusion within an academic setting; and the names and contact information of three referees willing to write a letter if solicited. Applicants should contact the chair of the search committee (bioscifacultysearch@missouri.edu) with questions about the position and MU Human Resource Services (muhrs@missouri.edu) with questions about the online application process.

— / —

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

UNebraska EvolGeneFunction

The Center for Plant Science Innovation at the University of Nebraska-Lincoln invites applications for a joint Postdoctoral Research Associate in the labs of Dr. Heriberto Cerutti and Dr. Jeff Mower. The aims of the

research will be focused on understanding the evolution of gene function in diverse plants and algae as well as the development of methods for the genetic engineering of plant and algal species, including RNA interference and CRISPR-Cas9. The successful candidate will have access to state-of-the art facilities in the George W. Beadle Center for Genetics Research and acquire experience in genomics, proteomics, and bioinformatics analyses.

The Associate will also have the opportunity to mentor graduate and undergraduate students, design and lead specific experiments, manage and analyze 'omics' datasets, prepare conference presentations and manuscripts, and participate in activities promoting professional and career development organized by the Postdoctoral Association at the University of Nebraska-Lincoln. The ideal candidate will have a promising record of scientific productivity, appropriate to career stage, in biology or genetics. Preferred skills include expertise in plant/algal genetic engineering, functional genomics, and/or molecular biology. The completion of a PhD degree in Biology, Genetics or a related field by the start date of the appointment is required. The position is grant funded and offers competitive salary and benefits package.

To apply please send an email message to Dr. Heriberto Cerutti (hcerutti1@unl.edu) and Dr. Jeff Mower (jpmower@unl.edu) including (1) a cover letter summarizing your research interests, accomplishments, and professional goals; (2) a curriculum vitae with a list of publications; and (3) the contact information for three references. Applications received by September 15, 2019 will be given full consideration. However, applications will be accepted until the position is filled.

As an EO/AA employer, qualified applicants are considered for employment without regard to race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation. See http://www.unl.edu/equity/notice-nondiscrimination . jpmower@unl.edu

UNebraska Kearney EvolutionaryBiologist

Assistant or Associate Professor (Evolutionary Biology), Biology, 55511

Job Description or Duties: The Department of Biology is seeking a tenure-track position at the Assistant or Associate Professor level for the Spring of 2020. The successful applicant will be broadly trained in evolutionary biology. Duties will include teaching on-campus undergraduate and graduate courses, instructing and developing online graduate courses (including one organic evolution course), creating a successful independent research program involving students, and performing service to the department, university, and profession.

Required Qualifications: Earned doctorate (by the start date) in biology or relevant area; two recent (within the last three years) publications in peer-reviewed journals; and teaching experience. Applicants must have demonstrated proficiency in teaching and the ability to develop an externally funded research program that involves students.

Preferred Qualifications: Post-doctoral experience; experience mentoring undergraduate student research; skill in online course delivery methods; demonstrated expertise in STEM education and/or outreach; evidence of grant writing.

HOW TO APPLY: Application review begins August 30, 2019. For more information and to apply visit http://unkemployment.unk.edu/ For more information about the position contact: Melissa Wuellner, wuellnermr@unk.edu. For more information about the online application process contact: 308-865-8522 or employment@unk.edu

SALARY AND BENEFITS: With contingent offer of employment, the University of Nebraska will conduct an investigation of employment records, educational records, criminal records, and other records to verify the information provided in your application and/or any additional information you have provided is accurate. Salaries at the University of Nebraska at Kearney are competitive. The University provides a flexible benefits program at minimal cost to the employee. NuFlex benefit choices include a Medical Plan and Prescription Drug Program, Vision Care, Dental Plan, LTD, Life Insurance, AD&D Insurance, Dependent Life Insurance,

Long Term Care Insurance, and Reimbursement Accounts for Health and Dependent Care. The Employee and Dependent Scholarship program is also available to eligible employees. Basic Retirement Plan options include TIAA/CREF and Fidelity.

The University of Nebraska at Kearney, serving over 6,500 students, is one of four University of Nebraska campuses. Established in 1905, the University has a tradition of emphasis in scholarly teaching at the undergraduate and graduate levels in a variety of disciplines. Kearney, a progressive city of 31,000, is the educational, medical, cultural, commercial and agricultural center of a large mid-state area. http://www.unk.edu/ The University of Nebraska at Kearney is responsive to University issues which support a diverse work and academic environment. The University of Nebraska at Kearney does not discriminate based on race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation in its programs, activities, or employment. This policy is applicable to all University administered programs including educational programs, financial aid, admission policies and employment policies. UNK is an Affirmative Action Equal Opportunity employer. Veterans and persons with disabilities encouraged to apply. The University affirms a policy of equal educational and employment opportunities, affirmative action in employment and nondiscrimination in providing services to the public. University employees, students and others associated with the University who have not received the benefits of these policies, are encouraged to contact the Chief Compliance Officer/ADA Coordinator.

For a copy of the University of Nebraska at Kearney's Annual Security Report, you may contact the Office of Police and Parking Services or visit the website: http://www.unk.edu/annual_security_report simondm@unk.edu

UNewMexico 2 MuseumCurators

THE UNIVERSITY OF NEW MEXICO IS HIRING TWO FACULTY-CURATORS:

ASSISTANT PROFESSOR & CURATOR OF THE HERBARIUM ASSISTANT PROFESSOR & CURATOR OF HERPETOLOGY

We invite applications for two tenure-track faculty-curator positions at the Museum of Southwestern Biology (MSB), a natural history collections facility within the Department of Biology of the University of New Mexico (UNM). Each position will be Assistant Professor of Biology; one will be Curator of the Herbarium, and the other will be Curator of Herpetology.

We seek colleagues with demonstrated commitments to (1) collecting and curating natural history specimens; (2) using specimens to address fundamental questions in biology; (3) pursuing a vigorous, externally funded research program; (4) advancing the integration of specimens into the fields of botany or herpetology, respectively; (5) achieving excellence in teaching and mentoring; and (6) diversity, equity, inclusion, student access, as well as working with a diverse community.

UNM is both a research intensive university (Carnegie R1) and a minority-majority institution. It is located in Albuquerque, a city with a rich cultural heritage in a biodiverse, scenic landscape. The Department of Biology is family-friendly and comprises ~30 tenure-track faculty members (https://biology.unm.edu/core-faculty.shtml), ~1500 undergraduate majors, a thriving graduate training program, and a vibrant portfolio of extramurally funded research.

The MSB (https://msb.unm.edu/) includes eight collections, each headed by a faculty-curator, managed by a full-time collection manager, and charged with a shared mission: to collect and curate biodiversity specimens and information to advance understanding of earth's biota over time and space. MSB holds over four million specimens that contribute to >150 scientific publications annually, and it is a leading institution in the use and development of informatics resources (https://-arctosdb.org/). MSB's cryo-collections comprise more than one-half million samples and are heavily used for basic research ranging from genomics to ecology. The Herbarium and Collection of Amphibians & Reptiles are fully digitized collections, each >100,000 specimens, and with strong traditions of supporting basic research and conservation.

Applicants should submit a cover letter, curriculum vitae, three representative reprints, names of three references, and four two-page statements addressing past, present, and future efforts in (1) research, (2) curation, (3) teaching, and (4) diversity and inclusion. A Ph.D. is required at the time of application, and post-doctoral experience is preferred before the start of the appointment. To apply, visit the UNM jobs website for the appropriate position:

Assistant Professor and Curator of the Herbarium: https://tinyurl.com/yxmk7qgu Assistant Professor and Curator of Herpetology. https://tinyurl.com/y6z44b68 For best consideration, apply by September 16, 2019.

Questions may be directed to search committee chairs, Christopher Witt (cwitt@unm.edu) for the Curator of the Herbarium, and Joe Cook (cookjose@unm.edu) for the Curator of Herpetology.

UNM is an Equal Opportunity/Affirmative Action Employer and Educator. Women and underrepresented minorities are strongly encouraged to apply.

XX

Christopher C. Witt Director & Curator of Birds, Museum of Southwestern Biology Professor, Dept. of Biology University of New Mexico cwitt@unm.edu

Christopher Witt <cwitt@unm.edu>

UNorthCarolina Charlotte BioinformaticsGenomics

The Department of Bioinformatics and Genomics, within the College of Computing and Informatics at the University of North Carolina at Charlotte, invites applications for a tenure-track Assistant Professor. Applicants for this position must hold an earned Ph.D. in bioinformatics or a related discipline. The successful candidate will demonstrate excellence in research via a strong publication record, a record of or potential for extramural funding, and a commitment to mentoring and teaching at the graduate and undergraduate levels. The successful candidate is expected to develop and maintain an independent externally-funded research program. Applications that demonstrate experience with or an interest in promoting diversity through their research and teaching are especially encouraged.

The Bioinformatics and Genomics Department is a research-intensive unit with both a Ph.D. program in Bioinformatics and Computational Biology and a M.S. in Bioinformatics. Faculty in this Department support an undergraduate Bioinformatics Minor and Bioinformatics Concentrations within the Bachelor of Science and Bachelor of Arts degrees in Computer Science. The Department has excellent BSL-2 and BSL-3 wet lab facilities, several high-performance computing clusters, and has dedicated space for postdoctoral fellows, graduate students, and staff. Visit https://bioinformatics.uncc.edu for more information.

Applications must be made electronically at https://jobs.uncc.edu (position #000043) and must include a cover letter, CV, contact information for at least three references, a statement of research interests (max 5 pages), a statement of teaching philosophy (max 2 pages), and PDFs of three publications. As an EOE/AA employer and an ADVANCE institution that strives to create an academic climate in which the dignity of all individuals is respected and maintained, the University of North Carolina at Charlotte encourages applications from all underrepresented groups.

For additional information about the department, please visit our website at https://bioinformatics.uncc.edu. For questions about the position or the application, please contact Dr. Daniel Janies djanies@uncc.edu

Daniel Janies <djanies@uncc.edu>

UOklahoma Tech Genomics

Title of Position: Scientist/Researcher I - Genetics Job Location: University of Oklahoma - Norman Campus Start Date: Spring 2020

This position requires a Bachelors or higher degree in a biological science-related field, with at least two years of experience in genetics. Duties include coordination and protocol implementation in a multi-PI research group that is active in the use of genomic technologies, including ancient DNA, genome reconstruction, and microbiome research (see LMAMR.ORG). Strong organization skills and the ability to perform wet-lab chemistry commonly used in a genomics laboratory is a must. Candidates having prior experience with sample preparation for next-generation sequencing (NGS), including DNA extraction, library preparation, or target enrichment capture, will be preferred. This position will require the use of pre-designed bioinformatics scripts for analyses of NGS data. Candidates with prior knowledge of bash shell scripting will be preferred; however, a training period can be provided for the candidate to acquire the necessary scripting skills.

Earliest start date: Open until filled

Salary Range: $40,000 - $45,400 Benefits Provided: Yes Work Schedule: Full-time, M-F

Required Attachments: Cover Letter, Curriculum Vitae

Required Education: Bachelor Degree, and/or combination of work experience and education, AND: - 12-24 months of experience in genetics

Skills: - Ability to speak, read and write clear, concise English - Basic math skills - Proficient in Microsoft Office - Detail oriented for accuracy of data and infor-

mation - Some technical writing experience

Advertised Physical Requirements: Duties include standing, carrying materials, and frequent communication.

Supervision: 1-5 Staff

Special Instructions: If you are selected as a final candidate for this position, you will be subject to The University of Oklahoma Norman Campus Tuberculosis Testing policy. To view the policy, visit https://-hr.ou.edu/Policies-Handbooks/TB-Testing Hiring contingent upon a Background Check.

Apply at: https://ou.taleo.net/careersection/-2/jobdetail.ftl?job=190887&tz=GMT-05%3A00&tzname=America%2FChicago "Lewis, Cecil M. Jr." <cmlewis@ou.edu>

UTartu 3 EvolGenomics Bioinformatics MolMedicine

Dear colleagues,

We write to you to inform you about 3 free positions at Institute of Genomics, University of Tartu.

Institute of Genomics received H2020 ERA-Chair grant in 2018. The project started from 1st of September 2018 and will last for 5 years.

The proposed ERA Chair 'V the Center for Genomics, Evolution and Medicine (cGEM), aims to apply advancements in genomic medicine in an evolutionarily-aware framework to account for different evolutionary pathways of populations which have led to differences in susceptibility to common diseases. cGEM group (http:/-/cgem.ut.ee), led by Dr Anders Eriksson, was recently formed with the goal to bridge the fields of bioinformatics, evolutionary biology and genomic medicine. The research in the cGEM ERA Chair group will be focussed on combining tools and data from different disciplines to gain insights into the genetic variation, regulatory mechanisms for gene expression and gene-environment interactions responsible for variation in complex human traits and susceptibility to disease within and between and populations, and translating these insights into clinical practise and collaboration with industry.

Who do we need?

1. Senior Research Fellow of Evolutionary and Population Genomics: a researcher in evolutionary genetics, population genetics, computational genetics and genomics or related fields

2. Senior Research Fellow of Bioinformatics and Medical Genomics: a researcher in medical and functional genetics, bioinformatics, personalised medicine or related fields

3. Senior Research Fellow of Molecular Medicine (position under Institute of Clinical Medicine): a researcher in medical genetics and diagnostics, molecular medicine, and/or clinical research or related fields

What do we offer?

The recruitment package includes a competitive salary, fully funded positions for one postdoc and one PhD student to complete the team. It is a 4-year position starting from 1st of November 2019 to 31rd of August 2023, which can be extended if successful.

How to apply?

Applications should include a letter of application, CV, motivation letter, list of research publications, research agenda including contacts of two references and a copy of a document which shows the candidate to hold the required qualification. In your publication list, please explain briefly the relevance of your most important work.

In order to be considered for the position, the candidate must submit required documents to the UT Human Resources Office (email: personal@ut.ee) at the latest on 16.09.2019

Further Information: Mait Metspalu, PhD director of Institute of Genomics, mait.metspalu@ut.ee Andres Salumets, Institute of Clinical Medicine, andres.salumets@ut.ee Anders Eriksson, PhD, cGEM ERA Chair, group leader genomics guided evolutionary medicine, anders.eriksson@kcl.ac.uk Merit Kreitsberg, project manager, merit.kreitsberg@ut.ee

– Dr Anders Eriksson Department of Medical & Molecular Genetics, Kings College London

anders.eriksson@kcl.ac.uk

UVictoria GeneticsGenomics

Assistant Professor Biology - Faculty of Science

Faculty Position ??? Assistant Professor in Genetics / Genomics

The Department of Biology at the University of Victoria invites outstanding candidates to apply for a tenure-track appointment at the rank of Assistant Professor in

the field of genetics and / or genomics with an expected start date of July 2020. We are a diverse department that fosters a collegial and collaborative environment. Candidates who share this vision and can bring further expertise in genetics / genomics to our department???s strengths in ecology, evolutionary biology, marine science, developmental biology, neuroscience, forest biology, and/or environmental health are especially encouraged to apply.

Requirements Candidates must have a PhD with postdoctoral training in genetics / genomics. They must demonstrate potential to develop an externally funded, independent and original research program, and a strong commitment to excellence in research and teaching. The successful candidate will teach at the undergraduate and graduate levels, share in the administrative responsibilities of the department, and play an active role in the advising and supervision of graduate and undergraduate students.

The following will be considered assets: A strong record of publication in the area of genetics / genomics in peer-reviewed, scientific journals; a record of teaching or active student mentorship recognizing the diversity of student experiences; and experience in and commitment to respectful and collegial relationships.

Candidates should submit a single PDF document that includes a cover letter outlining how the candidate meets the requirements of the position, a CV, and a 2-page description of their proposed research program (including how it complements current departmental strengths). Candidates must provide a 2-page statement on teaching experience and teaching philosophy, including how they will support diversity and inclusiveness in teaching and research. Candidates must also include the names and contact information for three referees.

Additional information The University of Victoria is consistently ranked in the top tier of Canada???s research-intensive universities. Vital impact drives the UVic sense of purpose. As an internationally renowned teaching and research hub, we tackle essential issues that matter to people, places and the planet. Situated in the Pacific Rim, our location breeds a profound passion for exploration. Defined by its edges, this extraordinary environment inspires us to defy boundaries, discover, and innovate in exciting ways. It???s different here, naturally and by design. We live, learn, work and explore on the edge of what???s next???for our planet and its peoples. Our commitment to research-inspired dynamic learning and vital impact make this Canada???s most extraordinary environment for discovery and innovation. Experience the edge of possibilities for yourself

Faculty and Librarians at the University of Victoria are governed by the provisions of the Collective Agreement. Members are represented by the University of Victoria Faculty Association.

Contact information The application document should be emailed with the subject ???Genetics / Genomics??? to: Chantal Lalibert?? (biology@uvic.ca). For questions regarding the position please contact

Dr. Barbara Hawkins, Chair of the Department of Biology via email (biochair@uvic.ca) or phone (250-721-7091). Information about the Department of Biology can be found here: www.uvic.ca/science/biology Application deadline Review of applications will begin on September 9, 2019

Equity statement UVic is committed to upholding the values of equity, diversity, and inclusion in our living, learning and work environments. In pursuit of our values, we seek members who will work respectfully and constructively with differences and across levels of power. We actively encourage applications from members of groups experiencing barriers to equity. Read our full equity statement here: www.uvic.ca/equitystatement The University acknowledges the potential impact that career interruptions can have on a candidate???s record of research achievement. We encourage applicants to explain in their application the impact that career interruptions have had on their record.

Persons with disabilities, who anticipate needing accommodation for any part of the application and hiring process, may contact Faculty Relations and Academic Administration in the Office of the VP Academic and Provost at FRrecruit@uvic.ca. Any personal information provided will be maintained in confidence.

All qualified candidates are encouraged to apply; in accordance with Canadian Immigration requirements, Canadians and permanent residents will be given priority. Please indicate in your application package if you are a Canadian citizen or permanent resident.

— / —

WashingtonStateU Microbiome

Microbiome Biology Washington State University, School of Biological Sciences Vancouver, Washington

Position summary The School of Biological Sciences at Washington State University invites applications for a full-time, tenure-track Assistant Professor position in Microbiome Biology to begin August 16, 2020 on the Vancouver campus. The successful candidate will be expected to establish an internationally recognized, externally funded research program, teach undergraduate and graduate courses, and participate in service. Salary is competitive and commensurate with training and experience.

Candidates should have a research program focused on microbiome biology, potential for collaborative research and training, and the ability to complement WSU Vancouvers existing research strengths. Area of expertise is open. Priority will be given to candidates with research focus on the animal microbiome and the relationship between the microbiome and host physiology and/or behavior, including the impact on human health. Preference will be given to a researcher who employs both bioinfomatic analysis of large, complex biological data sets and experimental approaches to understanding microbiome-host interactions, including modern genetic or genomic approaches.

Washington State University is a multi-campus Tier 1 research university with faculty in the School of Biological Sciences on three campuses (WSU Vancouver, WSU Pullman and WSU Tri-Cities). WSU Vancouver is a growing campus (currently ˜3,500 students), with science and engineering as areas of emphasis. Located on a beautiful 351-acre campus across the Columbia River from Portland, Oregon, WSU Vancouver offers opportunities for research and collaboration including faculty on other WSU campuses. In addition, there is a rich variety of nearby institutions for potential collaboration (e.g. Portland State University, Oregon Health Sciences University, Lewis and Clark College, Reed College, Oregon State University, Legacy Research Institute, Providence Health and Services Research, Legacy Salmon Creek, Kaiser, etc.), and an excellent quality of life.

Job Duties and Responsibilities 1. Develop and maintain an externally-funded research program in microbiome biology, including a strong publication record. 2. Recruit and train graduate and undergraduate students. 3. Teach undergraduate and graduate courses. 4. Participate in service within and outside of WSU. 5. Advance WSUs commitment to diversity.

Minimum/required qualifications 1. Earned doctorate in Microbiome Biology or related field by Dec 31, 2019. 2. Externally-funded research program in microbiome biology or demonstrated potential to develop such a program 3. Strong publication record relative to career stage 4. Demonstrated ability or potential to mentor graduate students and direct graduate research 5. Demonstrated ability or potential to develop and teach undergraduate and graduate courses that complement the existing curriculum 6. Demonstrated ability or potential to serve under-represented groups and to contribute to WSUs diversity goals in research, teaching, mentoring, and/or service (See WSU Diversity Goals < https://www.vancouver.wsu.edu/strategic-plan/goal-4-equity-diversity >).

Preferred qualifications 1. A record of applying modern genetic or bioinformatic approaches to microbiome biology 2. Ability to complement existing research strengths and collaborate in the College of Arts and Sciences on the Vancouver Campus and across the WSU system. 3. A record of collaborative research and training. 4. Demonstrated ability to communicate effectively with both students and colleagues.

To apply visit wsujobs.com < https://-www.wsujobs.com/postings/47054 > and upload the following application materials: (1) Letter of application addressing qualifications (2 page maximum); (2) Curriculum vitae; (3) A statement of teaching philosophy and interests (2 page maximum); (4) A summary of research accomplishments and plans for future research (2 page maximum); (5) Up to three representative reprints of published or in press papers; (6) A statement on equity and diversity (guidelines found at https://ww-w.vancouver.wsu.edu/sites/www.vancouver.wsu.edu/-files/uploaded- files/equity-diversity-statement-guidelines.pdf) (7) Three letters of recommendation that address the applicants history of and potential for research, teaching and communication excellence are required. The reference letters will be automatically and immediately requested and obtained from the reference provider through our online application system.

— / —

YorkU LabManager BeeGenetics

Lab Tech Position, York University, Toronto, Canada

The Zayed Lab (www.yorku.ca/zayedlab) in the Department of Biology, York University (Toronto, Canada), has a position available for a Lab Tech with expertise in insect molecular biology and genetics starting Fall 2019.

The successful candidate will participate in a pioneering project to improve the health of Canadian honey bees. Our research will measure stressor-induced changes in the honey bee transcriptome in order to identify diagnostic markers of colony health.

We are particularly seeking individuals that have expertise in RNA extraction and gene expression profiling, as well as experience in training and working with undergraduate students.

Degree: MSc or PhD in Biology

Salary: $45,000 per year

Please submit your cover letter, CV, and contact information for 3 referees to honeybee@yorku.ca by September 12th, 2019.

Ida Conflitti <iconflitti@gmail.com>

YorkU Toronto EvolutionaryEcol

Dear subscribers,

We are excited to share the following job announcement with you. We welcome applications from evolutionary ecologists with strong field research programs.

http://webapps.yorku.ca/academichiringviewer/-viewposition.jsp?positionnumber=87 Position Information *Position Rank:* Full Time Professorial Stream - Assistant Professor *Discipline/Field:* Field Biology *Home Faculty:* Science *Home Department/Area/Division: *Biology *Affiliation/Union:* YUFA *Position Start Date:* July 1, 2020

The Department of Biology, Faculty of Science at York University invites applications for a tenure-track professorial-stream appointment in Field Biology at the Assistant Professor level, to commence July 1, 2020. Salary will be commensurate with qualifications and experience. All York University positions are subject to budgetary approval.

The successful candidate will have an outstanding early career record in ecological field research at the organismal, population or community levels of study. These areas of ecology intersect a broad suite of ecological theories including (but not restricted to) those in landscape ecology, conservation biology, plant/animal physiology, disease transmission and population genetics. Key criteria will include exploration of ecological questions across taxa, expertise in a variety of field biology experimental techniques and strong empirical skills.

The successful candidate will join a strong ecological research community in the Department of Biology that includes a Canada Research Chair in Ecotoxicology, a York Research Chair (YRC) in Global Change Biology and a YRC in Genomics.

The Biology Department is a member of the Ontario Program in Field Biology and also offers stand-alone local field courses. This position will enhance current teaching in Field Biology, Ecology, and Environmental Management, and involve the supervision of honours thesis field projects. Collaborations between research groups within Biology, Glendon College, and the newly proposed Faculty of Environment are anticipated.

The successful candidate will have a PhD in Biology or related discipline, postdoctoral experience, an outstanding research record that includes excellent research output and momentum as well as publishing in very high-quality refereed journals, demonstrated excellence or promise of excellence in teaching and scholarly research, and will be expected to develop an innovative independent research program.

The candidate must be eligible for prompt appointment to the Faculty of Graduate Studies and will teach in both undergraduate and graduate level courses. Pedagogical innovation in high priority areas such as experiential education and technology enhanced learning is preferred.

Further information about the Department of Biology in the Faculty of Science can be found at http://-science.yorku.ca/biology/ . York University has a policy on Accommodation in Employment for Persons with Disabilities < http://secretariat-policies.info.yorku.ca/-policies/accommodation-in-employment-for-persons-with-disabilities/ >and is committed to working towards a barrier-free workplace and to expanding the accessibility of the workplace to persons with disabilities. Candidates who require accommodation

during the selection process are invited to contact Dr. Bridget Stutchbury, Chair of the Search Committee at bstutch@yorku.ca.

York University is an Affirmative Action (AA) employer and strongly values diversity, including gender and sexual diversity, within its community. The AA Program, which applies to women, members of visible minorities (racialized groups), Aboriginal (Indigenous) people and persons with disabilities, can be found at http://acadjobs.info.yorku.ca/ or by calling the AA line at 416-736-5713. Applicants wishing to self-identify as part of York University's Affirmative Action program can do so by downloading, completing and submitting the form found at: http://acadjobs.info.yorku.ca/-affirmative-action/self-identification-form/ .All qualified candidates are encouraged to apply; applicants who are external to York University will not be considered without a completed mandatory Work Status Declaration form which can be found at http://acadjobs.info.yorku.ca/affirmative-action/work-authorization-form < http://acadjobs.info.yorku.ca/-affirmative-action/work-authorization-form >.

— / —

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

Other

AgeSpecific variation data

We are seeking empirical data, published or unpublished, on variance in reproductive success of individuals of the same age and sex. Life tables typically include age-specific survival and fecundity; we are interested in a 3rd age-specific vital rate, which is the variance in production of offspring among all same-age, same-sex individuals in one year or reproductive season. For example, from a standard life table you might find that males aged 6 produce an average of bx offspring. We are interested in Vx, which is the variance in offspring number of age-6 males around the mean of bx. Age-specific variances in reproductive success are important biologically but are reported less frequently than mean fecundity and survival rate. The ratio Vx/bx has been called the Index of Variability (Crow and Morton 1955 Evolution 9:202-214) and is a key determinant of effective population size, and Crow (1958 Human Biology 30:1-13) considered the ratio I = Vx/(bx^2) = Index of Total Selection to provide an upper limit to the rate of evolution by natural selection.

The ratio Vx/bx is very sensitive to the value of bx, so it is important that we scale the ratio to what it would be in a stable population. This requires data on

age-specific survival, so the ideal datasets would have age-specific data for bx, Vx, and survival. Nevertheless, we can use raw values for bx and Vx if survival data are not available. It is not necessary to have separate data for both sexes, but that of course would be ideal. For iteroparous species lifetime variance in reproductive success is also a key parameter, but for this project we are focusing on reproduction in one year or breeding cycle.

We have already scoured the following sources: Clutton-Brocks 1988 book on Reproductive Success; the 63 life tables compiled by Waples et al. 2013 (PRSLB 280: 20131339); and the ~20 additional life tables compiled by Fung and Waples (2017 Conservation Biology 31:883-893), and we are using various keywords to search the published literature. However, we expect that many datasets like this will be hard to find and wed like your help locating them. We are particularly interested in leads to unpublished or gray literature datasets, processed reports, species status assessments, dissertations, etc., that might contain useful information. Our primary interest is reproduction in natural populations. Depending on the circumstances, captive breeding data might be useful, but not data for programs where reproduction has been heavily managed (e.g., commercial livestock or forestry).

Please send any data, leads, or suggestions for potential data sources to Summer Ai (aixinransummer@gmail.com). If you have any questions, please contact Robin Waples (robin.waples@noaa.gov).

Thanks very much for your assistance.

Robin Waples, NOAA Fisheries, Seattle

Anjanette Baker <theaga@theaga.org>

EECGAward NewDeadline

NEW DEADLINE for the 2020 Evolutionary, Ecological, and Conservation Genomics (EECG) Research Awards: Friday, Dec. 13, 2019!

The American Genetic Association grants EECG Research Awards to graduate and post-doctoral researchers who are at a critical point in their research, where additional funds would allow them to conclude their research project and prepare it for publication.

Application materials will be available on the AGA website in mid-October. Learn more at https://-www.theaga.org/announcements-and-awards.htm .
ccough-schulze@cvm.tamu.edu

EvolutionaryBotany prize

The Rising Star in Botany prize for undergraduate and graduate students will be awarded at the annual meeting of the Society for Integrative and Comparative Biology (SICB) in Austin, Texas in January 2020. Finalists will be selected to give a talk in the Rising Star symposium, and the winner will receive a $2000 grant for research support. Application instructions can be found at: http://sicb.org/meetings/2020/risingstar.php .The deadline for applying is Sept. 5th, 2019.

Please direct questions about this award to stacey.d.smith@colorado.edu

stsm4607@colorado.edu

Evolution outreach survey

Dear Evoldir Community,

If you have and/or run any evolution-related outreach activity please let the *EuroScitizen COST Action to Build Scientific Literacy in Evolution* know by answering to the survey you can access here: https://docs.google.com/forms/d/e/-1FAIpQLSevjRAZa6f2XYjeJ4BpRhtu8UL4hBiFmnAGWkkPQ9b-uKalNg/viewform .

For more information please read the email below or send an email directly to euroscitizen@gmail.com.

You can also find more information about the EuroScitizen goals and projects here: http://-www.euroscitizen.eu/ Best regards, Marta Marialva

———- Forwarded message ——— From: HéloÃÂse Dufour - EuroScitizen COST Action <euroscitizen@gmail.com> Date: Sat, Jul 27, 2019 at 10:25 AM Subject: EuroScitizen evolution-themed outreach activities survey To: <martamarialva@gmail.com>

EuroScitizen evolution-themed outreach activities survey View this email in your browser <

https://mailchi.mp/8cf46a4bd8da/euroscitizen-evolution-themed-outreach-activities-survey?eÂdd4b3863 >

Dear EuroScitizen member,

We are glad to announce that evolution-themed outreach activities survey is ready to be distributed widely.

The goal of this exploratory survey is to collect evolution-themed outreach activities performed in any non-formal education environment (museums, science centres, festivals, online, etc.). Activities on formal education setting can also be included. The survey will help us gather the information for the pilot study of assessment of informal learning environments in evolution education (WG3's Deliverable 1).

The survey was created by EuroScitizen WG3 members (Informal Educators) in collaboration with WG5 members (Scientists).

We would greatly appreciate if you could fill out the survey <

https://twitter.us19.list-manage.com/track/-click?u9ed1942c3bc556a147a38e26&id˜ab00aa18&eÂdd4b3863 > and also help us distribute it widely to colleagues and friends who are possibly not members of the EuroScitizen Action. We are hoping to have the results of the survey ready for our Split Meeting, at the end of September/October 2019.

Many thanks for your help, participation and distribution of the survey!

Best, EuroScitizen WG3 members in collaboration with WG5 members.

<

https://twitter.us19.list-manage.com/-track/click?u9ed1942c3bc556a147a38e26&id 2a78f48d&eÂdd4b3863 >

This email was sent to martamarialva@gmail.com *why did I get this?* <

https://twitter.us19.list-manage.com/-about?u9ed1942c3bc556a147a38e26&idçd16d5c67&eÂdd4b3863&cóc0daa002 > unsubscribe from this list update subscription preferences <

https://twitter.us19.list-manage.com/-profile?u9ed1942c3bc556a147a38e26&idçd16d5c67&eÂdd4b3863 > EuroScitizen §EuroScitizen CA 17127 §Avenue Louise 149 §Brussels 1050 §Belgium

< http://www.mailchimp.com/monkey-rewards/-?utm_source=freemium_newsletter&utm_medium=-email&utm_campaign=monkey_rewards&aid9ed1942c3bc556a147a38e26&afl= 1 >

Marta Marialva <martamarialva@gmail.com>

Outreach CallForNatlRepresentatives

Dear evolution enthusiasts!

Are you an educator, researcher, science communicator or policy advisor adviser interested in science outreach and evolution? Do you think evolution literacy is fundamental for decision making processes that affect personal and public well being? Do you want others to discover and understand the fascinating science of evolution?

Become part of our international team and help foster evolution literacy in your country, across Europe, and beyond. Apply here forms.gle/f9tzTgNycqKPfy6w9to be an EvoKE National Representative and connect EvoKEs network with people in your country working in the field.

Deadline: 29th September

Apply here: forms.gle/f9tzTgNycqKPfy6w9

More information about the duties of the National Representatives and about the nomination process here: evokeproject.org/evoke-national-representatives/

Szymek Drobniak On behalf of the EvoKE Board

Szymek Drobniak JU <szymek.drobniak@uj.edu.pl>

SexSpecific GeneticVariation Data

Other: Unpublished data on sex-specific genetic variation

Dear Colleagues,

We are currently conducting a meta-analysis on sex-specific genetic variances of fitness components. Specifically, we aim to test whether additive genetic variances of reproductive success (and other fitness correlates) differ between males and females.

Because meta-analyses are often sensitive to publication bias, we are looking for unpublished datasets that quantified genetic variances of both sexes within the same experimental setup or field population. Ideally, the data should include sample size, mean estimate,

unstandardised genetic variance, coefficient of variation, and heritability estimates for both sexes.

If you have, or know of, such unpublished data sets, we would love to hear about it. Moreover, we would be very grateful if you could point us to published work that provides this type of information but may go unnoticed in database searches applying search terms like genetic variation, heritability and reproductive success.

Please email suggestions or questions to: janicke.tim@gmail.com

Many, many thanks in advance!

Tim Janicke (CEFE-CNRS, Montpellier)

with

Lennart Winkler (Technische Universitaet Dresden) Maria Moiron (CEFE-CNRS, Montpellier) Ted Morrow (University of Sussex)

Tim Janicke

Centre d'Ecologie Fonctionnelle et Evolutive CNRS-UMR 5175 1919 Route de Mende 34293 Montpellier Cedex 05 France

Phone: ++33 (0) 4 67 61 32 17 Fax: ++33 (0) 4 67 61 33 36

email: janicke.tim@gmail.com home: http://timjanicke.wordpress.com/ Tim Janicke <janicke.tim@gmail.com>

TeachingEvolution BestPractices

Do you have a great educational activity that you use to teach evolution? Share it with Evoke SEEDS!

What is the EvoKE SEEDS?

The EvoKE SEEDS (Selection of Evolution Education practices to further Develop and Spread) project will collect evolution education activities from the community, help authors publish their materials as an open education resource (OER , see more information here < https://qubeshub.org/qubesresources/oer >), and support adaptation of the activity by the community. This project is linked to the EvoKE SEEDS workshop that will take place at EvoKE 2019 meeting, during which the participants will work with selected activities shared by the community and further develop, adapt, and prepare those to be published as OERs.

How can I submit my activity to EvoKE SEEDS?

You can submit your activity in English to EvoKE SEEDS through the form here < https://docs.google.com/forms/d/17enaCn-VIbQh4r1-AhmX7CP-trrIAdO_u3mHqTb6jX8/edit > .

What will Evoke SEEDS do with my activity?

We will select a few of the activities and participants in the EvoKE SEEDS workshop at EvoKE 2019, Split, Croatia (apply here < https://evokeproject.org/applying-for-evoke-2019/ >), will provide the following:

1- Peer review and further development of the activities, adding additional aspects such as assessments or adaptations for different settings or curricula;

2- Preparation of activities for publication as an OER in QUBES (see an example here < https://qubeshub.org/qubesresources/publications/298/1 >) and international dissemination as an EvoKE SEEDS peer reviewed activity.

What about the authorship?

If you share your activity with us and your activity is selected to be an EvoKE SEEDS activity:

-

You will get authorship credit; -

After the workshop you can review the modified version proposed by SEEDS and either choose to publish the activity as you proposed, with the SEEDS modifications published as adaptations, or (preferably), publish the reviewed version as first author, with the SEEDS participants who reviewed it as co-authors.

Share your activity here < https://docs.google.com/forms/d/17enaCn-VIbQh4r1-AhmX7CP-trrIAdO_u3mHqTb6jX8/edit > and let us spread it as one of the EvoKE SEEDS$B!D(B

Join us at EvoKE 2019 here < https://evokeproject.org/applying-for-evoke-2019/ >. Learn about EuroScitizen here < http://www.euroscitizen.eu/ >.

– Kristin P. Jenkins, PhD Director

BioQUEST Curriculum Consortium bioquest.org (608) 622.9394

Summer Workshop 2019 Thanks to everyone for a great workshop! Visit the workshop site to see what happened: https://qubeshub.org/community/groups/summer2019 And watch for Summer Workshop 2020 announcements!

TeachingResources
NESCentVideosCorrupted

Greetings,

Does anyone know what has happened to the "Tree thinking challenges" youtube video produced by NESCent way back when? https://www.youtube.com/-watch?v=wkYLjmRX7mo It is an interactive series of videos featuring some students/actors talking about interpretation of phylogenetic trees. Embedded links address various common misconceptions - it's kind of fun, and I used to use it some of my courses, but upon giving it a preview today, I find that the link in the introductory video doesn't appear. Maybe it has died? Maybe youtube algorithms killed it? Any news would be welcome - I still would find it a useful educational tool if it could be revived.

Happy to summarize and post any helpful responses-ctivey@csuchico.edu.

Thanks, Chris

Dr. Christopher T. Ivey Professor and Graduate Coordinator Biological Sciences 400 W. First St. California State University, Chico Chico, CA 95929-0515

530-898-5812 http://ctivey3.wixsite.com/iveylab
"ctivey@csuchico.edu" <ctivey@csuchico.edu>

PostDocs

ArizonaStateU ComparativeGenomicsEvolution

Postdoctoral Position in Comparative Genomics and Evolution

The Pfeifer Lab invites applications for a postdoctoral position at the School of Life Sciences, Arizona State University. Research in the lab aims to understand how interactions between mutation, recombination, natural selection, and population history shape the genetic differences among primate species. Projects will involve computational methods development as well as analyses of large-scale genomic data sets. Thus, the ideal candidate is expected to have a PhD, or equivalent doctorate, with a strong background in one or more of the following areas: comparative genomics, evolutionary biology, population genetics, computational biology, bioinformatics, computer science, statistics, and/or biostatistics. Specific research topics are open to discussion and mutual interest. Opportunities to gain mentoring experience and/or teaching experience are available. The start date is flexible.

The Pfeifer Lab is part of the Center for Mechanisms of Evolution (biodesign.asu.edu/mechanisms-evolution), the Center for Evolution and Medicine (evmed.asu.edu), and the Arizona Population Genetics Consortium (http://asupopgen.org/az-popgroup/).

Interested applicants should please send a CV and a brief cover letter stating research interests to susanne.pfeifer@asu.edu by August 31, 2019. Informal inquiries are welcome.

– Susanne P. Pfeifer Assistant Professor Arizona State University School of Life Sciences http://spfeiferlab.org spfeife1@asu.edu

ChicagoBotanicGarden ConservationGenomics

Hello all,

Reposting position as forgot to add dates.

Title: Conservation Genomics Post-doctoral Researcher.

Deadlines: Position will remain open until filled, but will likely begin reviewing applications at end of August, and will begin to conduct interviews in Mid September.

Application material: The institution website is a bit sparse but in addition to the application form, please include your full CV, cover letter and a list of 3 references.

Application are accepted online (https://-www.chicagobotanic.org/jobs/postdoctoral_researcher) BUT please also send pdf version of submission directly to me (jfant@chicagobotanic.org) or an email to let me know to look for your application.

Position Overview: We are looking for a postdoctoral researcher with analytical skills in either, Population Genetics, Genomics, Landscape Genetics or Molecular Ecology. The ideal applicant will share our interests in applying these analytical skills towards questions related to conservation, pollination ecology and/or habitat fragmentation. Funding is secured for first 12 months, but there is a grant pending which would allow us to extend this position for another 3 years (4 total). The initial funding is for the postdoc to work with PIs to complete the final year of work on a NSF-funded Dimensions of Biodiversity grant titled "Landscapes of linalool: scent-mediated diversification of flowers and moths across western North America". Data collection for the project is largely complete (RADSeq and Hyb-Seq), therefore they will primarily assist with population genetic analysis of existing data, interpretation of results, and manuscript preparation, although depending on the individual's interest, there are opportunities for the post doc to develop an autonomous project within the grant's objectives. If additional funding is secured, the post doctoral researcher will transition over to a project looking to identify best practices for management of genetic diversity in botanic garden collections for critically endangered species. The successful candidates will be based at the Chicago Botanic Garden, and join a group of enthusiastic scientists focused on addressing key conservation challenges. The Garden and all its programs value diversity in all its forms and are committed to ensuring a sense of belonging to every individual we encounter, regardless of age, race, gender, ethnicity, religion, sexual orientation, physical ability, intellectual ability, or economic status. We anticipate a start date in Fall 2019. Job description can be found (https://www.chicagobotanic.org/jobs/-postdoctoral_researcher). For more information please contact Jeremie Fant (jfant@chicagobotanic.org).

Jeremie Fant (he/him/his)

Molecular Ecologist Chicago Botanic Garden 1000 Lake Cook Rd, Glencoe, Il 60022 Ph 847-835-6959 Lab 847-835-8346 http://sites.northwestern.edu/fant-lab/ http://www.chicagobotanic.org/research Graduate Program: Plant Biology and Conservation, http://www.plantbiology.northwestern.edu NSF-REU: Plant Biology & Conservation Research Experiences for Undergraduates - From Genes to Ecosystems: http://pbcinternships.org/ Genetics Lab <Lab@chicagobotanic.org>

ClemsonU ArthropodMetabarcoding

Postdoctoral Fellowship in Arthropod Biodiversity

The Caterino Arthropod Biodiversity Lab at Clemson University is seeking a postdoctoral scholar to conduct integrative research on arthropod biodiversity in the southeastern United States. This NSF-funded project, Litter Arthropods of High Appalachia, will collect arthropods from leaf litter at sites throughout the southern Appalachians, and utilize metabarcoding procedures to analyze patterns of diversity and endemism across these sites. Some lineages have shown high levels of local endemicity in the region, but the majority have never been analyzed in detail. The ultimate goal of the project is to use novel understanding of diversity patterns across this region to help inform forest management and conservation. The postdoc will work as part of a collaborative team involving the Clemson PI, co-PI Paul Marek at Virginia Tech University, and graduate and undergraduate students at both institutions.

A Ph.D. in Systematic Biology, Entomology, or a related field is required. Candidates should have demonstrated expertise in next-generation sequencing techniques and phylogenetic methods, and have systematic expertise in a relevant terrestrial arthropod group. Candidates having direct experience with metabarcoding will be preferred. Responsibilities will include, but are not limited to, fieldwork, labwork, data analysis, manuscript preparation, mentoring graduate and undergraduate students, presentation at national/international meetings, and outreach.

For more information on the Caterino Lab visit: https://sites.google.com/site/caterinolab/ QUALIFICATIONS: REQUIREMENTS: Ph.D. in Systematic Biology, Entomology, or a closely related field. Candidates must have experience in next-generation sequencing and phylogenetic data analysis.

PREFERRED QUALIFICATIONS: Additional desirable expertise includes metabarcoding, arthropod taxonomy, entomological fieldwork, and morphological and molecular character development. Ideal candidates will have particular expertise in the systematics of a group of terrestrial arthropods prominent in leaf litter.

PAY & WORK SCHEDULE: Standard Hrs: 40. Annual starting salary is USD$47,486, with annual cost-of-living

adjustments. The position will be renewable annually for up to three years, contingent on satisfactory performance.

HOW TO APPLY: To apply, please submit cover letter describing applicable experience, C.V., and contact details for three references as a single pdf document titled: your_name_biodiversitypostdoc.pdf to mcateri@clemson.edu. If a Ph.D. degree has not yet been earned, please indicate anticipated graduation date. Any additional questions about the position may be directed to the PI as well.

Review of materials will begin immediately and continue until the position is filled. To ensure full consideration, please submit materials by August 21, 2019. Start date is negotiable, but the position is open immediately.

JOB LOCATION: Poole Agricultural Center - Clemson Main Campus

The Jeanne Clery Disclosure Act requires institutions of higher education to disclose campus security information including crime statistics for the campus and surrounding areas. As a current or prospective Clemson University employee, you have a right to obtain a copy of this information for this institution. For more information regarding our Employment, Campus Safety and Benefits, please visit the Human Resources-Prospective Employees web page: http://www.clemson.edu/cao/-humanresources/prospective/ Clemson University is an Affirmative Action/Equal Opportunity employer and does not discriminate against any individual or group of individuals on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, veteran status or genetic information.

Michael S. Caterino Morse Chair of Arthropod Biodiversity Director, Clemson University Arthropod Collection Department of Plant and Environmental Sciences (PES) MAIL: 277 Poole Agricultural Center OFFICE: E-254 Poole Agricultural Center Clemson University Clemson, SC 29634-0310 mcateri@clemson.edu Office phone: (864) 656-3105 LAB: sites.google.com/site/caterinolab/ MUSEUM: sites.google.com/site/clemsonarthropodcollection/

mcateri@clemson.edu

ColdSpringHarbor FitnessLandscapes

A postdoctoral position is available in David McCandlish's group at Cold Spring Harbor Laboratory!

Fitness landscapes, molecular evolution, population genetics, proteins.

Informal inquiries welcome / start date flexible. Full ad below.

David M. McCandlish Assistant Professor Simons Center for Quantitative Biology Cold Spring Harbor Laboratory mccandlish@cshl.edu

Relevant links:

https://www.cshl.edu/researchfaculty/david-mccandlish.html https://www.cshl.edu/Research/-Simons-Center-for-Quantitative-Biology.html https://-cshl.peopleadmin.com/postings/15934 —

A post-doctoral position in computational biology is available in Professor David McCandlishs laboratory in the Simons Center for Quantitative Biology at Cold Spring Harbor Laboratory. Research in the McCandlish laboratory is focused on the analysis of high-throughput mutagenesis data, with the goal of accurately predicting the phenotypic, health, and evolutionary consequences of both single and multiple mutations in protein coding and regulatory sequences.

The successful candidate will develop new statistical and mathematical techniques for modeling the effects of mutations. Creativity and the ability to teach oneself new mathematics will be essential. Current research directions involve semi-parametric statistics, Markov chains, Gaussian processes, and population-genetic theory.

This position is affiliated with the Simons Center for Quantitative Biology (SCQB)

Required qualifications: -A PhD in a quantitative discipline such as computational biology, evolutionary biology, molecular evolution, quantitative genetics, bioinformatics, biochemistry, or molecular genetics. Individuals with backgrounds in mathematics, physics or computer science will also be considered. -Strong mathematical skills. -Proficiency in at least one computational environment for the development of new statistical techniques such as R, Mathematica, Matlab, Julia, Python, C, etc.

Informal inquiries are welcome. Please send a CV, one

or two representative publications and a brief statement of research interests to mccandlish@cshl.edu as well as submitting an online application here: http://-cshl.peopleadmin.com/postings/15934 Position Number: 02493-R

We offer a competitive salary and a comprehensive benefits package.

Cold Spring Harbor Laboratory is a world-renowned research and educational institution recognized internationally for its excellence in ground-breaking research programs in cancer, neuroscience, plant biology, genomics, and bioinformatics and broad educational mission.

CSHL is an EO/AA Employer. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of race, color, religion, sex, sexual orientation, national origin, age, disability or protected veteran status.

For more information about CSHL, please visit us at www.cshl.edu . VEVRAA Federal Contractor

david.mccandlish@gmail.com

ColoradoStateU RapidAdaptation

Dear all-

The applied evolutionary ecology group at Colorado State University in Fort Collins, Colorado is seeking a postdoctoral researcher to work on an NSF funded project focused testing and developing fundamental theory regarding the factors that determine the fate of small populations in novel environments. We use Tribolium flour beetles as a model system to conduct experimental evolution. The work will take place in Fort Collins in Ruth Hufbauer's lab (www.hufbauerlab.org/) and we will collaborate closely with Brett Melbourne and his lab group at University of Colorado, Boulder (https:/-/www.colorado.edu/lab/melbourne/). We will experimentally evolve populations in different conditions, and then use genomic approaches to evaluate signatures of adaptive and neutral processes.

Please see the formal job posting here: https://-jobs.colostate.edu/postings/70014 Fort Collins is a great place to live and work, and we'd love to have an enthusiastic and energetic colleague in this position. We have a strong track record in mentoring and supporting career development.

Address any inquiries to me, Ruth Hufbauer (hufbauer@colostate.edu). The deadline of August 31 2019 for full consideration is rapidly approaching.

Best, Ruth Hufbauer

Ruth A. Hufbauer, Professor pronouns: she/her/hers http://www.hufbauerlab.org Colorado State University Dept of Bioag. Sci and Pest Mgmt. 1177 Campus Mail C205B Plant Sciences Fort Collins, CO 80523-1177 USA

office: (970) 491-6945

"Hufbauer,Ruth" <Ruth.Hufbauer@colostate.edu>

Cornell MarineEcolEvolGenomics

Postdoc in marine ecological & evolutionary genomics

The Hare Lab in the Department of Natural Resources at Cornell University is recruiting a postdoc to lead population genomic analyses for an NSF-funded project to identify and spatially map balanced polymorphisms underlying oyster tolerance to low salinity. We are testing the hypothesis that short-term adaptive responses to environmental stress can involve distinct genetic architectures across a habitat gradient, even at spatial scales with high gene flow. These predictions are for the eastern oyster, a species in which high standing genetic variation and low linkage disequilibrium facilitate testing for polygenic architectures. A first goal for this study is to identify candidate genes for tolerance to low-salinity using whole-genome resequencing of experimental challenge before/after samples, supported by an available chromosome-level reference genome. Results will inform models of evolutionary response to environmental change as well as artificial selection strategies in breeding for aquaculture traits.

In general, this study is motivated by the expectation that dispersing genotypes in high fecundity species will have phenotype - environment mismatches resulting in strong viability selection. As a result, functional genetic differentiation is generated across small-scale habitat heterogeneities within each cohort. A second goal of this project is to measure candidate gene variation along the estuarine salinity gradient and test for associations with salinity variation. Field sampling of Delaware Bay eastern oysters will target larvae, newly-settled juveniles and adults to measure the extent and spatial/temporal pattern of recurrent within-generation selection. Oyster sampling this summer captured a strong selection gradient produced by an unusually rainy winter. Environ-

mental data will provide estimates of lifetime salinity exposures for oysters from different locations within the estuary, informing three replicate years of genetic-environment spatial correlation testing.

In addition to collection and analysis of genomic data at Cornell, this position will include summer work at the Rutgers Haskin Shellfish Lab in southern New Jersey where experimental challenge experiments will be conducted. The ideal candidate will have experimental design experience that informs these experiments, but primary responsibility will be for bioinformatic and population genomic analyses of barcoded whole genome and sequence capture data. Laboratory molecular work will be minimal. The candidate also will be encouraged to develop a related, independent project according to their interests.

Qualifications: A PhD in ecological genetics, population genomics or related field is required. We are looking for a creative and productive scientist with strong computational and bioinformatic skills, good communication abilities, and a publication record commensurate with career stage. Programming abilities are highly desirable.

Term is one year renewable for an additional 1.5 years contingent on performance. The start date is flexible, but late 2019 or early 2020 is preferred. Information about salary and benefits at Cornell can be found here: https://postdocs.cornell.edu/postdoctoral-associates-benefits . Interested candidates should send a cover letter describing your relevant experience and interest, a CV, the contact information for three references to Matt Hare (mph75@cornell.edu). Review of applications will begin immediately and continue until the position is filled.

Diversity and inclusion are a part of Cornell University's heritage. Cornell is a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

Matt Hare Associate Professor Department of Natural Resources 205 Fernow Hall Cornell University Ithaca, NY 14853 https://blogs.cornell.edu/harelab/ mph75@cornell.edu 607-255-5685

mph75@cornell.edu

DukeU 2 FungalEvolution

Postdoctoral Positions in the Tri-Institutional Molecular Mycology and Pathogenesis Training Program (Tri-I MMPTP) at Duke University, UNC-Chapel Hill, and North Carolina State University

The Tri-Institutional Molecular Mycology and Pathogenesis Training Program is seeking Postdoctoral Fellowship applicants. This program was founded in 2004 and has been continuously funded by an NIH/NIAID T32 training grant over the past 15 years, and was renewed recently for a fourth five year funding period. Two fellowship positions are available as of August 1, 2019 or thereafter. The program funds both basic and clinical fellows working on all aspects of mycology encompassing model fungi, plant pathogenic fungi, and human pathogenic fungi. Areas of interest span DNA repair and recombination in model yeasts, virulence of human and plant fungal pathogens, antifungal drug targets and mechanisms of action and therapeutic development, evolution of fungi, and clinical infectious diseases, among others. The program is tri-institutional and features training mentors in all thematic areas throughout the Triangle Area of North Carolina, and supports fellows at all three institutions. The program is codirected by Joe Heitman, Andy Alspaugh, and Bill Steinbach, and supports career development through a series of ongoing activities including a monthly lunch meeting series, annual symposia, travel awards to meeting and courses, and regular meetings with scientific advisory committee members and visiting speakers including advisory board members. The program has an illustrious group of alumni (some are listed below), many of whom are leaders in medical mycology or with leadership positions in pharma, industry, and government/NIH. Women and individuals representing diversity in science are encouraged to apply. Interested applicants are encouraged to contact the program co-directors and send a letter of interest, cv, reprints, and references. Further information at the program website: https://mmptp.mgm.duke.edu/- Many program alumni are excelling in independent positions: Robert Cramer (Dartmouth), Brian Smith (Duke), Michael Price (Liberty University), Kirsten Nielsen (University of Minnesota), Crystal Icenhour (CEO Aperiomics), Xiaorong Lin (University of Georgia), Alex Idnurm (University of Melbourne), Marianela Rodriguez-Carres (BASF-RTP), Jarrod Fortwendel (University of Tennessee), Josh Burgess (Epicentre), Min Ni (Regeneron), Wenjun Li (NCBI), Richard Festa (Irvine Scientific), Soo Chan Lee (University of Texas, San Antonio), Xuying Wang (GlaxoSmithKline), Jelena Catania (University of Central Florida College), Ryoko Oono (UC Santa Barbara), and Chelsea Boyd (NIH/NIAID).

Please send application materials to Joseph Heitman at heitm001@duke.edu, Andy Alspaugh at Andrew.alspaugh@duke.edu, and Bill Steinbach at

bill.steinbach@duke.edu.

Cryptococcus neoformans research highlight: completion of the genome sequence (Science 307: 1321-1324, 2005), the genome spans 20 Mb and comprises 14 chromosomes, and production of infectious spores

Melissa Palmer <melissa.sykes@duke.edu>

EastCarolinaU EvolutionBehavior

Reposting now that that the position advertisement is active:

https://ecu.peopleadmin.com/postings/31524 Please contact me with questions: balakrishnanc@ecu.edu

The Balakrishnan Lab (www.balalab.com) is seeking a postdoctoral researcher in behavioral and evolutionary genomics. The primary responsibilities of the fellow will be to contribute to ongoing research projects and to assist with lab oversight and student mentoring. Current projects in the lab include collaborative work on the courtship display behavior and sexual selection in neotropical lekking manakins, brood parasitic behavior, and song learning behavior. Most of these projects have existing data that could be immediately analyzed for publication. The Fellow could contribute to research in one or more of these study systems and will also be encouraged to develop new research avenues.

The postdoctoral researcher will interact with multiple labs and departments where they will gain broad training behavioral and evolutionary genomics. The evolution/behavior/ecology group at ECU is particularly strong (in my humble opinion, http://www.ecu.edu/-biology/). The Balakrishnan Lab is active in outreach and community engagement through Nerd Nite and projects with Sylvan Heights Birds Park (https://-shwpark.com/). Sylvan Heights is a focus of an ECU-wide collaborative initiative and the Fellow would be encouraged to pursue opportunities there. Likewise, though not required, this position could offer the opportunity for the postdoc to develop their teaching experience by contributing to an established workshop on genomic data analysis taught at ECU.

Qualifications: Candidates should hold a Ph.D. in Biology or related discipline and should have demonstrated experience in the analysis of genome-scale datasets (RNA-seq, ddRAD-seq, whole genome resequencing etc.) The successful applicant will be expected to be creative, self-motivated, and able to help mentor and supervise undergraduate and graduate students and work with a diverse team of collaborators.

Start date is flexible, but could potentially be as soon as October 1.

"BALAKRISHNANC@ECU.EDU" <BALAKRISHNANC@ECU.EDU>

FreieU Berlin ExperimentalEvolution

Postdoc, full time, 3 Years, salary grade 13 TV-L FU Freie Universitaet Berlin Reference: AG Rolff_VW

Job description Research in the inter-disciplinary project: Understanding Drug Resistance: Experimental Evolution in a One Health Context funded by the Volkswagen Foundation. This projects combines research on drug resistance in bacteria, viruses and worms and includes Pis from biology, medicine and veterinary medicine. This particular project is jointly supervised by Annette Moter (Biofilm Laboratory, Charite, University Medicine) and Jens Rolff (Evolutionary Biology, FU Berlin)

- Experimental evolution of bacteria in biofilms and liquid culture - Collaboration with researchers in medicine and veterinary medicine - This project is based at the FU and the Charite (University Medicine) - Research and publication - Initiation and of inter-disciplinary collaboration.

Required qualification: A PhD in biology or a related discipline

Desired qualifications and experience: - A PhD on antibiotic resistance evolution - Microbiological and molecular skills - Peer-reviewed publications - Strong interest in inter-disciplinary work - Very good written and spoken English

Please send your application by August 26 to Jens Rolff: jens.rolff@fu-berlin.de (ideally as a single pdf) or post it to: Freie Universität Berlin, Fachbereich Biologie, Chemie, Pharmazie, Institut fÃÂ¼r Biologie, Prof. Dr. Jens Rolff, Konigin-Luise-Str. 1-3, 14195 Berlin Germany

Jens Rolff <jens.rolff@fu-berlin.de>

HarvardU BioinformaticsEvolutionaryBiology

Postdoc Position in Bioinformatics, Evolutionary Biology

Matthew Meselson (Professor of Biology, Harvard), in collaboration with Tim Sackton (Director of Bioinformatics, Harvard FAS), has an opening for a postdoctoral position to use long-read technology (Nanopore, PacBio, 10x) to better understand the unique biology of bdelloid rotifers. The position is available immediately, for one year initially with possible extension dependent on funding. Start date is flexible.

The great majority of eukaryotes reproduce sexually, either constitutively or facultatively, and nearly all that are thought to be entirely asexual diverged only recently from sexual relatives, suggesting that the loss of sex leads to early extinction. Posing a challenge to this generalization and to hypotheses for the evolutionary benefit of sex are a few groups of ancient origin in which, despite considerable study, sexual reproduction has never been observed – the so-called ancient asexuals. The most extensively studied of these are the rotifers of Class Bdelloidea. Although certainly ancient, evidence for their asexuality is entirely negative – the failure, despite much observation, to find males. Using 10x and nanopore sequencing to obtain phased genomic sequences of individuals of the bdelloid rotiferMacrotrachela quadricornifera, the project would conduct a critical test of recent population-genetic evidence that bdelloids occasionally do reproduce sexually, perhaps with meiosis of an atypical sort 'V a situation possibly adapted to the unusual bdelloid life history (Signorovitchet al. 2015. Genetics200:581-590).

Candidates must be proficient in advanced bioinformatic methods of sequence assembly and analysis. Doctoral degree in bioinformatics, evolutionary biology, or related field. Prior experience with analysis of genetic sequences required. Strong communication skills including scientific reading and writing in English necessary.

To apply, please email as a single PDF file to Matthew Meselson (msmeselson@gmail.com) and Tim Sackton (tsackton@g.harvard.edu):

- Cover letter briefly describing your research experiences, skills, interests, and future plan - CV with full publication list and contact information for at least two references.

Contact Matthew Meselson (msmeselson@gmail.com) or Tim Sackton (tsackton@g.harvard.edu) for more information.

"Montgomery, Janet" <jmontgom@mcb.harvard.edu>

IowaStateU EvolutionMitochondria

Postdoctoral Research Associate in Evolutionary Mitochondrial Biology

The Dennis Lavrov laboratory in the department of Ecology, Evolution and Organismal Biology at Iowa State University is seeking qualified candidates for Postdoctoral Research Associate. The successful candidate will join an international team of researchers on a project "Enhancing mitochondrial DNA fidelity to improve mammalian lifespan and healthspan" funded by the Human Frontiers Science Program. The position will be primary responsibility for a comparative analysis of mitochondrial protein and mitochondrial DNA evolution in various groups of animals, with a focus on anthozoan cnidarians.

Potential candidates will have a PhD degree in biology and prior research experience with phylogenetic analysis, ancestral protein reconstruction, and/or adaptive protein evolution. Knowledge of Mitochondrial and/or Anthozoa is desirable but not mandatory. Experience with molecular biology techniques including PCR and sequencing, as well as overexpression and purification of proteins is a plus. The position requires the ability to work independently. Excellent communication skills (both written and oral) are a must. Candidates should eligible for employment in the US, and prepared to commit to 2-3 years of full-time research.

The start date is flexible. Salary will be dependent on experience, and benefits are included. The initial appointment is for one year with the possibility of renewal for up to three years.

To apply, be prepared to provide a cover letter summarizing your research interests and experience, a current CV, and contact information for three references @ https://isu.wd1.myworkdayjobs.com/-IowaStateJobs/job/Ames-IA/Postdoctoral-Research-Associate—Evolutionary-Mitochondrial-Biology_R525 .For inquiries, please email to dlavrov@iastate.edu with the email subject line "Postdoc application: [Your full name]". Please submit your application by September

8, 2019 for full consideration.

Iowa State University is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, age, religion, sex, sexual orientation, gender identity, genetic information, national origin, marital status, disability, or protected veteran status and will not be discriminated against.

Dennis V. Lavrov, Associate Professor Department of Ecology, Evolution, and Organismal Biology, Iowa State University 343A Bessey Hall, 2200 Osborn Dr., Ames, IA 50011-4009 phone: (515) 294-9091 fax: (515) 294-1337 dlavrov@iastate.edu https://sites.google.com/site/-dennislavrov/ dennis.lavrov@gmail.com

IowaStateU UCLondon 2 GenomicsMajorTransitions

Two postdoctoral positions, focused on genomics of major transitions in evolution, are available for a trans-Atlantic collaboration (sponsored by NERC-NSF) between the laboratories of Seirian Sumner (University College London, UK) Amy Toth (Iowa State University, USA) and Sandra Rehan (York University, Canada). One position will be based in London and the other will be based in Ames, Iowa, USA. Apply by August 15 for full consideration.

Whats it all about?

Over 20 years ago, eight major transitions in evolution that explain the emergence of biological complexity were defined, one of which is the evolution of sociality (or superorganismality). Significant advances have been made in understanding the theory underpinning major evolutionary transitions; however, we lack an integrated understanding of the evolutionary patterns and processes of the major transitions. Through this project, we have formulated a new predictive framework on the molecular processes underpinning major transitions; the predictions of this framework will be tested empirically using multi-level genomic analyses of sociality in 16 species of bees and wasps.

What were looking for

The project is mostly computational, involving large-scale comparative genomic and transcriptomic analyses of bee and wasp species that span the stages of the major evolutionary transition from solitary to social living. Most of the datasets are already complete (and those that are not will be complete by end of 2019), allowing the postdoctoral team to get cracking in analysing data to test hypotheses on how major transitions arise at the level of the genes. The successful candidates will be evolutionary biologists with proven track-records in the use of genomic analyses and bioinformatics to address broad evolutionary questions. An in-depth knowledge of social insects and social evolution is not a pre-requisite, but a curiosity about these topics, and a willingness to learn about how and why they evolved, is essential.

Some things you need to know

The two postdocs will work concurrently (on 30 month contracts), one based in the UK at UCL, and the other in the USA at ISU. However, both postdocs will work collaboratively and enjoy considerable mobility between the labs of the three Investigators. These positions, therefore, present excellent opportunities for networking in three countries and world-class institutions and their respective lab groups. The positions are available from Sept 2019; successful candidates must be in post by end of Nov 2019 at the latest.

Interested? Note that applications will be reviewed concurrently for both positions, and you may apply for both.

Apply here for the UK job https://-/atsv7.wcn.co.uk/search_engine/-jobs.cgi?amNvZGU9MTgxNjYyOCZ2dF90ZW1wbGF0ZT05NjUmb3du&jcode=1816628&vt_template=965&owner=-5041178&ownertype=fair&brand_id=0&job_ref_code=-1816628&posting_code=224 Apply here for the US job. https://isu.wd1.myworkdayjobs.com/en-US/-IowaStateJobs/job/Ames-IA/Post-Doctoral-Research-Associate_R63 For questions or inquiries contact:

Dr Seirian Sumner s.sumner@ucl.ac.uk

Dr Sandra Rehan sanrehan@yorku.ca

Dr Amy Toth amytoth@iastate.edu

"Toth, Amy L [EEOB]" <amytoth@iastate.edu>

Israel AncientDNAandDomesticationGenomics

Postdoctoral Fellowship in Wheat Ancient DNA and Domestication Genomics

The Hübner lab at Migal ' Galilee Research institute - Israel, invites applications for a postdoctoral position in wheat ancient DNA and domestication genomics. The project involves analysis of ancient DNA samples of wheat grains collected at different archaeological sites in Israel, representing time gradient along the history of wheat cultivation in the Levant. Ancient samples will be analysed in the context of recent wild and domesticated wheat samples to provide a comprehensive view on the history of wheat domestication and improvement. We are looking for a highly motivated individual with experience in population genomics data analysis and bioinformatics to join this exciting project.

The ideal candidate should have a PhD and relevant research experience in genomics, bioinformatics, population genetics, comparative genomics, or domestication genomics. Although the objectives and direction of the project are already established, the candidates are encouraged to bring their own unique direction and ideas to the project.

The fellowship is for two years, subject to review after the first year. Preferred start date: the sooner the better.

Interested candidates should submit a cover letter, CV, names and contact details of two referees, and a one-page description of their research accomplishments, all as a single PDF file.

Please send questions and application materials to sarielh@migal.org.il

Sariel Hübner MIGAL - Galilee Research Institute 1 Tarshish st Kiryat Shmona 11016, Israel Phone: +972-4-695-3575 sarielh@migal.org.il

Sariel Hubner <sarielh@migal.org.il>

IVBD MonashU MosquitoEvolution

** the old person description was previously attached to the job ad - now corrected **

The Vector and Pathogen Genomics group at the Institute of Vector-Borne disease at Monash University is looking for a skilled postdoctoral Research Fellow to investigate genomic rearrangement and mobile element insertion in Aedes aegypti and its effect on gene flow in wild populations. As well as being a fascinating aspect of genome evolution, this is also a subject of prime interest to the success of population replacement interventions and the specific work of the World Mosquito Program.

In our group we apply omics tools to vectors, viruses and parasites in order to better understand disease transmission and develop tools for disease surveillance and control. Specific interests of the group include population structure and speciation in mosquito vectors, pathogen diversity and relatedness, pathogen-vector interactions and genomic epidemiology. This is all performed within the context of the World Mosquito Program and their global network of Wolbachia-based interventions into dengue and Zika transmission.

The role would suit either a computational biologist looking to work in an important field of infectious disease research, or an experienced entomologist who would like to pursue a postdoc in a computational field. Researchers with previous experience in statistical / population genetics or genomic evolution in insect species are encouraged to apply.

Full ad and application details here (closing 10 Sept): https://jobs.sciencecareers.org/job/501505/-research-fellow/ – Seth Redmond - Senior Research Fellow, Institute for Vector Borne Disease, Monash University seth.redmond@monash.edu | @snredmond Monash University | 12 Innovation Walk | Clayton VIC 3800 Australia https://www.monash.edu/ivbd seth.redmond@monash.edu

IVPP Beijing ComputationalPhylogenetics

Postdoc Position in Computational Phylogenetics

A postdoc position is available in the lab of Dr. Chi Zhang in the Institute of Vertebrate Paleontology and Paleoanthropology (IVPP), Chinese Academy of Sciences (CAS) in Beijing, China. The position is available immediately, and is for two years initially, with possible extension upon progress. The starting date is flexible.

We are developing phylogenetic tools to study speciation and gene flow (hybridization or introgression) using genetic sequence data from extant and extinct species. The development is based on the BEAST2 platform (https://www.beast2.org). Besides, we are improving and applying tools to date species divergences using both morphological and molecular data (MrBayes and BEAST2 primarily). In these projects, you will be expected to contribute to the software development and/or computational tools application to empirical data, while encouraged to develop an independent project where Bayesian phylogenetic computation plays a central role. Our lab has access to the high-performance computing resources in IVPP.

You should have a doctoral degree in bioinformatics, statistics, computer science, evolutionary biology, or related major. You should be comfortable with Bayesian statistics and computation, and have prior experience in programming using Java, C/C++, Python, R, or other languages. If you focus on empirical research, the ability of applying various phylogenetic tools and understanding the outcomes is desired. You need to have good communication, scientific reading and writing skills in English.

Your salary will be covered by Dr. Zhangs research funding. You are also encouraged to apply the CAS President's International Fellowship Initiative (PIFI), category C (http://english.cas.cn/cooperation/fellowships/) and/or the CAS Special Research Assistant if qualified. IVPP is one of worlds premiere paleontological institutions focusing on morphology, taxonomy, phylogeny, paleoecology, and many other fields. More information can be found here (http://english.ivpp.cas.cn/au/bi/).

To apply, please email a single PDF file to Dr. Chi Zhang (zhangchi@ivpp.ac.cn), consisting – a cover letter briefly describing your research experience, skills, interests, and future plan; – a CV with contact information for at least two referees.

Chi Zhang Associate Professor Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences 142 Xizhimenwai Street, Beijing, China zhangchi@ivpp.ac.cn https://-scholar.google.com/citations?user=4othtCUAAAAJ zhangchicool@gmail.com

JiangxiAgriculturalU EvolutionaryBiol

Title: Bee biology Post-doctoral Researcher

Position Overview: We are looking for a postdoctoral researcher with interest and analytical skill in either social behavior, population genetics, comparative genomics, evolution, microbiology or molecular ecology. The applicant has complete freedom to develop his/her own research project. The funding package is available for 2 years and the extension for additional 1 years is possible. The annual salary before tax is 200,000 Yuan.

The successful candidate will be based at Honeybee Research Institute (http://bee.jxau.edu.cn/), Jiangxi Agricultural University (http://english.jxau.edu.cn/), and join a group of enthusiastic young scientists focused on bee social behavior, learning and memory, physiology, evolution and pathology. The institute respects all forms of diversity and personality and encourage early career researchers to apply. The University also has excellent associated kindergarten and elementary school. The position is available immediately and the starting date is negotiable.

The applicant needs to send a research proposal and CV to Prof. Zheng (bees@1965.com).

For more information please contact Zhijiang Zeng (bees1965@sina.com).

Prof. Zhijiang Zeng

Qiang Huang <qiang-huang@live.com>

Linkoping Sweden EvolutionaryGenticsAgeing

Postdoc position for up to 2 years in the research group of Dr Urban Friberg at IFM Biology, Linkoping University, Sweden. Our group has a broad general interest in the area of evolutionary biology/genetics/genomics, and ongoing projects focus on the evolution of ageing and the genetics/genomics of sexual dimorphism (see https://liu.se/en/employee/urbfr20 for more information).

The declining strength of selection with age sets the scene for evolution of ageing, but evolution of ageing also requires mutations with age-specific effects. Despite intense work on the genetics of ageing we unfortunately still have a poor understanding its architecture. We use the model organism Drosophila melanogaster to learn more about this topic, and the successful applicant is expected to primarily work on projects testing how various types of mutations influences the life history of Drosophila melanogaster. The successful applicant will also have the opportunity to develop own ideas related to research topics pursued in the lab.

We seek a bright, highly motivated and enthusiastic person able to work both as part of a team and independently, having a PhD in evolutionary biology/genetics/genomics. Documented experience in one or several of the following topics is highly beneficial: statistics, quantitative genetics, Drosophila genetics/lab work, but expertise in bioinformatics (analyzes of RNAseq data) is also of interest. The working language at the department and lab is English. A high standard of spoken and written English is required. For further inquiries about the position, please email Urban Friberg (urban.friberg@liu.se) or find me at ESEB2019 if you are attending.

Linkoping University is a modern university with a vibrant and growing biology division. The university attracts some 27 000 students from all over the world, creating an international and stimulating research environment as well as providing a multitude of opportunities for collaboration and socializing. Linkoping is located in central Sweden only a couple of hours by train/car from Stockholm, and have beautiful and easily accessible surroundings.

Applications should be written in English and include i) a cover letter with information on your background, research interests and expertise, and your motivation to work on the genetics of ageing (max 3 pages), ii) complete CV, and iii) the names and email addresses of 2-3 independent referees. Applications should be sent as one PDF to urban.friberg@liu.se. The position is open until filled. Applications will be reviewed continuously, but for full consideration please apply by September 30.

Urban Friberg <urban.friberg@liu.se>

MasarykU FishParasiteEvolution

The Laboratory of Parasitology, Department of Botany and Zoology, Faculty of Science, Masaryk University, Brno, Czech Republic is searching for a post-doc candidate interesting in fish parasitology. Two main topics are proposed.

1. Diversity and phylogeny of Gyrodactylus species (Monogenea) parasitizing Peri-Mediterranean cyprinid fish

Project description: Viviparous Gyrodactylus are gill and skin parasites infecting fish. Due to their high diversity, they represent interesting model in evolutionary and ecological parasitology. In a few last years, we already performed the sampling in Euro-Mediterranean area and other sampling is in progress within two next years to collect monogenean parasites of cyprinid fish living in Peri-Mediterranean area exhibiting high level of endemism. The aim of the study will be to describe Gyrodactylus diversity using morphological characters (microscopic determination) and molecular markers, and to evaluate the degree of parasite endemism. The successful candidate will participate in field sampling. Phylogenetic reconstruction will be performed in order to investigate the co-evolutionary associations between Gyrodactylus and their cyprinid hosts and to reveal the historical contacts of cyprinid hosts associated with host switches.

2. Transcriptome analyses of hybrid and polyploid cyprinid species

Project description: Hybridization is a common phenomenon reported in cyprinid fish. Our realized studies focused on parasite diversity in naturally occurring hybrids of several cyprinid species. Currently, under the realization of new project we focused on transcriptomic analyses of selected hybrids. The aim of the study will be to compare the transcriptome profiles of selected

hybrid and pure-breed lines of cyprinid species and to detect the potential genes related to hybrid breakdown. The candidate will actively participate in molecular analyses (qPCR of selected genes affected by hybridization) and experimental studies (life cycle of parasites).

Qualifications: PhD degree in biological science is an obligatory condition. The applicants should study or be employed for at least two years within the last four years at an university or research institute outside the Czech Republic or Slovak Republic. The applicants should publish at least three papers as the first or corresponding author of in journals indexed in the Web of Science database. The applicants with the interest in the first topic should have background in fish parasitology including parasite identification (the passion for gyrodactylid parasites is highly appreciated) based on morphological and molecular markers, at least basic knowledge in ecology and evolution are expected. Previous practice with molecular identification of organisms using basic molecular methods is necessary prerequisite. The applicants with the interest in the second topic should have sufficient background in statistics, knowledge and practice in molecular methods and experience in analyses of next-generation sequence data (the independent work with NGS data is required). The knowledge of library preparation and qPCR are highly appreciated. If interested, please, send (1) CV including a list of publications, (2) motivation letter, and (3) contact details for 2 references to Andrea VeteÂ¹níková Â©imková (simkova@sci.muni.cz) immediately. Deadline for application is 15 September 2019.

Prof. Andrea VeteÂ¹níková Â©imková, Ph.D. Department of Botany and Zoology Faculty of Science Masaryk University Kotláøská 2 611 37 Brno Czech Republic tel. 420-549497363

Andrea Simkova <simkova@sci.muni.cz>

Miano Italy 2 Microbiome Insects

Firstpost-doc position

Postdocposition (12 + 12 months) at DiSAA ' Università degli Studi di Milano, InsectEcology and Evolution group, Milano, Italy.

We arelooking for a postdoc with a consolidate experience (minimum 2 years) inmicrobiome analyses (prokaryotes genomics and metagenomics, RNA sequencing).Our group is planning to start several research projects aimed to investigateinsect-microbiota-plant interactions in different systems (ants-extrafloralnectars-microbiota and tomato endophytes-Spodoptera littoralis-gut microbiota).

Forapplying send an e-mail to matteo.montagna@unimi.it .

Deadlineto apply is 10 of October 2019. Salary is around 1500 euros net/month,including health insurance. The position will start as soon as we find thecandidate.

Thepostdoc will be supervised by Dr Matteo Montagna (https://www.researchgate.net/profile/-Matteo_Montagna)

Secondpost-doc position

Postdocposition (12 + 12 months) at DBS ' Università degli Studi di Milano, Insectphysiology and biotechnology group, Milano, Italy.

We arelooking for a postdoc with a consolidate experience (minimum 2 years) on insectphysiology, including enzyme assays (candidates with experience on lepidopteraas model organisms are preferred), beside this, the candidate is expected topossess basic skills of molecular biology (DNA and RNA extraction protocols, PCR,rtPCR) and techniques in practical microbiology. Our group is planning to startseveral research projects aimed to investigate insect-microbiota-plantinteractions in different systems (ants-extrafloral nectars-microbiota andtomato endophytes-Spodoptera littoralis-gut microbiota).

Forapplying send an e-mail to morena.casartelli@unimi.it

Deadlineto apply is 10 of October 2019. Salary is around 1500 euros net/month,including health insurance. The position will start as soon as we find thecandidate.

Thepostdoc will be supervised by Prof. Morena Casartelli (https://www.researchgate.net/profile/-Morena_Casartelli)

Matteo Montagna <matteo.montagna@unimi.it>

Milano Italy 2 Microbiome Insects

Milan.InsectPlantMicrobiomeInteractions_1

Postdocposition (12 + 12 months) at DiSAA ' Università degli Studi di Milano, InsectEcology and Evolution

group, Milano, Italy.

We arelooking for a postdoc with a consolidate experience (minimum 2 years) inmicrobiome analyses (prokaryotes genomics and metagenomics, RNA sequencing).Our group is planning to start several research projects aimed to investigateinsect-microbiota-plant interactions in different systems (ants-extrafloralnectars-microbiota and tomato endophytes-Spodoptera littoralis-gut microbiota).

Forapplying send an e-mail to matteo.montagna@unimi.it .

Deadlineto apply is 10 of October 2019. Salary is around 1500 euros net/month,including health insurance. The position will start as soon as we find thecandidate.

Thepostdoc will be supervised by Dr Matteo Montagna

(https://www.researchgate.net/profile/-Matteo_Montagna)

Milan.InsectPlantMicrobiomeInteractions_2

Postdocposition (12 + 12 months) at DBS ' Università degli Studi di Milano, Insectphysiology and biotechnology group, Milano, Italy.

We arelooking for a postdoc with a consolidate experience (minimum 2 years) on insectphysiology, including enzyme assays (candidates with experience on lepidopteraas model organisms are preferred), beside this, the candidate is expected topossess basic skills of molecular biology (DNA and RNA extraction protocols, PCR,rtPCR) and techniques in practical microbiology. Our group is planning to startseveral research projects aimed to investigate insect-microbiota-plantinteractions in different systems (ants-extrafloral nectars-microbiota andtomato endophytes-Spodoptera littoralis-gut microbiota).

Forapplying send an e-mail to morena.casartelli@unimi.it

Deadlineto apply is 10 of October 2019. Salary is around 1500 euros net/month,including health insurance. The position will start as soon as we find thecandidate.

Thepostdoc will be supervised by Prof. Morena Casartelli

(https://www.researchgate.net/profile/-Morena_Casartelli)

Matteo Montagna <matteo.montagna@unimi.it>

Montpellier EcoEvoGenomics

Post-doctoral Position in The Dynamics of Eco-evolutionary Systems

CEFE, Montpellier, France, Evolutionary Genetics and Ecology (EGE) group

Starting date: Nov-Dec. 2019 Duration: 2 years, full time , with potential for extension Working place: EGE team in CEFE, Supervision: Patrik Nosil and colleagues

Project short description: Evolutionary and ecological processes can affect one another. For example, evolutionary adaptation within species can affect population dynamics or species interactions in communities, and thus ecosystem functioning. This position is part of a larger research project funded by the European Research Council (Consolidator Grant to P. Nosil, 2 million Euros) to investigate the community and ecosystem level consequences of evolution within species, in this case the stick-insect *Timema cristinae*. The project will specifically test for reciprocal interactions and feedback loops between ecological and evolutionary processes. Key publications pertaining to the project are Farkas et al. 2013 *Current Biology* and Nosil et al. 2018 *Science*.

Requirements: The applicant should hold a Ph.D. degree or equivalent. We are looking for a highly motivated post-doctoral fellow with a solid conceptual and formal background in either: (1) functional genomics (slightly preferred) or (2) theoretical modeling. Excellent written, verbal, and interpersonal skills, a strong work ethic, and the ability to think creatively are required. Key responsibilities will depend on the applicant's expertise. Applicants with stronger experience in functional genomics will be expected to develop and implement transgenic manipulations that target candidate genes for cryptic coloration in insects. Applicants with stronger experience in modeling will be expected to bridge the development of evolutionary models based in population genetics with ecological models based in population dynamics and community ecology. In either case, the applicant will be required to integrate with the current research team and occasionally aid with basic data collection and administrative matters that pertain to research (e.g., getting quotes for sequencing projects). The contract will be with the CNRS-ERC, with a rough monthly gross salary between Â2300 and 3000 depending on experience. It is noted that the quality of life in Montpellier is exceptional, and that the CEFE is a

leading institute in ecological and evolutionary research.

Application documents; the applicants should submit: - A one-page letter with a summary of previous research experience and professional motivation, with a clear statement of whether expertise/interest is more in functional genomics or modeling - Curriculum Vitae - Names and emails of two professional references - An electronic copy of their previous works (ideally scientific publications).

The application should be sent as one single PDF file to patrik.nosil@cefe.cnrs.fr

Applications received before September 20th will be given full consideration. Interviews will be held as soon as possible afterwards

Patrik Nosil <p.nosil@sheffield.ac.uk>

Montpellier RiceMicrobiomeInteractions

Postdoc position (15 months) at IRD in ABIP group at IPME (Interactions Plant-Microorganisms-Environment) laboratory, IRD campus, Montpellier, France.

We are looking for a postdoc with strong experience in microbiome analyses (analyses based on Sequence Variant (DADA2), prediction of functions (PiCRUST), biostats and graphical representation of results using different packages (ggplot, iTOL..). Our group is developing several research projects with developing countries on rice-microbes interactions, including microbiome analyses, microbiome engineering, biostimulants, resistance to pathogens, and rice responses to PGPR . The main work of the postdoc will be to analyse two sets of microbiome data of rice-associated microbes in Africa that are already produced and write two publications (one is dedicated to microbiome variation in different fertilization conditions, the other on correlations between leaf microbiomes and occurrence of rice diseases). A part of the postdoc work will be to train several PhD students on microbiome analyses in France, Senegal and Burkina-Faso. A 2 months mission in Africa is planned in the frame of the position. Starting date is October 2019, but negotiable depending on profile. Candidates with 2 to 4 years experience post-PhD are welcomed to apply. Candidates with a recent PhD can apply only if they developed a strong experience in microbiome analysis during their PhD.

Send applications to Lionel.moulin@ird.fr. Deadline to apply is 10 of September 2019. Salary is around 2000 euros net/month depending on experience, including health insurance.

The postdoc will be supervised by Dr Lionel Moulin (https://www.researchgate.net/profile/Lionel_Moulin)

More informations on the group at http://umr-ipme.ird.fr/equipes/equipe-abip . *Dr. Gilles Béna - IRD*

IPME - Interactions Plant Microorganismes Environnement

image003.jpg911 Avenue Agropolis BP 64501, 34394 Montpellier FRANCE Tél :+33 4 67 41 64 82*_ _*/E-mail/: gilles.bena@ird.fr

Web:http://umr-ipme.ird.fr/ Gilles BENA <gilles.bena@ird.fr>

Montpellier TropicalForestEvolution

The AMAP lab (Montpellier, France) is seeking to appoint a post-doctoral researcher to work on the spatio-temporal dynamics of Marantaceae forest, a presumably stable state of degraded forest in central Africa. The postdoc will be based at the main AMAP headquarter in Montpellier, France, but will work in close collaboration with the Forest and Society and ISEM labs, also in Montpellier. She/He will also participate to fieldwork in the north of the Republic of Congo. The contract must start on 01/12/2019 at the latest, with a duration of 12 months renewable once. The salary depends on the experience of the postdoctoral researcher (gross monthly salary of 2150 euro for juniors (2 years after phD)).

####Context

The spatio-temporal dynamics of forest degradation is poorly known in the tropics, despite its importance for understanding global biogeochemical cycles or for the implementation of carbon mitigation strategies. Forest degradation in the tropics has so far been mostly studied from an ecological succession perspective, where successional processes drive the system into a supposedly stable and “mature” state. However, disturbances may also produce deep and lasting modifications of the forest dynamics, pushing the system to bifurcate to an alternative stable state or to an arrested succession. Our project focuses on a system that probably corresponds to such a stable degraded forest state in central Africa,

the Marantaceae forests. These forests exhibit a very low tree density, almost no tree regeneration, a very low floristic diversity and an impenetrable dense understory composed of giant herbs (> 2 m) mostly belonging to the Marantaceae (arrowroot) and Zingiberaceae (ginger) families. They currently cover very large areas in central Africa where they have been little explored, though representing a critical issue for forest managers. Some previous unpublished works suggest that these forests are extremely stable in time, some likely resulting from anthropogenic disturbances dated from more than 1000 years BP. Besides human disturbances, some Marantaceae forests established following extreme dry events. Thus, under the on-going conjunction of climate change and increasing anthropogenic disturbances, Marantaceae forests are expected to expand at the expense of dense mature forests with important consequences for forest biodiversity, carbon sequestration and other ecosystem services.

####Job description

The main objective of this postdoctoral project is to study the spatio-temporal dynamics of the central African Marantaceae forests in order to assess their long-term stability and dynamics. Our overall approach consists in combining local field experiments, remote sensing analyses and historical ecology approaches. The post-doctoral fellow is intended to conduct an original study from already available data including i) field inventories; ii) old (1950s) aerial photographs; iii) very high resolution satelitte images and; iv) multiple UAV acquisitions with passive images and LiDAR measurements. The main idea is to use time series of remote sensing data and multiple field censuses to test whether Marantaceae forests naturally increase in undisturbed (protected areas) and in disturbed (logged) forests and to assess whether they constitute stable systems (i.e. whether shifts from Marantaceae forests to closed-canopy forests can be observed or not). The expected results will both bring new insights on the conditions of stability of coexisting forest states, which so far have remained elusive, and have strong implications for forest management and conservation in central Africa.

####The team Our group is composed of c. 10 permanent researchers and PhD students working in tropical forest ecology and having extended field experience in Central African forests (see http://amap.cirad.fr/en/-th11.php and http://amap.cirad.fr/en/th9.php). The team also have a strong experience in remote sensing of forest structure, including passive and active sensors. We have our own integrated UAV systems with multispectral cameras and a LiDAR sensor (see e.g. https://www.youtube.com/watch?v=RxGAXC4cefQ).

####Qualifications We are seeking a post-doctoral researcher (PhD required) in ecology, with a background in remote sensing, or a researcher in remote sensing, with a background on forest systems. The postdoc should have strong data analysis skills (particularly in spatial analyses) and must be fluent in an interpreted language (preferentially R). Good writing skills in english and publication records are required. The candidate must be able to work in a collaborative way.

####Applications Applicants should submit their CV with publication list and statement of research interest to both recrutement.dr-occitanie@ird.fr and

— / —

Montreal InfectiousDiseaseGenomics

Postdoctoral Position in Infectious Disease Evolutionary Genomics

*** In addition to the following specific project description, the Shapiro Lab (www.shapirolab.ca) is considering postdoc candidates with broad interests in microbial evolutionary genomics. Please contact Jesse Shapiro if interested: jesse.shapiro@umontreal.ca ***

Description of the research: Pathogenic microbial organisms cause a significant burden of disease, particularly due to the problem of drug resistance, whereby a pathogen no longer responds to treatment by one or more available drugs. The availability of fast, reliable and affordable whole-genome sequencing (WGS) methods has the potential to be a major boon for public health authorities attempting to control the evolution of drug resistance and the spread of epidemic outbreaks.

However, in order to fully harness the power of these methods there is an urgent need for novel machine learning and algorithmic techniques for microbial WGS data. Machine learning (in particular, deep learning) provides a tool to predict and understand the relationship between drug resistance and genotype.

The successful applicant will develop and apply deep learning methods for this task. The project will involve developing new neural network strategies and architectures and applying these methods to improve under-

standing and treatment of drug resistance in bacterial pathogens.

The candidate: The ideal candidate will have a PhD in computational biology, statistics, applied mathematics, or a related field. The candidate should be a self-starter, able to work independently and assist in supervising MSc or PhD students. Experience working with genomic data, and a knowledge of machine learning, GWAS, or other relevant methodologies is an asset. The candidate will be based in the Montreal area, but must be willing to occasionally travel to the Vancouver location.

The offer: The position will be based in Montreal, QC in the group of Jesse Shapiro (Universite de Montreal, Biological Sciences Department), with frequent communication and occasional visits to Vancouver, BC to the groups of Maxwell Libbrecht and Leonid Chindelevitch (Simon Fraser University, School of Computing Science), and funded by a Bioinformatics/Computational Biology grant from Genome Canada.

For more about our research groups see: www.shapirolab.ca www.cs.sfu.ca/ ˜ maxwl/- www.sfu.ca/ ˜ leonid/ The position will come with a competitive postdoctoral-level compensation for two years, with possibility of extension. Applications will be considered on a rolling basis starting immediately. Please send a CV and two relevant peer-reviewed publications to jesse.shapiro@umontreal.ca and maxwl@sfu.ca

NIH Bethesda DiseaseEvolution

Post-doctoral fellowships in infectious disease evolution at the Fogarty International Center, NIH

The Fogarty International Center (FIC), at the National Institutes of Health (NIH) in Bethesda, MD, is seeking post-doctoral fellows to study the evolutionary dynamics of human pathogens. The position is within the Division of International Epidemiology and Population Studies (DIEPS), which has a long history of running computational projects and field studies, developing data-rich models, managing international collaborations and training programs, and translating research findings to policy, particularly in the area of influenza (see MISMS project). In addition to conducting primary research on pathogen evolution, the candidate(s) will have the opportunity to be an instructor at international training workshops in phylogenetic analysis and mathematical modeling. Successful candidates will work in the historic Stone House on the NIH Bethesda campus and enjoy fruitful interactions with the dynamic community of NIH intramural scientists. The candidate will have the opportunity to participate in large research networks that generate pathogen sequence data, for example NIAIDs Centers of Excellence in Influenza Research and Surveillance (CEIRS) and the RSV DIVERGE project. Overall, DIEPS has broad research interests that include disease forecasting, anti-microbial resistance, and zoonoses.

The successful candidate(s) will have a doctoral degree (PhD or equivalent) in computational or evolutionary biology, bioinformatics, or related quantitative fields. Strong quantitative and communications skills are required. The ability to critically evaluate data, publish scientific papers, work in interdisciplinary environments, and present at conferences is essential. Preference will be given to candidates with experience using Bayesian approaches to study the evolutionary dynamics of infectious diseases (for example, using the BEAST package) and an interest in developing methods that better integrate various kinds of metadata into phylogenetic approaches.

Interested candidates should contact Martha Nelson (nelsonma@mail.nih.gov). Applications should include a cover letter, a CV, a brief statement of research interests, and the names (and contact info) of three references. Salary will be commensurate with experience and NIH guidelines.

Thank you! Martha

"Nelson, Martha (NIH/FIC) [E]" <nelsonma@mail.nih.gov>

NorthDakotaStateU PlantHybridization

A highly motivated, interdisciplinary postdoctoral fellow is sought to join the lab of Dr. Jill Hamilton in the Department of Biological Sciences at North Dakota State University (NDSU). The position is a 2 year fellowship, renewable upon satisfactory performance following the first year, and may be extended further as funding permits. The anticipated start date is flexible with possible start date of early 2020 or soon after hiring approval. The successful candidate will combine genome resequence data of Populus trichocarpa, P. balsamifera and their hybrids with phenotyping across

a broad range of environments to predict phenotypic variation in traits of economic and ecological importance. A major goal will be to develop new methods combining spatial modeling of adaptive genetic variation with genotype-phenotype associations to identify genetic variants pre-adapted to novel climates. In addition, this position has an extensive outreach component. Working alongside ArbNet, the post-doctoral fellow will lead and coordinate establishment of Poplar mini gardens in arboreta across the United States and design curricula appropriate for middle school programs that illustrate the principles of climate adaptation and phenological variation. Applicants must be willing to travel to arboreta across the United States and collaborator institutions. The postdoctoral fellow will interact with the Hamilton Lab at NDSU and collaborators at Virginia Tech, University of Vermont and University of Maryland as part of this NSF-Plant Genome funded project. The postdoctoral fellow will be expected to analyze large datasets and lead preparation and publication of peer-reviewed manuscripts and present findings from the research project. In addition, there will be ample opportunity to pursue research questions besides those of the particular study. Salary is commensurate with experience.

Candidates must have 1) a Ph.D. in biology, evolution, genetics, or related area from an accredited university, 2) demonstrated experience working with next-generation sequence data and whole genome sequence datasets, 3) strong oral and written communication skills, and 4) demonstrated ability to work independently and as part of a collaborative team.

Preference will be given to candidates with experience or demonstrated interest in 1) plant evolution and ecology, speciation, and hybridization, 2) quantitative genetics and statistical modeling, 3) species distribution modeling 4) demonstrated experience designing and implementing STEM outreach modules 5) documented ability to successfully publish, including first-author publications 6) mentoring graduate and undergraduate students, 7) grant writing, 8) promoting a culture of safety in the laboratory, and 9) laboratory management skills.

Applicants must submit a cover letter, a curriculum vitae, a description of research experience (2 pages maximum) under Research Plan, and contact information (including telephone numbers and e-mail addresses) for three professional references under Other Document 1. All application materials must be submitted online at: www.jobs.ndsu.edu Review of applications will begin September 6, 2019 and continue until the position is filled.

Questions regarding the search may be sent to jill.hamilton@ndsu.edu.

"Hamilton, Jill" <jill.hamilton@ndsu.edu>

Norwich UK Bioinformatics

Dear Evoldir, I am currently looking for a talented bioinformatician to research the evolution of bacteria within their natural environment to join our young group in Norwich, UK. We do this using metagenomics, tracking bacterial strain transfers between patients and also longitudinal time series metagenomics. More information can be found on the job post: https://quadram.ac.uk/-vacancies/bioinformatician-ecological-networks/ and an our group webpage: www.falk.science This position is at the Quadram and Earlham Institute, that focus on gut microbiome, nutrition and well being, and on new sequencing technologies and large scale data science. For any questions please feel free to email me, I would be happy to provide further information.

Kind Regards,

Falk Hildebrand PI Quadram / Earlham Institute Ext.: 5359 (QIB), 2629 (EI) Norwich Research Park www.falk.science

falk.hildebrand@googlemail.com

NTNU Norway 2 EvolutionaryBiol

Application deadline: 29 September, 2019.

The position is based in Trondheim, Norway, at Department of Natural History, NTNU University Museum, with Associate Professor Mike Martin and Professor II Tom Gilbert. Questions about the position can be directed to Head of Department, Hans K. Stenøien, phone number +47 91897592, e-mail hans.stenoien@ntnu.no. Please submit your application electronically via jobbnorge.no with your CV, diplomas and certificates. Applicants invited for interview must include certified copies of transcripts and reference letters. Please refer to the application number 2019/26592 when applying.

The NTNU University Museum is looking for an energetic and ambitious postdoctoral researcher in computa-

tional hologenomics for a period of up to three years, as part of an international project funded by the Norwegian Seafood Research Fund (FHF). The HoloFish project aims to explore the interactive effect of the genome and microbiome on salmon growth and quality. The HoloFish project is built around an international consortium of universities and private industry (Lerøy Seafood Group, Norway, the Institute for Marine Research, Norway, the University of Copenhagen, Denmark, Aarhus University, Denmark), and the EMBL European Bioinformatics Institute using a combined genomics and transcriptomics approach to bioinformatically characterise, and decipher the interactions between, host genomes and gut microbial communities. The ultimate aim is to test evolutionary hypotheses about the â', and to increase feed efficiency in industrial salmon production

Specifically, this postdoctoral position is in salmon hologenomics, and will be exploring the co-interaction of salmon with their gut microbiota, and how this may affect/condition growth and health under the influence of different feed types. We are looking for a motivated, highly organised and collaborative postdoc, whose role will be to lead the analysis of large volumes of multiomic data. This role will involve: close coordination with an existing international team; quality control and bioinformatic processing of the available genomic, transcriptomic, epigenomic, and metagenomic sequencing data; and implementation of a state-of-the-art computational framework for data analysis on a large computing cluster.

Main duties and responsibilities - Conduct high-throughput data processing (quality control, trimming, mapping, variant annotation, etc.) on hundreds of salmon shotgun genomes, transcriptomes, epigenomes, and metagenomes - Perform bioinformatic and population genomic analyses on the data and lead writing of scientific papers - Attend annual project meetings and contribute towards scientific reports

Qualification requirements A postdoctoral research fellowship is a qualification position in which the main objective is qualification for work in academic positions. Completion of a Norwegian doctoral degree in a topic related to Population Genetics and/or Bioinformatics and/or Computational Biology or corresponding foreign doctoral degree recognized as equivalent to a Norwegian doctoral degree is required. The degree must be completed by the employment start date.

Other qualifications - Documented evidence (in form of published papers and/or PhD thesis) of experience using state-of-the-art methods in bioinformatics and/or computational genomics and/or population genomics and/or GWAS - Experience with analysing NGS data using Unix command-line tools - Fluency in English (written, reading, spoken)

Desirable requirements - Excellent teamwork and communication skills, both verbal and written - Ability to collaborate on a large project alongside senior researchers at both academic and industrial partners - Very good organizational skills - Experience supervising students in computational methods - Experience with publishing GWAS and/or metagenomic data - Knowledge of the principles of genomics and metagenomics - Experience with administration of UNIX servers

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability, as well as motivation, in terms of the qualification requirements specified in the advertisement.

We offer - exciting and stimulating tasks in a strong international academic environment - an open and inclusive work environment with dedicated colleagues - favourable terms in the Norwegian Public Service Pension Fund - employee benefits

Salary and conditions Postdoctoral candidates are remunerated in code 1352, and are normally remunerated at gross from NOK 515 200 before tax per year. From the salary, 2 % is deducted as a contribution to the Norwegian Public Service Pension Fund.

About the application Publications and other academic works that the applicant would like to be considered in the evaluation must accompany the application. Joint works will be considered. If it is difficult to identify the individual

— / —

OxfordU ModellingHIV

Dear all,

We are looking for a Senior Researcher in Infectious Disease Modelling at the Li Ka Shing Centre for Health Information and Discovery, Big Data Institute, Old Road Campus, Headington, Oxford. The position will be grade 8, 40,792 - 48,677 per annum. The closing date is 12 noon on 4th September 2019.

This is an exciting opportunity to join a team trialling an intervention to tackle the HIV epidemic in Zambia and South Africa. You will report to Professor Christophe Fraser, and be based in the Pathogen Dynamics group at the Big Data Institute in Oxford. You will join a modelling team based at Oxford and Imperial College, developing a new highly computationally efficient individual based simulation for use in interpreting the trial. This work involves developing new algorithms for simulation and inference, analysis of complex data from a range of sources, and communication with a wide variety of stakeholders involved in the trial. The researcher will be an integral member of the Pathogen Dynamics group based at Oxford, led by Christophe Fraser. Members of the group study the dynamics of several human infectious diseases using both modelling and pathogen genetics, and the post offers substantial opportunities for career development. You will provide guidance to less experienced members of the research group, including postdocs, research assistants, and PhD and project students.

You will develop and adapt statistical analysis methods, simulation methods, computer code and error-checking methods for use in the project as well as actively manage collaboration with colleagues working on the modelling and health economic analysis of the trial, and more broadly with colleagues involved in the trial as a whole. You will raise research funds through grant applications, and manage own area of a larger research budget and develop research questions within a specific contact and conduct individual research.

You must have a PhD in infectious disease modelling, applied computing, applied mathematics, statistics, epidemiology or relevant quantitative science, together with relevant experience in modelling or simulation science. You will also possess sufficient specialist knowledge in infectious disease modelling, epidemiology or simulation science to work within established research programmes. A strong publication record and familiarity with the existing literature and research in the field is also essential.

For informal inquiries about this position, please contact Dr Lucie Abeler-Dörner lucie.abeler-dorner@bdi.ox.ac.uk.

This full-time position is fixed-term until 31 October 2021 in the first instance.

Further particulars, including details of how to apply, can be obtained from the document below. Applications for this vacancy should be made online.

https://my.corehr.com/pls/uoxrecruit/-erq_jobspec_version_4.display_form?p_company=-10&p_internal_external=E&p_display_in_irish=-N&p_process_type=&p_applicant_no=-&p_form_profile_detail=&p_display_apply_ind=-Y&p_refresh_search=Y&p_recruitment_id=142094
The closing date for applications is 12.00 noon on Wednesday 4 September 2019.

Best wishes, Lucie

Lucie Abeler-Dörner Nuffield Department of Medicine | University of Oxford Big Data Institute | Li Ka Shing Centre for Health Information and Discovery Old Road Campus | Headington | Oxford | OX3 7LF | United Kingdom lucie.abeler-dorner@bdi.ox.ac.uk

Lucie Abeler-Dorner <lucie.abeler-dorner@bdi.ox.ac.uk>

Paris France PopGenetics

Postdoctoral position (1 to 3 years) in LRI Paris-Saclay (France) - population genetics, paleogenomics, machine learning, statistics

We are recruiting a postdoctoral researcher to work on the newly awarded *Human Frontier Science Program (HFSP) project *'Evolutionary changes in human hosts and their pathogens during first contact in the New World' that brings together Emilia Huerta-Sanchez lab (Brown University, USA), Maria Avila-Arcos lab (UNAM, Mexico) and Flora Jay (LRI, France).

Candidates must hold a PhD at the time of recruitment and demonstrated expertise in at least one of the following:

** population genetics, paleogenomics, pathogen genomics, metagenomics, statistical inference, machine learning, deep learning, mathematical modeling. **

Candidates are expected to be proficient in oral and written English and have great communication skills. The selected candidates will have the opportunity to visit the three partner labs for short to mid-time periods and will work in tight collaboration with the 3 labs via regular skype meeting.

* Project description

In this project we will combine the latest paleogenomics techniques with novel population genetics, machine learning, and statistical methods to study the evolutionary dynamics at play in both humans and pathogens in response to epidemics caused by the European colonization of America.

* Role

The candidate will lead and perform statistical analyses of pathogen and human longitudinal genetic data newly sequenced for this project. He/She will develop new mathematical models and/or machine learning approaches to quantify jointly the changes in both pathogen and human diversity across time, identify the signatures of selective pressure, and help understanding the dynamics of adaptation in response to epidemic outbreaks and colonization.

* Location

The position will be based in LRI (Paris-Saclay, France, https://www.lri.fr/index_en.php?lang=EN) a computer science lab hosting leading experts in machine learning and bioinformatics, and the postoc will have the opportunity to gain research experience in the lab of Dr. Huerta-Sanchez (at Brown University in the US) and Dr. Maria Avila Arcos (at LIIGH in Mexico).

* Please email flora.jay@lri.fr for any question or directly send your resume and cover letter detailing your interest and experience to flora.jay@lri.fr, emilia_huerta-sanchez@brown.edu; and mavila@liigh.unam.mx. The evaluation of applications will begin immediately, and will continue until a suitable candidate has been found. The intended start date is October 1st, but it is flexible.

* Investigators

Flora Jay < https://flora-jay.blogspot.com/ > (CNRS/LRI, France) -

Emilia Huerta-Sanchez < https://vivo.brown.edu/-display/ehuertas > (Brown University) - Maria Avila Arcos < http://liigh.unam.mx/mavila/ > (UNAM, Mexico) -

Flora Jay <flora.jay@lri.fr>

PrincetonU HumanGenomicDiversity

Postdoctoral Research Associate Positions Akey Lab Lewis-Sigler Institute for Integrative Genomics

Princeton University

The Akey laboratory (https://lsi.princeton.edu/joshua-akey) located in the Lewis-Sigler Institute for Integrative Genomics at Princeton University, invites applications for multiple Postdoctoral Research Associate or more senior research positions. The Akey lab is broadly interested in the evolutionary, functional, and phenotypic consequences of genetic variation and have ongoing projects in yeast, dogs, and humans.

The successful candidate will leverage existing and novel large-scale WGS data from geographically diverse populations to better understand human history and the evolutionary forces that have shaped extant patterns of human genomic diversity. The specific research program will be tailored to the interests of the individual, but we are particularly interested in archaic hominin admixture, and how interactions between modern and archaic forms of humans shaped the trajectory of modern human evolution. Although this is primarily a computational position, there will be opportunities to develop experimental collaborations (for example, to study the functional and phenotypic consequences of adaptively introgressed DNA). In addition, the successful candidate will benefit from the strong interdisciplinary and collaborative atmosphere in LSI, and have the opportunity to interact with many outstanding research groups in computational, statistical, and functional genomics (including John Storey, Olga Troyanskaya, Mona Singh, Britt Adamson)

Appointments are for one year, with possibility for renewal pending satisfactory performance and continued funding.

The Lewis-Sigler Institute for Integrative Genomics, housed in the Carl Icahn Laboratory at Princeton University, was established to innovate in research and teaching at the interface of modern biology and complementary quantitative sciences. The Institute has a diverse interdisciplinary intellectual environment and provides significant support to its faculty and postdoctoral associates through heavy investment in state-of-the-art infrastructure and resources.

Essential Qualifications: - PhD in Computational Biology, Population Genetics, Statistics, Biostatistics, Computer Science, or other disciplines with strong quantitative background. - Strong programming skills.

Preferred Qualifications: - Experience in population genetics analyses and working with large sequencing data sets. - Strong background in statistical inference. - Highly motivated and independent. - Strong writing and communication skills.

How to Apply: Applications must be submitted online at https://www.princeton.edu/acad-positions/-position/13261. Applications should include a curriculum vitae that includes a list of publications, a brief statement of research interests, and goals and the names and contact information for three references.

*Informal inquiries are welcome. Please contact Josh

Akey at jakey@princeton.edu

These positions are subject to the University's background check policy. Princeton University is an Equal Opportunity/Affirmative Action employer and all qualified applicants will receive consideration for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity or expression, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Laura Gallagher-Katz <lgallagh@princeton.edu>

PurdueU PlantEvolutionaryGenetics

Postdoctoral position in plant ecological and evolutionary genetics at Purdue University

A postdoctoral position is available in the Oakley lab at Purdue University to study the genetic and physiological mechanisms of fitness tradeoffs across environments. We use a combination of field experiments in native habitats and experiments in controlled growth chambers to investigate the links between sequence polymorphism, molecular phenotypes, organismal phenotypes, and ultimately, fitness in contrasting environments. Current and future work will incorporate transcriptomic and metabolomic approaches to studying genotype by environment interactions for fitness. Additional research in the lab is focused on the evolutionary ecology and genetic basis of heterosis and outbreeding depression. Development of new research directions building on these broad themes is strongly encouraged. There is a vibrant community of interdisciplinary plant biologists at Purdue (https://ag.purdue.edu/cpb/faculty/), providing ample opportunity for interaction and new collaborations.

Research activities will include (but are not limited to): Leading growth chamber experiments to estimate freezing tolerance & lifetime fitness, and combining this data with differential expression analyses using RNAseq; field planting and harvesting of experiments at sites in Italy (near Rome) and northern Sweden (three to four trips per year, ~10 days each); overseeing development of CRISPR-CAS9 lines, near isogenic lines, two new recombinant inbred line populations; data analysis; and manuscript preparation.

A PhD in biology or related discipline is required and preference will be given to candidates with a strong background in plant evolutionary biology or plant genetics. The ideal candidate will have an interdisciplinary skill set, having some combination of wet lab, bioinformatic, and experimental biology experience. A strong foundation in R, and at least a basic familiarity with bioinformatic analysis on a cluster is strongly preferred. This is initially a one-year appointment, with the possibility of an extension of another year dependent on funding and performance. A start date sometime before the end of 2019 is preferred, but this is negotiable.

Applicants should send (as a single PDF attachment): CV, a letter summarizing research interests, accomplishments, and fit to the lab and project, and the names and contact information for two professional references. Review of applications will begin September 20, 2019 and will continue until a suitable candidate is found.

Chris Oakley

oakleyc@purdue.edu

https://dev.btny.purdue.edu/labs/oakley/ "Oakley, Christopher G" <oakleyc@purdue.edu>

PurdueU PupfishPopGenomics

A postdoctoral position on the population genomics of White Sands Pupfish is available immediately in Andrew DeWoodys lab at Purdue University. This position is for up to 12 months with the possibility of renewal. Interested parties should email a brief letter of inquiry/interest, a CV, and a short summary of research interests to dewoody@purdue.edu; be sure and check out the lab website before doing so. Purdue University is an equal access/equal opportunity institution.

dewoody@purdue.edu

ROM Toronto AvianEvolution

The Royal Ontario Museum invites applications for a Wendy & Leslie Rebanks Fellowship to conduct postdoctoral research in the Department of Natural History of the Royal Ontario Museum in Toronto. This is a two-year fellowship with an annual salary of $50,000 that provides Canadian citizens or permanent residents the opportunity to conduct research in one of Canada's

leading research institutions. This year we are seeking candidates interested in the phylogenetics and macroevolution of birds. The successful candidate will work full time in the lab of Associate Curator of Ornithology Dr. Santiago Claramunt. Projects would involve phylogenetic analysis of traditional and genomic data, and comparative and diversification analysis potentially incorporating phenotypic data from research specimens with the goal of answering major standing questions regarding the mechanisms and processes of evolutionary diversification.

Candidates should electronically submit a letter of application detailing their interest in the position, research experience, preferred start date (ideally in January 2020), names with contact details of three references, and a curriculum vitae to naturalhistory@rom.on.ca. Application materials must be received by October 14, 2019 for consideration. We especially encourage applications from women and members of minority groups. For inquiries, contact Santiago Claramunt at sclaramunt@rom.on.ca

ON NOW Treasures of a Desert Kingdom: The Royal Arts of Jodhpur, India < https://www.rom.on.ca/en/-exhibitions-galleries/exhibitions/rajasthan >

In the Age of Rembrandt: Dutch Paintings from the Museum of Fine Arts, Boston < https://www.rom.on.ca/-en/exhibitions-galleries/exhibitions/in-the-age-of-rembrandt-dutch-paintings-from-the-museum-of-fine >

It's Alive! Classic Horror and Sci-Fi Art from the Kirk Hammett Collection < https://www.rom.on.ca/en/-exhibitions-galleries/exhibitions/its-alive-classic-horror-and-sci-fi-art-from-the-kirk-hammett-0 >

Gods in My Home: Chinese New Year with Ancestor Portraits and Deity Prints < https://www.rom.on.ca/-en/exhibitions-galleries/exhibitions/gods-in-my-home-chinese-new-year-with-ancestor-portraits-and-deity >

COMING SOON November 16, 2019 | Bloodsuckers: Legends to Leeches < https://www.rom.on.ca/en/-exhibitions-galleries/exhibitions/bloodsuckers-legends-to-leeches >

March 7, 2020 | Egyptian Mummies: Exploring Ancient Lives < https://www.rom.on.ca/en/exhibitions-galleries/exhibitions/egyptian-mummies-exploring-ancient-lives >

Ã€L'AFFICHE Trésors d'un royaume du désert : les arts de la cour de Jodhpur, en Inde < https://www.rom.on.ca/fr/expositions-et-galeries/-expositions/tresors-dun-royaume-du-desert-les-arts-de-la-cour-de-jodhpur-0 >

Au temps de Rembrandt : Les peintures hollandaises du Musée des beaux-arts de Boston < https://www.rom.on.ca/fr/expositions-et-galeries/-expositions/au-temps-de-rembrandt-les-peintures-hollandaises-du-musee-des >

Sauve qui peut! L'art des grands films d'horreur et de science-fiction de la collection de Kirk Hammett < https://www.rom.on.ca/fr/expositions-et-galeries/-expositions/sauve-qui-peut-lart-des-grands-films-dhorreur-et-de-science >

Accueillir les divinités : Portraits d'ancêtres et estampes de dieux pour le nouvel an chinois < https://www.rom.on.ca/fr/expositions-et-galeries/-expositions/accueillir-les-divinites-portraits-dancetres-et-estampes-de >

Ã€VENIR Le 16 novembre 2019 | Soif de sang

— / —

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

SantaFeInst ComplexityInEvolution

Santa Fe Institute's Complexity Postdoctoral Fellowships offer the opportunity for early career scientists to join a collaborative research community that nurtures transdisciplinary thinking about the complex systems that matter most for science and society. The Institute rejects compartmentalized thought common in academia. Instead, SFI scientists transcend boundaries between fields, freely synthesizing ideas spanning many disciplines "from math, physics, and biology to the social sciences and the humanities" in pursuit of creative insights that advance our scientific frontiers.

Application site is at http://www.santafe.edu/-sfifellowship and the deadline is October 27.

Please apply or pass this announcement to any suitable candidates in your or others' research groups. We especially welcome female candidates and those from underrepresented minorities.

The SFI Complexity Postdoctoral Fellowships offer:

- transdisciplinary collaboration with leading researchers worldwide - up to three years in residence at the Santa Fe Institute - dedicated funds for research and collaboration - a structured leadership training program -

unparalleled intellectual freedom - competitive salary and paid family leave

Requirements include:

- a Ph.D. in any scientific discipline within the past 6 years or completed prior to September 2020 - strong quantitative and computational skills - an exemplary academic record - a proven ability to work both independently and collaboratively - a demonstrated interest in multidisciplinary research - evidence of the ability to think beyond traditional paradigms

Please email sfifellowship@santafe.edu I'd be happy to answer any questions you might have.

SFI is an Equal Opportunity Employer and is committed to fostering a diverse and inclusive academic global community. Women, veterans, and members of underrepresented groups are especially encouraged to apply. U.S. citizenship is not a requirement, however, you must be legally able to work in the US. SFI will sponsor a J1 Visa for successful candidates. SFI is not able to sponsor a H1B Visa for candidates.

Hilary Skolnik Santa Fe Institute

hilary@santafe.edu

SGN Frankfurt MammalEvolGenomics

Job offer ref. #11-19012

The Senckenberg Gesellschaft fur 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 Researcher (m/f/d)

in Evolutionary Genomics of Mammals

(100 %)

There is an exciting opportunity for a talented and motivated applicant to join the working group of Prof. Dr. Axel Janke. The applicant will be closely involved in gene flow, evolutionary-population or phylo-genetics to study speciation in mammals (bears, giraffe, kangaroos or allies) at the genomic level.

Your profile:

* PhD in Biology, Genetics, Bioinformatics or a related field

* strong interest and proven skills in evolutionary, population or phylo-genetics, preferentially in gene-flow analyses * experience in genome assembly, annotation and programing of scripts, R * very good written and oral communication skills in English * interest to be involved in an international and interdisciplinary group to expand the work to species distribution modeling and conservation genetics

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 and will initially be limited for two 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. The employer is the Senckenberg Gesellschaft fur Naturforschung.

Please send your application, mentioning the reference of this job offer (*ref. #11-19012*) before *September 1ˆst , 2019* by e-mail (attachment in a single pdf document) and including a cover letter describing your motivation to apply, a detailed CV, relevant credentials and certificates, two relevant publications and contact details of two potential references to:

Senckenberg Gesellschaft fur Naturforschung

Senckenberganlage 25

60325 Frankfurt am Main

E-Mail: recruiting@senckenberg.de

For scientific enquiries please get in contact with Prof. Dr. Axel Janke, axel.janke@senckenberg.de

– Mit freundlichen Grußen / Best Regards

Jessica Helm Personalsachbearbeiterin

SENCKENBERG Gesellschaft fur Naturforschung (Rechtsfähiger Verein gemäß §22 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 Personalbeschaffung (Recruiting) - 1564 di-Biase, Maria - 1313 Helm, Jessica - 1478 Gajcevic, Isabel

Fax: 0049 (0)69 / 7542-1445

Mail: recruiting@senckenberg.de

Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Andreas Mulch, Stephanie Schwedhelm, Prof. Dr. Katrin Bohning-Gaese, Prof. Dr. Karsten Wesche

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

Mitglied der Leibniz-Gemeinschaft

Vernetzen Sie sich mit uns: www.senckenberg.de/-socialmedia recruiting <recruiting@senckenberg.de>

SmithC MarineMicrobialDiversity

*Combining single-cell and community omics to test hypotheses about *

diversity and function of planktonic ciliates. Smith College invites applications for a full-time postdoctoral research position focusing on the biodiversity of ciliates and other SAR (Stramenopila + Alveolata + Rhizaria) lineages in marine settings. The initial appointment is for one year, with the possibility of extending for additional years. The position will be housed in Laura Katz's laboratory < http://www.science.smith.edu/katz-lab/ > in the Department of Biological Sciences questions should be directed to lkatz@smith.edu.

The goals of the project are to: assess species boundaries (i.e. reproductive isolation); characterize transitions of closely-related ciliates across ecological gradients in the ocean; and determine functional differences within and between species through analyses of transcriptomics. The project is part of a long-term collaboration with George McManus < https://marinesciences.uconn.edu/-faculty/mcmanus/ > at the University of Connecticut.

To apply, submit < http://apply.interfolio.com/66890 >a letter of application, C.V., a statement of research interests, representative publications, and the names and contact information of three references. Review of applications will begin August 30, 2019.

****

Research in the Katz lab aims to elucidate principles of the evolution in eukaryotes through analyses of microbial groups, and to assess how these principles apply (or fail to apply) to other organisms. Currently we focus on three interrelated areas: (1) characterizing evolutionary relationships among eukaryotes using single-cell omics and phylogenomics; (2) Exploring the evolution of germline v s somatic genomes; and (3) describing the phylogeography and biodiversity of protists in local environments (bogs, fens, coastal habitats).

Smith College < https://www.smith.edu/ > is a member of the Five College Consortium < https://-www.fivecolleges.edu/ >with Amherst, Hampshire, and Mount Holyoke Colleges and the University of Massachusetts Amherst.

Diversity and a culture of equity and inclusion among students, staff, faculty, and administration are crucial to the mission and values of Smith College. We are an Affirmative Action/Equal Opportunity employer and do not discriminate on the basis of race, gender, age, color, religion, national origin, disability, sexual orientation, gender identity and expression or veteran status in the recruitment and employment of faculty and staff, and the operation of any of its programs and activities, as specified by all applicable laws and regulations. Women, historically underrepresented minorities, veterans, and individuals with disabilities are encouraged to apply.

Application Instructions To apply, go to http://-apply.interfolio.com/66890. Review of applications will begin on August 30, 2019.

–

Laura A. Katz, Elsie Damon Simonds Professor < http:/-/www.science.smith.edu/departments/Biology/lkatz/ > Editor in Chief, Genome Biology and Evolution < https://academic.oup.com/gbe >

Department of Biological Sciences Burton Hall 201 / 44 College Lane Smith College Northampton, MA 01063 Ph: 413-585-3825 Skype: laura_a_katz

Laura Katz <lkatz@smith.edu>

SmithsonianNatHistMuseum InvertEvolution

Hi Folks,

Our postdoc program is accepting applications for multiple different fellowships at the Smithsonian National Museum of Natural History (Smithsonian Institution Fellowship Program (SIFP), GGI Postdocs, and Burch Postdocs). These positions are open to any invertebrate zoologist with a PhD earned within the last six years.

In the SIFP there are also opportunities for graduate students as there are in the Boss Fellowships (see below link to information).

If you are interested in applying please contact me with questions and include a short description of what you would be interested in working on and how being at the Smithsonian for that project would be essential.

I can support applications on any aspect of polychaete, peracarid, or plankton research but am most interested in those that address questions of evolution in the midwater. My lab has current research projects on holopelagic polychaete evolution and biomechanics, a multi-researcher project focused on the evolution of visual systems in hyperiid amphipods, an opportunity to use 30 years worth of midwater transect data to explore ecological and population dynamics patterns of midwater animals, and opportunities to develop projects on connectivity in the open ocean, methods of biodiversity study in the open ocean, or deep sea acorn worm or munnopsid isopod diversity.

The opportunities are summarized here because it can be confusing which ones apply to you.

SIFP = open postdoc or graduate student research https://www.smithsonianofi.com/fellowship-opportunities/smithsonian-institution-fellowship-program/ Burch Fellowship = medically related postdoctoral research https://www.smithsonianofi.com/-fellowship-opportunities/george-e-burch-fellowship/ Boss Fellowships = graduate student short visits to the collection or expert https://www.smithsonianofi.com/-kenneth-jay-boss-fellowship-in-invertebrate-zoology/ GGI = genomics related postdoctoral research and service https://www.smithsonianofi.com/blog/2019/-08/22/global-genome-initiative-buck-postdoctoral-fellowship-program/ Let me know if you have any questions and please feel free to forward this information to anyone you think would be interested and eligible.,

Karen

'X Karen Osborn Research Zoologist/Curator of Polychaetes, Peracarids and Plankton Department of Invertebrate Zoology w 202.633.3668 osbornk@si.edu http://invertebrates.si.edu/osborn/ http://orcid.org/-0000-0002-4226-9257 SMITHSONIAN INSTITUTION NATIONAL MUSEUM OF NATURAL HISTORY Facebook < https://www.facebook.com/nmnh.fanpage/ > | Twitter < https://twitter.com/NMNH > | Instagram < https://www.instagram.com/smithsoniannmnh/ >

Mail: Department of Invertebrate Zoology, Smithsonian National Museum of Natural History, MRC-163 P.O. Box 37012, Washington, D.C. 20013-7012 USA

Courier Address: Smithsonian Institution, MR 0163, Natural History, West Loading Dock, 10th and Constitution Ave NW, Washington, D.C. 20560

OsbornK@si.edu

StellenboschU SeagrassConservationGenomics

Postdoctoral Fellowship: conservation genomics, climate resilience and restoration of southern African seagrasses

The von der Heyden lab at Stellenbosch University is recruiting a postdoctoral fellow, for a fully funded NRF postdoctoral fellowship. The successful applicant will take a leading role in the newly funded "Project SeaStore: integrated research to support seagrass restoration and to build estuarine resilience in South Africa", that combines transcriptomic and functional diversity in natural and experimental populations of the seagrass, Zostera capensis, throughout its range. The project is a collaboration involving Stellenbosch University (Profs Sophie von der Heyden, Guy Midgley), Nelson Mandela University (Prof Janine Adams), University of Cape Town (Dr Deena Pillay) and the Knysna Basin Project (Dr Louw Claassens).

The successful applicant will be based at the von der Heyden Lab at Stellenbosch University, one of Africa's leading marine research groups specializing in the use of molecular tools to understand patterns and processes driving southern Africa's rich marine biodiversity. We are a dynamic lab, with a strong emphasis on research excellence as well as student training and support. Our work spans population genetics and phylogeography, fisheries management/stock identification, historical biogeography and the impacts of historical and contemporary climate change on species distributions. To do this, we utilise a wide range of tools including genomics and environmental DNA, with our overarching goal of promoting the integration of molecular tools into conservation and sustainable utilization of southern African marine species and resources. You can find out more about the von der Heyden lab and marine research at Stellenbosch University here: www.vonderheydenlab.com or via FB www.facebook.com/vonderheydenlab or on Twitter: @vonderheydenlab or @ProjectSeaStore.

Applicants for the position will be hard-working, enthusiastic, independently motivated and willing to lead a significant part of Project SeaStore. A background in ecological genomics is essential, as is a passion for

marine ecology and conservation. Ideally, the successful applicant would have some experience of transcriptomics and have worked with natural and laboratory populations of seagrass (although this is not essential). A background in bioinformatics (use of pipelines, ability to work and write R scripts) is required. The project includes a significant fieldwork component, so a valid drivers license is required, as well as an ability to work in aquatic environments.

Please direct all enquiries to Prof Sophie von der Heyden, svdh@sun.ac.za. For applications to be considered include a detailed CV noting experience, as well as publications and conference attendance and provide three contactable referees. The fellowship carries a value of R220,000 per annum and is available for two years (2020-2021). The successful applicant would ideally start early in 2020. Closing date for applications is the 30th September 2019.

Stellenbosch University is one of Africa's leading research intensive universities and is set in the beautiful Western Cape, close to Cape Town. For more information on Stellenbosch and Stellenbosch University: www.sun.ac.za. Stellenbosch offers ample opportunity for outdoor enthusiasts and is a culturally diverse, vibrant and welcoming environment. < http://www.sun.ac.za/english/about-us/-strategic-documents >

"Von der Heyden, S, Prof [svdh@sun.ac.za]" <svdh@sun.ac.za>

TempleU Philadelphia InvasiveSpecies

The integrative ecology lab (http://www.iecolab.org/) at Temple University is seeking creative applicants for a postdoctoral researcher to collaborate on the analyses of large existing ecological and economic datasets pertaining to the spread of non-native species across Caribbean islands. The precise questions and focus of inquiry are open, and may include questions that test theory on coexistence, community assembly, networks, island biogeography, macrosystems, and socio-ecological systems.

The applicant will collaborate with Drs. Jocelyn Behm and Matt Helmus to develop research questions, conduct analyses, and write up results for publication. Ample opportunities exist for mentoring students and networking with other biodiversity scientists. The position is for one year, with the possibility for renewal upon satisfactory performance and funding. Salary is commensurate with experience and benefits are included. The exact start date is negotiable; the applicant will preferably start Fall 2019 and no later than January 1, 2020. Because the datasets are already in hand, this is a great opportunity for someone looking for a productive postdoc position with high publication potential.

Qualifications: - a PhD in biology, ecology, or a closely related field - an internationally competitive publication record appropriate for career stage - strong quantitative skills - proficiency in R, preferably in tidyverse - experience in the analysis of large datasets - research experience in invasion ecology or other applicable subdisciplines

Please send any questions and applications to Jocelyn Behm (jebehm@temple.edu). For applications, please send as a single PDF: - Cover letter outlining qualifications, experience, and why you are interested in the position - Curriculum vitae including links to authored publications - Name, phone number, and email addresses of three references

iEcoLab believes the crisis in biological diversity can only be addressed by scientists from diverse backgrounds and with diverse viewpoints. We strongly encourage applications from biodiversity scientists with diverse backgrounds. Review of applications has begun and will continue until the position is filled.

The postdoctoral researcher will be housed in the Integrative Ecology Lab in the Center for Biodiversity (http://www.biodiversitycenter.org/) at Temple University, located in a new LEED-Gold certified building in historic Philadelphia. The Center provides state-of-the-art biodiversity research facilities along with support staff with expertise in media development, GIS technology, and genetics. Temple University, founded in 1884, is a public R1 university with a diverse student body of ca. 40,000 students. It is the sixth largest provider of graduate school education in the US, is within the top 4% of research institutions in the US, and is in the top ten of the fastest gainers in ranking by the U.S. News & World Reports Best Colleges.

Philadelphia is the birthplace of the United States, filled with numerous attractions (e.g., Philadelphia Museum

of Art, Philadelphia Zoo, Academy of Natural Sciences), amazing food, and a quick train ride to New York City and Washington DC. Philadelphia is nestled within an extensive national/state trail and park system, and is very close to Valley Forge National Park, the Pocono Mountains, the unique Pine Barren ecosystem, and the beaches of the Atlantic shore.

Temple University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community.

"tuf86195@temple.edu" <tuf86195@temple.edu>

UArizona Tucson EvolutionVertebrateAlgaSymbiosis

A postdoc position is available in the Duhamel laboratory in the Molecular and Cellular Biology department at the University of Arizona, Tucson, AZ (https://-/mcb.arizona.edu/profile/solange-duhamel). The research is an exploration of metabolite exchange in a vertebrate-alga symbiosis. The work will involve stable and radioisotope labeling of a freshwater green alga, microinjection of algae into amphibian embryos, and histological and chemical analyses of the established symbiosis. We seek to reveal nutritional aspects of this novel symbiosis. We are looking for someone with experience in histological methods with knowledge of different embedding and sectioning materials and protocols. Preference will be given to candidates with prior experience working with radioactive materials. The work will require travel between two laboratories, with approximately half of the year in the Duhamel laboratory at University of Arizona and half of the year in the Burns laboratory at Bigelow Laboratory for Ocean Sciences in Boothbay, Maine. The position is currently funded for one year from the start date with the possibility for extension.

*Outstanding UA benefits include health, dental, vision, and life insurance; paid vacation, sick leave, and holidays; UA/**ASU**/**NAU** tuition reduction for the employee and qualified family members; access to UA recreation and cultural activities; and more!*

The University of Arizona, recognized as a 'Public Ivy', offers state-of-the-art facilities and a vibrant, supportive, and highly collaborative academic environment. The University of Arizona has been listed by Forbes as one of America's Best Employers in the United States and WorldatWork and the Arizona Department of Health Services have recognized us for our innovative work-life programs. For more information about working at the University of Arizona and relocation services, go to: http://www.whyua.arizona.edu. The University campus is located in Tucson in southern Arizona and surrounded by beautiful mountain ranges. The postdoctoral scientists at Bigelow Laboratory have access to an active professional training program. The laboratory's state-of-the-art oceanfront campus is located in scenic Midcoast Maine, which offers excellent opportunities for outdoor activities, including hiking, canoeing, sailing, and skiing.

Candidates must have a PhD degree in a relevant field. Excellent written and verbal communication skills and ability to work harmoniously in a collaborative research team are crucial. All offers of employment are contingent upon positive results of a background check.

Salary will be commensurate with prior experience.

Qualifications: PhD in Biology or a related degree.

At the University of Arizona, we value our inclusive climate because we know that diversity in experiences and perspectives is vital to advancing innovation, critical thinking, solving complex problems, and creating an inclusive academic community. As an Hispanic-serving institution, we translate these values into action by seeking individuals who have experience and expertise working with diverse students, colleagues, and constituencies. Because we seek a workforce with a wide range of perspectives and experiences, we provide equal employment opportunities to applicants and employees without regard to race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information. As an Employer of National Service, we also welcome alumni of AmeriCorps, Peace Corps, and other national service programs and others who will help us advance our Inclusive Excellence initiative aimed at creating a university that values student, staff and faculty engagement in addressing issues of diversity and inclusiveness.

To apply, please upload a research statement describing your accomplishments and interests, your CV, and the names and contact information of three references online at www.uacareertrack.com (Job # P20858) or directly at http://uacareers.com/postings/-40174. Inquiries can be sent to Dr. Solange Duhamel (sduhamel@ldeo.columbia.edu) and Dr. John Burns (jburns@amnh.org).

Solange Duhamel <sduhamel@ldeo.columbia.edu>

UArkansas EvolutionaryBiology

Postdoctoral fellow in Evolutionary Biology

The Beaulieu lab (www.jeremybeaulieu.org) at the University of Arkansas is accepting applications for a Post-Doctoral Fellow. This is a three-year postdoctoral position (assuming adequate performance) as part of an NSF funded project (DEB #1916558) for developing novel trait-less and trait-based diversification models. The post-doc will lead the code development, code testing, and empirical analysis efforts, and will address potential ways to better deal with the ascertainment bias corrections. The postdoc is expected to interact continuously with the PI and as well as collaborators at the University of Tennessee (Dr. Brian O'Meara). This project will expand her or his training in evolutionary biology, with a focus on the necessary computational and statistical tools to complete the proposed work. Skills gained through the project will apply to any number of research topics on any group of organisms. Finally, the postdoc will have the opportunity to develop her or his teaching skills through participation in conference workshops as well as an instructor for an annual phylogenetics course held at or near the University of Arkansas.

Qualifications: - Ph.D. from an accredited institution of higher education or successfully defended dissertation prior to start date - Graduate training in ecology and evolutionary biology (EEB) or related fields - Experience with phylogenetics and its application to empirical data - Programming experience, for example, in R statistical language (though not an absolute requirement) - Knowledge, background, or interest in applying phylogenetic comparative methods to large data sets

For informal inquiries please contact Jeremy Beaulieu (jmbeauli@uark.edu) or Brian OMeara (bomeara@utk.edu).

For a complete position announcement and information regarding how to apply, visit https://jobs.uark.edu/postings/35838 The University of Arkansas is a Tier 1 research university is located in Fayetteville, which is in the northwest corner of the state. Set in the heart of the beautiful Ozark Mountains, Fayetteville has an abundance of state parks, community green space, parks, and walking trails. The city also has a first-class performing arts center, an active local food movement, a vibrant live music and festival scene, and a low cost of living compared to cities of similar size. Fayetteville was also just recently named the 3rd place to live in the U.S. by U.S. News & World Report.

Jeremy M. Beaulieu Assistant Professor Biological Sciences University of Arkansas (479) 575-2618 www.jeremybeaulieu.org eeob.uark.edu

Jeremy Michael Beaulieu <jmbeauli@uark.edu>

UArkansas EvolutionaryEcology

Postdoctoral Associate in Evolutionary Ecology The Siepielski Lab (https://asiepielski.wordpress.com/join-us/) invites applications for a Postdoctoral Associate in Evolutionary Community Ecology. This NSF funded project will address several questions focused on understanding how adaptive evolution affects species coexistence, population regulation, and diversity in damselflies.

Primary responsibilities: Developing and running large spatial scale field experiments and observational studies in lakes, authorship of peer-reviewed articles, communication of findings at professional meetings, and management of existing research projects. Ample opportunity exists to develop additional projects under the general themes of community ecology, population ecology, and evolutionary ecology using theory, experiments, or meta-analytical techniques. Qualifications: Candidates must have a Ph.D. in biology (or ABD), ecology, evolutionary biology or a closely related field, experience and expertise with ecological models and statistical analyses, and excellent written and verbal communication skills.

Application Details: This position is based in the Department of Biology < https://fulbright.uark.edu/departments/biology/ > and EEOB < https://eeob.uark.edu/ > group at the Main Campus of the University of Arkansas and includes competitive salary (based on relevant experience), health care, and retirement benefits. This is a full-time, 12-month, 1-yr position. Reappointment is available for up to 4 years, conditional on satisfactory performance. Review of applicants will begin immediately. The start-date for the position is flexible. For a complete, formal position announcement and information regarding how to apply, visit https://jobs.uark.edu/postings/35326 . Applicants must submit a CV and a cover letter. The cover letter should contain a brief description of experience in evolutionary ecology/community ecology. Deadline for applications is October 1, 2019, but will remain open until filled.

For more information, please email Adam Siepielski at amsiepie@uark.edu.

I will be at the ESA meeting in Louisville, KY and am happy to meet with any interested folks to discuss the project and the position. Send me an email to set up a meeting time.

The University of Arkansas, Fayetteville, AR, is a RI research university located in the Ozark Mountains. The faculty and graduate students at UARK are highly interactive and include an excellent group of evolutionary biologists and ecologists. We are located in an ideal setting for field-based projects. Fayetteville, located in northwest Arkansas, offers a high quality of living at a low cost, an excellent climate, and is a large enough city to offer diverse activities and amenities. It has consistently been ranked as one of the best places to live in the US < https://realestate.usnews.com/real-estate/-articles/best-places-to-live-in-the-us >. Rock climbing, hiking, kayaking, canoeing, and mountain biking opportunities are in close proximity.

Adam Michael Siepielski <amsiepie@uark.edu>

UCalifornia Berkeley HumanEvolutionaryGenetics

Post-doctoral position V University of California, Berkeley V Human Evolutionary Genetics.

Description: The Moorjani Lab (https://-moorjanilab.org/) at University of California, Berkeley uses computational and statistical methods to investigate questions in human evolutionary genetics, in particular on mutation rate, demographic inference and archaic ancestry. A central aim in the lab is to understand the impact of evolutionary history on genetic variation and to apply this knowledge to learn about human history and disease. To this end, we use genetic data from ancient specimens and present-day species to learn about: (1) when key events (such as introgression and adaptations) occurred in human history, (2) how different evolutionary processes such as mutation rate evolve across primates, and (3) how we can leverage these patterns to identify genetic variants related to human adaptation and disease. The research in the lab involves both development of new methods and large-scale genomic data analysis.

Responsibilities: A successful candidate will develop and apply computational approaches to large genomic datasets to characterize patterns of population history and evolution. The main responsibilities include conducting research, attending regular lab meetings and journal clubs, and preparing research results for publication and presentations at scientific meetings. Opportunities may also exist for mentoring graduate and undergraduate students.

Required qualifications: Ph.D. or equivalent in genetics, genomics, computational biology or related fields and demonstrated record of productivity and publications. Experience with programming (e.g. C/C++, Python/ Perl, R or other programming languages), genomic data analysis and methods development.

Please contact Priya with your CV and a brief overview of research questions you are interested in pursuing. Please also request three recommenders to send a letter of reference on your behalf. The position is open until filled with an anticipated start date in 2019/2020.

Salary: This is a multi-year postdoctoral position (initial appointment is for 12 months and renewable annually up to three more years). Salary is commensurate with qualifications and experience.

Contact: Priya Moorjani Assistant Professor Department of Molecular and Cell Biology Center for Computational Biology https://moorjanilab.org/ Email: moorjani@berkeley.edu

moorjani@berkeley.edu

UCalifornia Irvine EvolutionaryGenomics

Postdoctoral Fellow in the Evolutionary Genomics/Epigenomics Lab

The Lee lab at the University of California, Irvine invites applications for a Postdoctoral Fellow. Our group works on the interplay between transposable elements and genome/epigenome evolution. Current projects in the lab include the epigenetic impacts of transposable elements, empirical and theoretical population genomics of transposable elements, and evolutionary epigenomics. Candidates will ideally have interests broadly relevant to these topics, but will also have opportunities to pursue their own research interests in evolutionary genetics/epigenetics.

Our lab is part of the Department of Ecology and Evolutionary Biology (https://ecoevo.bio.uci.edu/)

and the Center for Evolutionary Genetics (https://-evogen.bio.uci.edu/) at UCI as well as the Southern California Evolutionary Genetics Meeting. More information about our research interests can be found at http://grylee.science/ The successful candidates will have a Ph.D. in the following or related fields: evolutionary genetics, genetics, genomics, epigenetics, cell biology, bioinformatics or computational biology. Experience with high-throughput sequencing and strong quantitative skills are especially desired.

The start date is flexible.

To apply, email the following to Grace Lee (grylee@uci.edu) with the subject line 'Postdoc application: [Your full name].' - curriculum vitae - a one-page research statement describing candidates' past experience and future research interests - contact information for three references

Please contact Grace Lee (grylee@uci.edu) for any questions. Informal inquiries are welcome.

The University of California, Irvine is an Equal Opportunity/Affirmative Action Employer advancing inclusive excellence. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, protected veteran status, or other protected categories covered by the UC nondiscrimination policy.

Grace Yuh Chwen Lee <grylee@uci.edu>

UCalifornia Riverside PlantPollinatorEvolutionaryEcol

A Postdoctoral Scholar position in pollination ecology is available in the Rafferty Lab (www.raffertylab.ucr.edu) in the Department of Evolution, Ecology, and Organismal Biology at the University of California, Riverside. We seek to hire a postdoc with interests in plant-pollinator interactions, especially in the context of plant evolutionary ecology and global change. The postdoc will lead research projects designed in collaboration with the PI that will involve both greenhouse work at UCR and fieldwork at various regional locations (e.g., at UC Natural Reserves). In addition, the postdoc will be encouraged to develop independent research projects. Expectations include dissemination of research findings via peer-reviewed publications and presentations at meetings; mentorship of graduate and undergraduate students in the lab; and participation in outreach activities.

The ideal candidate will have experience in pollination research, a strong publication record (adjusted for time since degree), and a PhD in a biology-related discipline obtained within the last five years. Preference will be given to individuals with strong interests in plant ecology and evolution, species interactions, and climate change. Enthusiasm for experimental work in sometimes challenging conditions is a plus.

The University of California, Riverside is a highly diverse and rapidly growing campus located in the historic city of Riverside, California. UCR is a world-class research university with an exceptionally diverse undergraduate student body. Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission is a preferred qualification, and we especially encourage applications from individuals who are members of groups historically underrepresented in higher education. The campus is located within one hour of downtown Los Angeles, a city that provides world-class cultural opportunities. Riverside also provides easy access to numerous outdoor recreational areas, including forest, alpine, ocean, and desert environments.

The position is available starting as soon as late fall 2019, but exact start date is negotiable. Priority will be given to applications that are complete by September 15, but the position will remain open until a suitable candidate is found. Initial support is for two years with a third year contingent on performance and funding.

To Apply: —

Please provide a CV, a cover letter describing research interests and career goals (2 pages max), and names and emails of 3 references who are prepared to provide letters of recommendation upon request. Application materials should be emailed to Dr. Nicole Rafferty (rafferty@ucr.edu) with the subject line "Pollination Ecology Postdoc."

The University of California 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, age, disability, protected veteran status, or any other characteristic protected by law.

"Nicole E. Rafferty" <rafferty@ucr.edu>

UCalifornia SanDiego NeurologicalEvolution

University of California, San Diego

Research Fellow Position

Postdoctoral research fellow position in genomic studies of neuropsychiatric disorders at University of California, San Diego

Dr. Chi-Hua Chen's laboratory is looking for highly motivated individuals to join our team for imaging genomics research in neuropsychiatric disorders and Alzheimer's disease at the Center for Multimodal Imaging and Genetics at UC San Diego. Our research projects include 1) genotype-phenotype mapping to identify genetic variants associated with brain structure in human population samples, all with MRI and genotype data; 2) translational research for genomic-guided drug target identification for brain disorders.

For qualified candidates, there are excellent opportunities to pursue research interests in neuroimaging genomics, statistical modeling, bioinformatics, and brain disorders in a multi-disciplinary research setting. Salary and benefits are commensurate with research experience and accomplishments, and determined by NIH guidelines. The position is available to start immediately. The successful applicant should have:

* PhD in biostatistics, bioinformatics, statistical genetics, computer science, neuroimaging or a related field. An MS or BS is acceptable if there is an exceptional record of past experience.

* Knowledge of programing in Linux shell scripts, R, python or Matlab

* Knowledge in biostatistics, bioinformatics or machine learning

* Experience to manipulate genomic or neuroimaging datasets

* Excellent analytical and problem-solving skills

* Good skills in written and spoken English If interested, please email a cover letter, a current CV, and contact information for three references to Mary Roberson at: mmroberson@ucsd.edu.

Position will be open until filled.

Thank you, Mary Roberson

Mary M Roberson | Executive Assistant Center for Multimodal Imaging and Genetics (CMIG), Department of Radiology UC San Diego | 9452 Medical Center Drive | MC-0841| La Jolla, CA 92037 Office: 858.534.8259 | Email: mmroberson@ucsd.edu

Drs. Ahrens | Bae | Brewer | Chang | Chen | Dale | Du | McEvoy | White

"Roberson, Mary" <mmroberson@ucsd.edu>

UCalifornia SantaCruz FishGenomics

Job Opportunity

Postdoctoral Researcher in Anadromous Fish Genomics

University of California, Santa Cruz

We seek a postdoctoral scientist to work on genomic and molecular population genetic analyses of Chinook salmon and alewife as part of a team conducting basic and applied research on the ecology, evolution, conservation and management of anadromous fishes. The successful candidate will formulate and carry out work using whole genome sequence data to study the heritable components of life history variation in these species, including age at maturity, migration behavior, growth, and development. In addition, the postdoc will be involved in generation and analysis of molecular population genetic data to study evolutionary dynamics and patterns of hybridization in response to restoration of alewife as part of a large, bi-coastal collaboration.

Duties will involve overseeing data generation, developing and applying bioinformatic techniques, and disseminating results through publications, reports and presentations. In addition to standard genomic and population genetic techniques, experience with genome-wide association studies is desirable. Experience with R and/or Python and working in a UNIX environment is also important, as is experience or familiarity with analysis software GATK, ANGSD, BWA and SAMTools or similar programs.

The successful candidate will work jointly with the research teams of Dr. Eric Palkovacs, in the Department of Ecology and Evolutionary Biology at the University of California, Santa Cruz (UCSC) and Dr. John Carlos Garza, at the Southwest Fisheries Science Center, both located on the UCSC Coastal Science Campus.

The position is available right away and will be open

until filled. Multiple years of funding have been secured for this work, but the initial appointment will be for one year, with possibility of extension.

Inquiries by email to Eric Palkovacs (epalkova@ucsc.edu) or John Carlos Garza (carlosjg@ucsc.edu).

UCSC is an Affirmative Action/EEO Employer. Please distribute appropriately.

John Carlos Garza, PhD Southwest Fisheries Science Center 110 McAllister Way Santa Cruz CA 95060 USA Tel. 831 420-3903

carlosjg@ucsc.edu

UCBerkeley Genomics

Postdoctoral position: Comparative evolutionary genomics of aposematism in frogs

The Tarvin lab at UC Berkeley integrates studies of natural history with genomics and phylogenetics. Specifically, our research aims to elucidate causal genetic mechanisms underlying novel traits, to characterize phenotypic diversification at macro and micro-evolutionary scales, and to identify factors that promote and constrain biodiversity. Current projects focus on the evolution of chemical defenses in poison frogs, flies, nudibranchs, and snakes. We believe that a productive scientist is a happy one. Thus, we support wellness in our lab by favoring work-life balance, artistic expression, and passion-driven science. We also believe that diversity in thought and experience positively impacts science. We promote diversity in our community through science outreach and advocacy.

A multi-year postdoctoral position is available (initial 12-month appointment renewable up to two more years). Start date is flexible. One of the main roles of this position will be to design a pipeline that analyzes difficult-to-assemble next generation sequence data. Several projects investigating the comparative evolution of aposematism will be available to expand and publish once the pipeline is established. Opportunities to conduct fieldwork, labwork, and experimental work may also become available depending on the candidate's interests.

Required qualifications:

- Ph.D. or equivalent in genetics, genomics, biology, computer science or related fields - demonstrated record of productivity and publications - experience analyzing large-scale genomic data - computational expertise sufficient to design NGS pipeline for difficult data - interest in research questions related to chemical ecology, evolutionary biology, and/or biodiversity

Please contact Becca with your CV, a brief overview of your qualifications, and two scientific references. The position is open until filled with a start date as soon as possible.

Starting salaries include benefits and are set according to the UC Berkeley step system. See https://www.ucop.edu/academic-personnel-programs/-_files/1819/postdoc-salary-scales-effec-11-28-18/t23-12-1-18.pdf for more information.

—- Rebecca Tarvin Assistant Professor, Department of Integrative Biology Assistant Curator of Herpetology, Museum of Vertebrate Zoology University of California Berkeley www.tarvinlab.org "rdtarvin@berkeley.edu" <rdtarvin@berkeley.edu>

UChicago StatisticalGenetics

Post-doctoral Scholar Position available in: statistical genetics and computational analysis of disease-associated and other functional variation in the human genome. A postdoctoral scholar position is available in the research group of Dr. Xuanyao Liu at the University of Chicago. The Liu group develops statistical methods to understand the genetic basis of complex traits. The exact projects for the scholars will be flexible, though based around detecting and understanding trans-gene regulation, disease gene mapping and etc. As the lab is brand new, you will be working closely with me, and my goal is to provide ample supervision and support for the scholar to be successful in academia and industry. The candidate will also benefit from training at a campus with reinforcing strengths in statistical genetics and human genetics. We maintain close interactions with groups focusing on statistical/computational problems in human genetics (e.g., Stephens, Novembre, Li, He, Imm, Abney) and genetic studies of gene regulation (e.g., Gilad, Li). Suitable candidates may come from a wide variety of quantitative / data science backgrounds. Those with strong expertise in computational statistics, particularly in the context of human genetics and genomics, will be preferred. The expected start date is negotiable, and the salary will be competitive and based on the level of experience. To apply please send a brief cover letter, curriculum vitae, and contact information for two references to xuanyao@uchicago.edu.

Please see < https://t.umblr.com/-redirect?z=http%3A%2F%2Fjnpopgen.org&t=-MjlhM2FhNWIyY2NkYjNiOTY1MzQzNDhlOTM4OWE3[illegible]t%3ATeurSZaFuQE1YV7XBsq6_Q&p=-https%3A%2F%2Fevoldir.tumblr.com%2Fpost%2F164590[illegible]uchicagopopulationgenetics&m=1 > https://-wordpress.uchospitals.edu/liulab/ to learn more about the group.

Many thanks,

Xuanyao

Xuanyao Liu <xuanyao.yao@gmail.com>

UCLondon IowaStateU 2 EvolGenomics MajorTransitions

This is a re-posting, we have extended the deadline for applications for these postdoc positions to August 25.

Two postdoctoral positions, focused on genomics of major transitions in evolution, are available for a trans-Atlantic collaboration (sponsored by NERC-NSF) between the laboratories of Seirian Sumner (University College London, UK) Amy Toth (Iowa State University, USA) and Sandra Rehan (York University, Canada). One position will be based in London and the other will be based in Ames, Iowa, USA. Apply by August 25.

What's it all about?

Over 20 years ago, eight major transitions in evolution that explain the emergence of biological complexity were defined, one of which is the evolution of sociality (or superorganismality). Significant advances have been made in understanding the theory underpinning major evolutionary transitions; however, we lack an integrated understanding of the evolutionary patterns and processes of the major transitions. Through this project, we have formulated a new predictive framework on the molecular processes underpinning major transitions; the predictions of this framework will be tested empirically using multi-level genomic analyses of sociality in 16 species of bees and wasps.

What we're looking for

The project is mostly computational, involving large-scale comparative genomic and transcriptomic analyses of bee and wasp species that span the stages of the major evolutionary transition from solitary to social living. Most of the datasets are already complete (and those that are not will be complete by end of 2019), allowing the postdoctoral team to get cracking in analysing data to test hypotheses on how major transitions arise at the level of the genes. The successful candidates will be evolutionary biologists with proven track-records in the use of genomic analyses and bioinformatics to address broad evolutionary questions. An in-depth knowledge of social insects and social evolution is not a pre-requisite, but a curiosity about these topics, and a willingness to learn about how and why they evolved, is essential.

Some things you need to know

The two postdocs will work concurrently (on 30 month contracts), one based in the UK at UCL, and the other in the USA at ISU. However, both postdocs will work collaboratively and enjoy considerable mobility between the labs of the three Investigators. These positions, therefore, present excellent opportunities for networking in three countries and world-class institutions and their respective lab groups. The positions are available from Sept 2019; successful candidates must be in post by end of Nov 2019 at the latest.

Interested? Note that applications will be reviewed concurrently for both positions, and you may apply for both.

Apply here for the UK job

https://atsv7.wcn.co.uk/search_engine/-jobs.cgi?amNvZGU9MTgxNjYyOCZ2dF90ZW1wbGF0ZT05NjUmb3du&jcode=16628&vt_template-5&ownerP41178&ownertypeÃoir&brand_id=-0&job_ref_code=16628&posting_code“4 Apply here for the US job.

https://isu.wd1.myworkdayjobs.com/en-US/-IowaStateJobs/job/Ames-IA/Post-Doctoral-Research-Associate_R63 For questions or inquiries contact:

Dr Seirian Sumner s.sumner@ucl.ac.uk

Dr Sandra Rehan sanrehan@yorku.ca

Dr Amy Toth amytoth@iastate.edu

Amy Toth, Associate Professor Iowa State University Dept. of Ecology, Evolution, and Organismal Biology Dept. of Entomology 251 Bessey Hall Ames, IA 50011 office phone: (515)-294-3121 amytoth@iastate.edu www.tothlab.org amytoth@iastate.edu

UConnecticut PlantPopulationGenomics

Postdoctoral Researcher: Advancing Population and Landscape Genomics in Forest Trees

The Plant Computational Genomics laboratory at University of Connecticut (Storrs, CT) has an opening for a Postdoctoral Scholar. This individual will take a lead role in the development of the integrated CartograTree application (https://treegenesdb.org/cartogratree). This web-based software integrates vast amounts of genomic, phenotypic, and environmental data to our diverse user community. In specific, the CartograTree application provides a portal for landscape genomics and association genetics studies of georeferenced forest trees through the implementation of web services and high performance computing resources available through the iPlant/Cyverse project (http://-www.cyverse.org/). In addition, we are committed to developing mechanisms for data sharing among partner databases through Galaxy modules, the Tripal platform (http://www.tripal.info/), the GMOD project, and custom analysis/visualization platforms.

The successful candidate will work as part of a small interdisciplinary team of bioinformaticians and data curators. We are seeking an individual who has strong skills in population genetics as we are interested in developing intelligent workflows to perform meta-analysis across a range of study designs, marker types, and species. Research efforts will focus on the the implementation of these workflows and interactive visualization tools. In specific, this project is focused on developing a wide range of intelligent methods to process heterogeneous datasets for association analysis (genotype, phenotype, and environment). The Postdoctoral Scholar will be provided with training opportunities and will attend conferences to present/train users on these new tools. In addition, publications on innovative software solutions for big data integration and meta-analysis will result.

The qualified applicant will have a PhD degree in Bioinformatics, Evolutionary Biology, Computational Biology, Genetics, or a related field. Biology/Bioinformatics experience is essential and previous experience with software development is desired. The applicant should have experience with Linux/Unix, scripting languages (Python), R, and relational databases. The applicant must have a strong background in population genetics/genomics and a solid foundation in the statistical considerations for these analysis. The position is renewable after the first year.

Interested applicants, Please send the following THREE documents: cover letter, research statement, and CV to: Jill Wegrzyn at jill.wegrzyn@uconn.edu

Applications will be accepted until the position is filled. Location: University of Connecticut, Storrs, CT, USA Start Date: ASAP Duration: Full-time

jill.wegrzyn@uconn.edu

UEasternFinland HumanSexualSelection

Postdoctoral Researcher (reproductive physiology, evolutionary biology and biomedicine)

The University of Eastern Finland, UEF, is one of the largest multidisciplinary universities in Finland. We offer education in nearly one hundred major subjects, and are home to approximately 15,000 students and 2,500 members of staff. We operate on two campuses in Joensuu and Kuopio. In international rankings, we are ranked among the leading universities in the world.

The Faculty of Science and Forestry operates on the Kuopio and Joensuu campuses of the University of Eastern Finland. The mission of the faculty is to carry out internationally recognised scientific research and to offer research-education in the fields of natural sciences and forest sciences. The faculty invests in all of the strategic research areas of the university. The faculty's environments for research and learning are international, modern and multidisciplinary. The faculty has approximately 3,800 Bachelor's and Master's degree students and some 490 postgraduate students. The number of staff amounts to 560. http://www.uef.fi/en/lumet/-etusivu We are now inviting applications for

a Postdoctoral Researcher (reproductive physiology, evolutionary biology and biomedicine) position, Department of Environmental and Biological Sciences, Joensuu and/or Kuopio Campus (extended application period)

We are seeking a motivated Postdoctoral Researcher for our project "Molecular and immunological basis of gamete compatibility in humans" (funded by the Academy of Finland, https://reprophys.weebly.com/).

According to the current definition of the World Health Organization, the causes of human infertility are parti-

tioned into male- or female-dependent pathological factors. However, in a significant proportion of cases, the exact reason for infertility remains unexplained. Thus, reliable assessment of human infertility is currently extremely challenging. The primary aim of the project is to investigate the emerging possibility that reproductive failure can also be a result of sexual selection at the level of the gametes ('cryptic female choice'). Accordingly, infertility does not necessarily represent a pathological condition, but can also be a consequence of natural compatibility verification processes of the gametes. Our project investigates the molecular and immunological mechanisms of these processes that occur in the reproductive tract of the female prior to fertilization. By clarifying these poorly known mechanisms, the project aims to increase our understanding of the mechanistic basis of fertilization and infertility, and pave the way for increasingly accurate infertility diagnostics that are better tailored to individual couples.

The Postdoctoral Researcher will participate in experimental research that aims to clarify these mechanisms in humans. Depending on the expertise of the researcher, the duties can include either: 1) molecular and/or immunological analyses (e.g. next-generation sequencing, Human Leucocyte Antigen analyses, protein mass spectrometry and cytokine analyses), 2) sperm motility and chemotaxis measurements, or 3) determination of female- and environmental exposure-induced physiological changes in sperm. The researcher's tasks also include data analysis and reporting of the results in scientific journals.

The applicant is expected to have good skills in written and spoken English. Earlier experience in laboratory work, relevant methods in cell biology (e.g. sperm motility or viability analyses, ELISA assays or flow cytometry), immunology or molecular biology (e.g. next-generation sequencing or proteomics) will be considered a benefit for the applicant. If you have any of these skills, please indicate them in the accompanying CV and/or motivation letter (see below).

The person to be appointed as Postdoctoral Researcher is expected to hold a doctoral degree from an applicable field. If the employee has been awarded his or her doctoral degree less than five years ago, the post will be one of a Postdoctoral Researcher. If the doctoral degree has been awarded more than five years ago, the post will be one of a Project Researcher. In this context, the five years refer to a net period of time, which does not include maternity leaves, parental leaves, or military service, etc.

English may be used as the language of instruction and supervision in this position.

The position is filled initially for a fixed term from 1.10.2019 to 31.8.2020 (or as agreed), with a possibility of extension when the follow-on funding from Academy of Finland is confirmed. The position will be filled for a fixed term due to it pertaining to a specific project (positions of Postdoctoral Researcher shall always be filled for a fixed term, UEF University Regulations, Section 31).

The salary of the Postdoctoral Researcher or Project Researcher

— / —

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

UGraz EvolutionaryParastilogyGenomics

PostDoc: UGraz.EvolutionaryParasitolGenomics

ïÂ¿Â¼PostDoc position available at the Institute of Biology, University of Graz, Austria

We are seeking a highly motivated PostDoc to join the project ÂDeep evolutionary genomics of Monogenea" funded by the Austrian Science Fund (FWF).

Qualifications of the successful applicant: - PhD in genetics, evolutionary biology or parasitology - strong background in bioinformatics, with solid command of at least one programming language - experience in genome/transcriptome assembly, phylogenomics and/or comparative genomics and ideally the use of High performance computing infrastructure - strong publication record demonstrating the above skills - experience with developing and running pipelines/workflows (e.g. Snakemake) and the use of Docker/Singularity - ability to mentor undergraduate and graduate students - previous experience with Âparasitic worms' is a plus.

Project description: The Neodermata (Platyhelminthes) are a highly diverse assemblage of obligate parasitic flatworms (estimated 40,000 - 100,000 species), comprising Cestoda (tapeworms), Monogenea, and Trematoda (flukes), many of biomedical, veterinary and economic importance. Together, they span an impressive range of hosts and parasitic lifestyles. Despite decades of research, however, the relationships between the main parasitic lineages remain contentious. Recent work has

sought to resolve the controversy by means of phylogenomic inference, but particularly Monogenea remain vastly underrepresented in these datasets, despite their importance and ubiquity. With their simple, direct life cycles, monogeneans are key for understanding the shift towards obligate parasitism of vertebrates, the evolutionary history of ecto- and endoparasitism, and the emergence of complex life cycles in Neodermata. We will assemble draft genomes for 50+ representatives of the Monogenea (Platyhelminthes; Neodermata), aiming for complete coverage of all monogenean families, based on a combination of short and long NGS read data. Genes will be identified in the genome assemblies using a combination of existing and newly generated (RNAseq) physical evidence and ab initio gene prediction. Phylogenetic relationships of the Neodermata and especially the Monogenea, will be inferred based on the newly assembled and previously published gene complements. We will investigate patterns of gene/gene family loss/expansion and conservation/disruption of metabolic pathways associated with shifts in parasite life history traits.

The city of Graz is the second largest city in Austria, with a population of >300k residents and roughly 60,000 students across 6 Universities. Graz is located at the eastern slopes of the Alps offering numerous cultural activities (theaters, opera, art galleries, concert halls) as well as easy access to pristine nature. Or you can hop on a direct bus or train and reach ïÂ¿Â¼other Austrian cultural hubs, like Vienna (2.5 h) or Salzburg (3.5 h), for a day- or weekend trip. With 31,000 students and 4,300 employees the University of Graz contributes significantly to the vibrant (night-)life in the city. The University is in walking distance to several parks as well as the city centre which offers a wide variety of bars, pubs, and restaurants (Graz was City of Culinary Delights in 2008). The Institute of Biology at the University of Graz has a strong focus on evolutionary biology, with several international research groups investigating aspects of molecular evolution in a wide variety of organisms, including, but not limited to, arthropods, fishes, flatworms, fungi and lichens, using large-scale genomics and transcriptomics approaches. The institute has a fully equipped molecular biological laboratory. Computational infrastructure at the institute includes PCs, Macs, and a number of high-spec Linux machines for data analyses. Members of the institute have access to dedicated High Performance computing (HPC) infrastructure of the University of Graz.

The position will be for two years, pending the successful completion of a probation period, with the possibility for extension after the initial two years. Gross monthly salary is 3803.90 EUR.

The desired starting date for the project is November 1 2019. Applications will be considered until a suitable candidate is found.

Please send your application documents (motivation letter including research interests, CV, names of two academic references) as PDF to: Christoph Hahn <christoph.hahn@uni-graz.at>

Christoph Hahn <chr.j.hahn@gmail.com>

UHaifa SunbirdEvolution

Post-doc position A highly motivated post-doctoral fellow is needed for a project looking at the effects of parental self-feeding on parental activities or a project testing the effects of uncertainty on foraging performance in sunbirds. This research will take place at the Department of Biology & the Environment, University of Haifa at Oranim, Israel. The position is available for two years with the possibility of renewal (up to 4 years) depending on research progress. The position is available from 1/10/19, but the start date is flexible. The candidate should have a strong background in behavioral ecology ideally using birds or bees as model systems. The preferred candidate will be a post doc who is capable of developing an innovating research line within the scope of the proposed research projects. The selected candidate should be or become a leader in her/his field, and have excellent communication and writing skills. If you are interested and want to hear more details please contact: Dr Shai Markman markmans@research.haifa.ac.il*. * Interested candidates should attach a CV and names and e-mails of three referees.

http://sciences.haifa.ac.il/newsci/main/-index.php/en/faculty-oranim?id Shai Markman <shaimarkman@gmail.com>

UKent UK GenomeEvolution

We are seeking to recruit an enthusiastic postdoctoral Research Associate to join the Ellis laboratory. The successful applicant will join an established research group working on fundamental and applied aspects of male reproductive biology. Ellis group lab interests encompass mechanisms of chromosome segregation during

meiosis, cytoplasmic and nuclear remodelling during haploid germ cell development, and how DNA damage in developing male germ cells affects the quality of the resulting gametes.

You will work on a three-year project funded by the Leverhulme Trust that seeks to understand how transmission ratio distorters manipulate the processes of gametogenesis and/or fertilisation so that they are passed on to more than 50% of offspring, and the consequences of this °drive± for genome structure.

Techniques to be used will include cutting-edge single-cell omics, RNA-Seq and ChIP-Seq techniques, and also older methods including metaphase FISH hybridisation. This is a mixed wet/dry position and will especially suit an applicant with established bench skills seeking cross-training in bioinformatics analysis.

As Research Associate you will:

* Develop an independent approach to the research project in both the design and execution of the necessary experiments in order to deliver the specific aims of the grant. * Maintain excellent lab notebooks to document all aspects of the work performed. * Help supervise other lab members e.g. MSc/PhD students both technically and academically. To be successful in this role you will have:

* PhD degree in Biology, Biochemistry or related discipline * Home Office Personal license holder or willingness to acquire a license * Mammalian tissue / cell work (preferably with FACS experience) * Bacterial cell culture and cloning * Protein analysis techniques (Western blot) * At least one publication in a peer-reviewed journal

More information and how to apply here: https://www.jobs.ac.uk/job/BTW215/research-associate-molecular-genetics Marta Farr Belmonte, PhD | Lecturer in Molecular Biosciences School of Biosciences, University of Kent Stacey Building G17 Canterbury, Kent, CT2 7NJ, UK

ORCID: https://orcid.org/0000-0001-9170-5767 Lab web: http://www.farre-evogenomicslab.com/ M.Farre-Belmonte@kent.ac.uk

ULausanne EvolutionaryGenomics

3-year Postdoc position in comparative evolutionary genomics

The Groups of Profs Christophe Dessimoz and Robert Waterhouse are seeking a candidate for a Postdoctoral position at the Department of Ecology & Evolution, University of Lausanne, Switzerland, funded by the Swiss National Science Foundation (SNSF).

Working at the interface between biology and computer science, the Dessimoz Lab (https://lab.dessimoz.org/) seeks to better understand evolutionary and functional relationships between genes, genomes, and species. The Waterhouse Group (https://rmwaterhouse.org/lab) is focused on elucidating interactions between gene evolution and gene function through computational interrogation of arthropod genomics data. Both Groups are members of the SIB Swiss Institute of Bioinformatics.

The Postdoc will co-lead the evolutionary genomics contributions to a groundbreaking interdisciplinary project in collaboration with the Group of Prof. Bruno Lemaitre (https://lemaitrelab.epfl.ch/) at the neighbouring École Polytechnique Fédérale de Lausanne.

The overall project aims to develop the computational tools required to fully exploit new genomics data in a framework that also takes advantage of the latest molecular biology tools to achieve combined evolutionary and functional characterisation of the Drosophila immune secretome. The two Postdocs on this project will work closely together developing and applying comparative genomics and evolutionary modelling approaches to fully exploit new genomics data, with a biological focus on the insect innate immune system. The evolutionary genomics part of the project will focus on (1) extending our current knowledge of immune effectors beyond the canonical repertoires of genes encoding for known antimicrobial peptides, and (2) exploiting the rich genomics datasets across Drosophila species to trace the evolutionary histories of immune genes.

We seek candidates with demonstrated programming skills in the areas of bioinformatics, computational biology, and comparative genomics. Further desirable attributes include knowledge of and interest in orthology delineation, gene family evolution, phylogenetics, gene birth/death, genome-wide synteny, selection and constraint, gene prediction, genome annotation, immu-

nity, infection, and insects.

Applications can only be made through the University of Lausanne online recruitment platform: https://career5.successfactors.eu/career?career_ns=-job_listing&company=universitdP&career_job_req_id=-667 Informal enquiries can be made by writing to Prof. Christophe Dessimoz, Christophe.Dessimoz@unil.ch and Prof. Robert Waterhouse, Robert.Waterhouse@unil.ch

Robert Waterhouse <robert.waterhouse@gmail.com>

UMichigan EvolutionaryBiology

Bridging Positions in Ecology & Evolutionary Biology

The University of Michigan Department of Ecology & Evolutionary Biology (https://lsa.umich.edu/eeb) invites applicants for two bridging postdoctoral programs: the Literature, Science, and the Arts Collegiate Fellows Program (LCFP) and the U'M Presidential Post'doctoral Fellowship Program (PPFP). Faculty members in EEB have successful records of providing a nurturing and productive postdoctoral experience through these programs. We are especially interested in future colleagues who engage in research in the fields of 1.) plant biodiversity or 2.) population and evolutionary genetics (with an emphasis on theoretical approaches).

The University of Michigan Department of Ecology & Evolutionary Biology views these postdoctoral fellowships as providing an exceptional opportunity to recruit potential new faculty to the University by offering the possibility of either a postdoc alone or a combined postdoc and tenure track faculty appointment.

Applications for the LCFP and PPFP open September 1. In addition to the materials required by both programs, applicants should submit their materials directly to EEB by October 1.

Eligibility

Ph.D. in a relevant field Demonstrated potential for high scholarly impact Evidence of successful classroom teaching experience (as a student or professional) A strong commitment to diversity, equity, and inclusion Candidates with tenure track appointments are not favored in the selection process unless there is a clear explanation of how an award to the candidate would further the goals of the LCFP or PPFP

How to Apply:

1. Send materials to the LCFP (https://lsa.umich.edu/ncid/fellowships-awards/lsa-collegiate-postdoctoral-fellowship.html) and/or PPFP http://presidentspostdoc.umich.edu/#) via their respective online applications, and

2. Send materials electronically to EEB by emailing Molly Hunter at mollyiz@umich.edu.

– Regina S Baucom Associate Professor 4034 Biological Sciences Building Dept of EEB University of Michigan Ann Arbor, MI 48109 (734) 647-8490 baucomlab.wordpress.com

Regina Baucom <rsbaucom@umich.edu>

UMilano Italy CommunityEcolMetabarcoding

Postdoctoral Fellowship: Reconstructing community dynamics after glacial retreat using environmental DNA

The Ficetola lab at the Univ. of Milano is recruiting a postdoctoral fellow, funded by the European Research Council (ERC). The successful applicant will take a leading role in the project "IceCommunities: Reconstructing community dynamics after glacial retreat using environmental DNA", that combines community ecology, environmental DNA metabarcoding and a global approach to understand the evolution of biotic communities in recently deglaciated areas at an unprecedented detail, and to understand the drivers of biotic colonization.

Research description

Glaciers show a pattern of retreat at the global scale. Increasing areas are exposed and colonized by multiple organisms, but lack of global studies hampers a complete understanding of the future of recently deglaciated terrains. What will be the fate of these areas? How do animals, plants and microorganisms colonize them? Which are the climatic, geological and biogeographical processes determining colonization patterns?

The IceCommunities project is using environmental DNA data to produce unprecedented, massive information on the biodiversity of recently deglaciated terrains at the global scale.

We are looking for candidates with a strong attitude toward the use of advanced statistical techniques to understand ecological processes. Applicants for the position will be hard-working, enthusiastic, independently motivated and willing to lead a significant part of the

IceCommunities Project, and will join a highly-dynamic work group, with a strong emphasis on research excellence.

A necessary prerequisite is experience in the use of numerical ecology to assess relationships between environmental variation and modifications of biotic communities. Experience in spatial ecology will be welcomed. Furthermore, the project is based on the use of molecular data (DNA metabarcoding). Experience in the analysis of metabarcoding data is not mandatory but will be useful

Details on the application

The post-doctoral position is available for 12+24 months. Base net salary is 1500 per month including health insurance, but the salary can be increased depending on the experience of the successful candidate.

Deadline for the application is the 10th of September 2019.

Also note that more post-doctoral positions will be available at the Ficetola lab in the next months. If you are interested in our research themes, please do not hesitate to contact us. We are highly dynamic and we will be happy to discuss the details of potential future positions.

Please direct all enquiries to Prof Francesco Ficetola, francesco.ficetola@unimi.it

For applications to be considered, please include a detailed CV noting experience, as well as publications and conference attendance.

Full details on the applications are available at

www.unimi.it/sites/default/files/2019-07/-DR%20FICETOLA%20ID%204311%20ENG.doc
G.F. Ficetola

Department of Environmental Science and Policy

Univ. of Milano-Italy

f.ficetola@libero.it

UMinnesota HostMicrobeEvolution

Post-doc position: host-microbe interactions, genome x genome interactions, genotype-phenotype mapping

Tiffin Lab, Univ. of Minnesota, ptiffin@umn.edu https://-/cbs.umn.edu/tiffin-lab/home . A post-doctoral position is available to work on a collaborative project investigating genotype-phenotype mapping and the evolution of genotype x genotype interactions in host-symbiont systems. The empirical work is focused on a plant legume-rhizobia system (Medicago and Ensifer). The project involves opportunities for empirical work (a two-species GWAS, two-species co-expression networks) and extensive analyses of phenotypic and population genomic data. Extensive resources are available, including fully sequenced genomes of a couple hundred Medicago accessions and several hundred rhizobia strains. We are particularly interested in candidates with strong backgrounds in evolutionary biology, microbial evolution, or statistical/population genomics (experience working with microbes or plants is not necessary). The successful candidate will have the freedom (time and resources) to develop and pursue research in their areas of interest.

If interested please send a CV, statement of research interests, and contact information for three references to ptiffin@umn.edu. Also feel free to email me with any questions about the position.

The start date is flexible. Review of applicants will begin Oct. 1 and continue until the position is filled.

Peter Tiffin <ptiffin@umn.edu>

UMinnesota PotatoEvolutionaryGenomics

Postdoc: University of Minnesota – Computational/Evolutionary Genomics of Diploid Potato

The Shannon Potato Genomics and Breeding Lab at University of Minnesota is looking for a computational biology postdoc to work on the development and analysis of large scale data sets related to the transformation of potato into a diploid inbred-hybrid crop. Potato genomics has been limited by the complexity of the potato genome. Potato is a highly heterozygous autotetraploid which is propagated clonally. This genomic complexity has also slowed potato breeding making many of the tools which have been successful in other crops (inbreeding, introgression of traits, etc.) inaccessible in potato. The Shannon lab is part of a community wide effort to develop inbred diploid potato lines with the beneficial alleles from the US tetraploid germplasm. We will be genotyping and sequencing lines developed throughout the process of diploid generation, selection, and inbred line creation. This data will provide a unique opportunity to elucidate haplotype structure and diversity in the US potato germplasm, explore potato evolution through

demographic inference, and identify deleterious alleles. The project is a collaboration with Robin Buell and Dave Douches at Michigan State University, and Jeff Endelman, Shelley Jansky, and Paul Bethke at the University of Wisconsin. This position is reappointed on an annual basis, with potential for continuation up to a total of 4 years. Start date is flexible, October at the earliest. The lab is located in the Department of Horticultural Science on the St. Paul campus of the University of Minnesota. Please apply with cover letter, CV, and sample publication through the University of Minnesota hiring portal (https://humanresources.umn.edu/content/find-job job ID 332301). Questions can be directed to Dr. Laura Shannon: lmshannon@umn.edu.

lmshannon@umn.edu

UNebraska EvolGeneFunction

The Center for Plant Science Innovation at the University of Nebraska-Lincoln invites applications for a joint Postdoctoral Research Associate in the labs of Dr. Heriberto Cerutti and Dr. Jeff Mower. The aims of the research will be focused on understanding the evolution of gene function in diverse plants and algae as well as the development of methods for the genetic engineering of plant and algal species, including RNA interference and CRISPR-Cas9. The successful candidate will have access to state-of-the art facilities in the George W. Beadle Center for Genetics Research and acquire experience in genomics, proteomics, and bioinformatics analyses.

The Associate will also have the opportunity to mentor graduate and undergraduate students, design and lead specific experiments, manage and analyze 'omics' datasets, prepare conference presentations and manuscripts, and participate in activities promoting professional and career development organized by the Postdoctoral Association at the University of Nebraska-Lincoln. The ideal candidate will have a promising record of scientific productivity, appropriate to career stage, in biology or genetics. Preferred skills include expertise in plant/algal genetic engineering, functional genomics, and/or molecular biology. The completion of a PhD degree in Biology, Genetics or a related field by the start date of the appointment is required. The position is grant funded and offers competitive salary and benefits package.

To apply please send an email message to Dr. Heriberto Cerutti (hcerutti1@unl.edu) and Dr. Jeff Mower (jpmower@unl.edu) including (1) a cover letter summarizing your research interests, accomplishments, and professional goals; (2) a curriculum vitae with a list of publications; and (3) the contact information for three references. Applications received by September 15, 2019 will be given full consideration. However, applications will be accepted until the position is filled.

As an EO/AA employer, qualified applicants are considered for employment without regard to race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation. See http://www.unl.edu/equity/notice-nondiscrimination . jpmower@unl.edu

UNevada Reno Bioinformatics

I am seeking a bioinformatics postdoc to join my lab at the University of Nevada, Reno (www.evolutioninthetropics.com). The postdoc will lead a project on rapid adaptation to environmental change in tropical lizards. They will analyze a multi-year data set consisting of nearly 2000 genetic samples from several generations of *Anolis* lizards that have been evolving on experimental islands in the Panama Canal.

The postdoc will have opportunities to travel to the Smithsonian Tropical Research Institute (STRI) in Panama, and work closely with STRI staff scientist W. Owen McMillan (https://stri.si.edu/scientist/owen-mcmillan) to develop high resolution genotypes of lizards using ddRADSeq. The postdoc will use these genomic data to generate pedigrees for each island population, and to conduct a genome-wide association study (GWAS) to reveal the genetic basis of important physiological and morphological traits. The postdoc will be hired for an initial period of two years, with the possibility of extension. The specific start date is flexible, but ideally will be sometime during the early spring semester (January V March) of 2020.

Required qualifications:

1. PhD in biology or related field by January 2020.

2. Demonstrated ability to write clearly and effectively.

3. Bioinformatics expertise/experience, especially as it pertains to large genomic data sets.

4. Ability to work effectively as part of a larger research

group.

Preferred qualifications:

1. Specific experience working with genome scan data and methods for developing pedigrees from such data.

2. Experience with GWAS.

3. Ability to work in the field, particularly in the humid tropics.

4. Organizational skills for leading a team of researchers.

In addition to leading the above-mentioned project, the postdoc may have opportunities to pursue questions of their own choosing in our other *Anolis* systems (The Bahamas and Dominica), or in local systems in the Great Basin Desert and Sierra Nevada mountains. Opportunities may be available to gain teaching experience (through guest lectures) and to mentor graduate and undergraduate students in the lab and field.

UNR is Nevadas flagship, land-grant institution. It is an R1 university with world-class facilities. The Biology Department at UNR (https://www.unr.edu/biology/-people) has a number of cutting-edge research laboratories working at the interface of ecology and evolution, across a diversity of vertebrate and invertebrate systems. Reno itself is a wonderful place to live. It is sandwiched between the Sierra Nevada mountains to the west and the Great Basin Desert to the east, providing ample opportunity for hiking, camping, biking, skiing, and mountain climbing. Reno is only a 30-minute drive from Lake Tahoe, and only a few hours drive from San Francisco.

Annual salary will be $48,000 per year. A comprehensive benefits package is available, which includes healthcare, retirement, and life insurance.

If you are interested in this opportunity, please send me an email at mike.logan1983@gmail.com. Please write a brief paragraph explaining why you are interested in working on this project, and attach a CV with contact information for at least two references. If you are a potential fit for this project/lab, I will set up a Skype interview.

– Michael L. Logan Assistant Professor Dept. of Biology University of Nevada, Reno www.evolutioninthetropics.com Michael Logan <mike.logan1983@gmail.com>

UNorthCarolina Charlotte EvolutionaryGenomics

Opportunity for a postdoctoral fellow to study the evolutionary and functional genomics of animal regeneration.

We seek a post doctoral fellow with an experimental background with skills related to wet lab work including but not limited to small animal dissection, histology, in situ hybridization, transfection, real time PCR, and trouble shooting.

The candidate must have an Ph.D. earned within the last four years.

Many human tissues cannot restore their anatomy and function after injuries. In contrast, our deuterostome relatives, Echinoderms can quickly and efficiently regenerate numerous body parts and organs. The striking ability makes these animals particularly attractive for research in regeneration. Our goals are to experimentally reduce or completely edit out the presence of transcription factors of interest in cells of regenerating organs in several species. The successful candidate will work as a member of a team including experimental biologists and bioinformaticians.

Charlotte, NC is a very livable place with a good climate and year round recreational opportunities. Commutes are typically short and a light rail connects UNC Charlotte campus to downtown and other neighborhoods. UNC Charlotte is the fastest growing University in the UNC System and has excellent lab facilities, support, and colleagues.

please apply at https://jobs.uncc.edu/postings/27943 Thanks Sincerely Dan Janies UNC Charlotte https://janieslab.github.io/index.html Dan Janies <unccpostdoc@gmail.com>

UPittsburgh OregonStateU 2 PlantEvolution

Two Postdoctoral positions in Plant Evolution University of Pittsburgh and Oregon State University

Two postdoctoral scholars to join a collaborative NSF-funded project between Dr. Tia-Lynn Ashman and Dr. Aaron Liston examining functional and genomic consequences of sex chromosome evolution.

The project aims to test molecular evolutionary mechanisms of sex chromosome turnover and assess the phenotypic and gene expression consequences of turnover using the octoploid wild strawberry (Fragaria) a model system with young homomorphic ZW sex chromosomes (Tennessen et al.2018 PLOS Biology https://doi.org/-10.1371/journal.pbio.2006062).

Position 1 will identify genomic signatures (changes in linkage disequilibrium and functional polymorphism) characteristic of translocation-based turnover events, using single molecule and high throughput sequencing to identify patterns of genetic diversity, signatures of selection, and phylogenetic relationships among sex chromosomes.

Responsibilities include collection and analysis of data for population genetic, molecular evolution and phylogenetic analyses, and the preparation of manuscripts for publication. Position is for three years and will be based in the Department of Botany and Plant Pathology at the Oregon State University, Corvallis Oregon. Start date is negotiable, but no later than January 1, 2020. Position 2 will assess consequences of sex chromosome turnover on sexual dimorphism in phenotype and gene expression by analyzing transcriptomes and vegetative and flower QTLs from several genetic linkage mapped families in the greenhouse, and ultimately link these to processes driving sex chromosome turnover events. Responsibilities include the establishment and characterization of QTL mapping populations under controlled conditions, collection and analysis of data for genetic maps, phenotypic and gene expression analyses, and the preparation of manuscripts for publication. Position is for three years, and will be based in the Department of Biological Sciences at the University of Pittsburgh, Pittsburgh, PA. Start date is negotiable, but no later than January 1, 2020.

Both positions afford opportunities for undergraduate mentoring, scientific outreach, and the design and implementation of allied projects tailored to the skills and interests of the postdoc.

We are looking for evolutionary-minded candidates with complementary skills and collaborative spirits. Ideal candidates for Position 1 will have molecular evolution, computational and/or population and comparative genomics backgrounds, whereas those for Position 2 will have gene expression, and/or population genetic or ecology backgrounds interested in a combination of plant quantitative genetics and transcriptomic work.

TO APPLY: Please send a CV and a cover letter describing your experience and interests as relevant to Positions 1 and/or 2 to tia1@pitt.edu and aaron.liston@oregonstate.edu, along with the names and contact information for three referees. Review of applications will begin Sept. 1, 2019.

Dr. Tia-Lynn Ashman Distinguished Professor of Ecology & Evolution Department of Biological Sciences University of Pittsburgh Pittsburgh, PA 15260-3929 412-624-0984 http://www.pitt.edu/~tia1/ "Ashman, Tia-Lynn" <tia1@pitt.edu>

UQueensland EvolutionaryBiology

Call for Expressions of Interest: Mid-Career Research Fellowships in Biological Sciences at the University of Queensland

The School of Biological Sciences at The University of Queensland is seeking expressions of interest from applicants interested in applying for the Australian Research Council Future Fellowship scheme. These government fellowships offer 4-years of salary and research funds to outstanding Australian and non-Australian mid-career (5-15 years post PhD) researchers (details on the scheme can be found at: http://www.arc.gov.au/-future-fellowships). UQs School of Biological Sciences is seeking to support a small number of outstanding candidates in the anticipated 2019 (FT20) round of this scheme. For selected candidates, we will be offering negotiated setup packages to help successful fellows establish their own research group as well as negotiated extensions of employment as teaching and research academics in the School following the completion of awarded fellowships.

We will consider any applicants whose research compliments our Schools existing research strengths but

are particularly interested in candidates with research programmes in zoology, entomology, marine biology or conservation biology. The School of Biological Sciences (http://www.biology.uq.edu.au/) at The University of Queensland is internationally recognised, and is one of the largest and most productive Biology departments in Australia, with a thriving graduate student and postdoctoral community. The School has strengths in ecology, evolution, genetics, and conservation biology.

Research within the School is diverse, including both empirical and theoretical approaches in taxa ranging across microbes, animals and plants, in a range of marine, freshwater and terrestrial ecosystems. The School offers a highly collaborative environment, including a variety of non-academic and industry partnerships, and collaborations across institutions nationally and internationally. Our School Academics also teach into a range of undergraduate courses, particularly in the Bachelor of Science majors of Ecology, Zoology, Marine Science, Genetics, and Plant Science, as well as in the Masters of Conservation Biology, and our new Masters of Quantitative Biology.

If interested, please submit a CV and an expression of interest (no more than 1 page) briefly outlining: 1) how your research programme will complement both research and teaching within the School, and 2) how your research meets the Future Fellowship scheme objectives of being innovative, internationally competitive research, building collaborations across industry or research, and generating economic, environmental, social and/or cultural benefits for Australia. The ARC considers candidate track record relative to opportunity, taking into account periods of unemployment, or any career interruptions for child birth, carers responsibilities, misadventure, or debilitating illness. Please indicate any career interruptions in your CV.

Please direct questions and submit expressions of interest to Dr Katrina McGuigan by 2nd September 2019: k.mcguigan1@uq.edu.au

Katrina McGuigan <k.mcguigan1@uq.edu.au>

URochester PopulationGenomics

Postdoctoral fellow in population genetics/genomics Department of Biology, University of Rochester

The Chen lab (https://popgenchenlab.github.io/) in the Biology Department at the University of Rochester is seeking a motivated and creative postdoc to join the team! The lab is broadly interested in genomic basis of contemporary evolution in natural populations. We integrate population genomics and quantitative genetics with extensive pedigree data from long-term demographic studies of vertebrates such as the Florida Scrub-Jay to study the evolutionary processes shaping patterns of genomic variation through space and time. Current projects include tracking the inheritance of haplotypes down the pedigree to link individual fitness with allele frequency dynamics and to quantify the contributions of gene flow to genetic diversity and fitness. Candidates will have the opportunity to expand on current projects or explore new areas through the development of a creative and independent project.

The successful candidate will have a background in population genetic, evolutionary biology, computational biology, or a related field. Strong quantitative and computational skills are desirable.

The Department of Biology has a strong research group in evolutionary genetics and genomics. The Chen lab is a safe space, and we are committed to increasing diversity and inclusion in the scientific community. We strongly encourage applications from scientists from groups traditionally underrepresented in science.

The start date is flexible. Salary will be dependent on experience, and benefits are included. The initial appointment is for one year with the possibility of renewal for up to three years.

To apply, please send a cover letter summarizing your research interests and experience, a current CV, and contact information for three references to Nancy Chen (nancy.chen@rochester.edu) with the email subject line "Postdoc application: [Your full name]". Informal inquiries welcome.

Nancy Chen, Ph.D. Assistant Professor Department of Biology University of Rochester popgenchenlab.github.io/

Pronouns: she/her/hers

"Chen, Nancy" <nancy.chen@rochester.edu>

USaoPaulo Coevolution

TWO POSTDOC POSITIONS IN BRAZIL: Two postdoctoral fellowships on Coevolutionary Dynamics in Ecological Networks Two postdoc positions are available to join the research group lead by Prof. Paulo R. Guimarães Jr - University of Sao Paulo, Brazil. The postdoctoral fellows will develop research projects on coevolutionary dynamics in ecological networks. The available fellowships are under the Young Investigator Grant Evolutionary dynamics in ecological networks (FAPESP # 2018/14809-0). The closing dates for applications are 31 August 2019 (first position) and 30 September 2019 (second position).

Essential qualifications: - A PhD in Ecology, Biological Sciences, Zoology, Botany, Genetics, Computer Science or Physics. - First author publications in journals with rigorous editorial policy and high impact factor. - A strong background in Ecology, Parasitology, Quantitative Genetics or Physics.

Desirable qualifications: - International experience (PhD or postdoc). - Ability to collaborate with students and other postdoctoral researchers. - Knowledge of at least one programming language (R, Matlab, Fortran, C, C++, Python). - Research experience on ecological interactions, preferably with fieldwork experience. - The ability to criticise and to evaluate projects and manuscripts developed by the research group. - Publications as coauthor. - Experience in at least one of the following study systems: plant- insect interactions, bacteria-phage interactions or mutualisms.

Mandatory documents for application: - Updated CV - A recommendation letter from a professional who knows the candidate - A copy of the PhD certificate - A short letter explaining why the candidate would like to work with coevolutionary dynamics of ecological interactions

The selection of candidates will happen in two phases. Candidates will first be shortlisted based on the CVs and recommendation letters. These pre-selected candidates will be interviewed in person or by Skype. The results will be informed by e-mail.

The two positions are open to Brazilian and foreign citizens. The selected candidates will receive a FAPESP postdoc fellowship - current salary of R$ 7.373,10 per month. The candidate will also receive 15% of its annual income for research expenses.

Application: Candidates should send the mandatory documents listed above to Paulo R. Guimaraes Jr. by e-mail (prguima@usp.br) indicating as e-mail subject: Post-doc [candidates name].

– Paulo R. Guimaraes Jr Departamento de Ecologia - sala 241A Universidade de Sao Paulo (USP) Sao Paulo, Brasil www.guimaraes.bio.br 55-11-30917597

prguima@gmail.com

USouthFlorida EvolutionaryGenomics

Postdoctoral Scholar University of South Florida

The laboratory of Dr. Derek Wildman at the University of South Florida is seeking a highly motivated, critically thinking Postdoctoral Scholar to work on multiple interrelated projects involving the evolution of human health and disease. The successful candidate will be able to integrate high dimensional datasets that also contain metadata. Next generation sequencing and publicly available data will be analyzed in a statistical probability framework. Code generated will be made publicly available via repositories. Statistical results will be summarized in graphs and tables and will form the basis of manuscripts and grant proposals that focus on comparative multiomics projects that focus on the emergence of important human phenotypes. Research results will be presented at internal and external meetings and conferences on a regular basis. The ideal candidate will be comfortable working with a diverse research group and a wide range of organisms.

One of 12 universities within the State University System of Florida, USF is one of the nation's top public research universities and a leading metropolitan research university. USF is one of the 10 largest public universities in the US by enrollment. The successful candidate will join the newly established, rapidly growing Genomics Program, a new multi-college program that operates through the College of Public Health?s global health strategic area. It includes faculty from the COPH, Morsani College of Medicine, College of Nursing, College of Arts and Sciences and College of Marine Science. USF Genomics research projects are naturally interdisciplinary with studies that cross many boundaries of traditional scientific fields, integrating bioscience approaches in experimental and environmental research with computation biology. This position will be based in

Tampa, Florida, which is located on Tampa Bay, along Florida?s Gulf Coast.

Candidates must have a Ph.D. in a broadly defined data analytics field (e.g., life sciences, health sciences, computer sciences, engineering, statistics, mathematics), experience with probability and statistics, good written and oral communication skills, and ability to work as part of an interdisciplinary team

Preferred Qualifications: Skills in scripting and computer coding, familiarity with standard programming languages and analytic tools (e.g., Python and R), good understanding of principles of genetics and genomics, ability to contribute to manuscript and grant proposal development and production, and ability to train undergraduate and graduate students in bioinformatic methods.

To apply: Complete an online application. Visit https://www.usf.edu/work-at-usf/careers/index.aspx and search for Job ID 21966. Applicants should submit a current curriculum vitae and cover letter, along with the names and contact information for three references.

Affirmative Action: USF is an equal opportunity, equal access academic institution that embraces diversity and inclusion in the workplace.

Please direct any questions to Derek Wildman at dwildman_at_health.usf.edu, or visit the USF Genomics website for more information on the program: https://-health.usf.edu/publichealth/ghidr/genomics Sarah Burgan, MS Senior Biological Scientist USF Genomics Program College of Public Health University of South Florida 813-974-6450

“Burgan, Sarah” <sarahburgan@health.usf.edu>

UTexas Austin EvolutionaryQuantitativeGenetics

The Juenger lab at the University of Texas at Austin is recruiting a postdoctoral position in quantitative genetics to work on DOE funded research of native C4 perennial grasses. The candidate will be involved in projects exploring ecological and evolutionary genetics using switchgrass (Panicum virgatum) as a model system. The project involves a multidisciplinary team of investigators including ecologists, physiologists, modelers and genomic scientists. A major theme of the research is the study of gene-by-environment interaction, ecological and evolutionary tradeoffs, and the evolution of adaptive trait sets in natural plant populations. A central goal is to identify genes underlying local adaptation and ecotypic differentiation across species ranges. The Juenger lab has longstanding interests in quantitative genetics, gene-by-environment interaction, and the genetic architecture of ecologically important traits. Over the last decade we have developed a number of resources for studying quantitative genetics in perennial grasses include diversity panels, mapping populations, and common garden plantings. Our funded projects leverage existing gardens spanning 10 locations across the latitudinal species range of switchgrass (from Texas to South Dakota). The candidate will likely be involved in statistical genetic projects including genome-wide complex trait analysis, genetic mapping (outbred QTL and GWAS), and genomic selection in plant breeding.

The position requires a PhD in Evolution, Population Genetics, Genomics, Statistical Genetics, Plant Biology, Plant Breeding or a related field. We are looking for highly motivated candidates with excellent communication skills, initiative, and enthusiasm for large collaborative team efforts. Our diverse research effort offers an ideal scenario for cross-disciplinary training, leveraging existing datasets and resources, leadership opportunities, a creative work environment, and avenues for applied impact in the development of sustainable biofuels.

Austin is the state capital of Texas, an inland city bordering the Hill Country. Home to the University of Texas, Austin is known for its eclectic live-music scene, sizeable tech sector, and SXSW Conference. Its many parks and lakes are popular for nearly year-round hiking, biking, swimming and boating. Austin boasts approximately 300 days of sunshine per year and is AmericaÂ¹s fastest growing city. https://hr.utexas.edu/prospective/austin We encourage applications from female, minority, and culturally diverse candidates. Please email all applications to tjuenger@austin.utexas.edu with the subject “Postdoctoral Application: statistical genetics”. Applications should include a cover letter detailing experience and research interests, a current CV, and contact information for three professional references compiled in a single pdf file. Applicants can find additional information about the Juenger lab at https://sites.cns.utexas.edu/-juenger_lab. Applications will be considered until the position is filled.

“Juenger, Thomas E” <tjuenger@austin.utexas.edu>

UToronto HumanPopulationGenetics

Potential postdoctoral opportunity at UofT, Canada

The University of Toronto has created a new postdoctoral program to hire Postdoctoral Fellows from underrepresented groups, specifically Indigenous and Black researchers. Information about this program is available here:

www.sgs.utoronto.ca/postdoctoralfellows/Pages/-Provost%27s-Postdoctoral-Fellowship-Program.aspx http://www.sgs.utoronto.ca/currentstudents/Pages/-Doctoral-Postdoctoral-Awards.aspx?expandjump=-PPFP This program offers a very competitive salary of $70,000 CAD per year for two years, and successful candidates will also receive a start-up fund of $5,000 CAD per year.

Applicants must have obtained a doctoral degree, normally within the last five years from the start date of the funding, or will have obtained the degree at the time the fellowship commences.

We seek postdoctoral scientists to work on human population genetics, molecular anthropology or genetic epidemiology (e.g. genome-wide association studies, transethnic meta-analysis,...). Eligible candidates with experience interested in applying to this program are welcome to contact Prof. Esteban Parra at esteban.parra@utoronto.ca The position will be open until filled.

Professor Esteban J. Parra Department of Anthropology University of Toronto at Mississauga Toronto, Canada Email: esteban.parra@utoronto.ca

Cesar Augusto Fortes Lima <cesar.fortes-lima@ebc.uu.se>

UTurku ElephantAgeing

"Post-doctoral position on senescence patterns and ageing markers in Asian elephants.

The University of Turku is a world-class multidisciplinary research university which offers interesting challenges and a unique vantage point to national and international research and education.

A postdoctoral position focusing on senescence patterns and ageing markers in Asian elephants will be available under the supervision of Dr Sophie Reichert, and in close collaboration with the large and multidisciplinary Myanmar Timber Elephant Project of Prof. Virpi Lummaa at the Department of Biology, University of Turku, Finland. The position is part of Dr Reicherts Academy of Finland funded project to study the patterns of senescence and reproductive senescence and identify their underlying hormonal and ageing markers correlates, using a large longitudinal dataset on life-histories of a semi-captive population of Asian elephants in Myanmar. The Myanmar Timber Elephant Project group is highly cosmopolite and focuses on diverse domains of biology (evolutionary biology, behavioural ecology, ecophysiology, genomics).

More information about the groups project can be found at: http://elephant-project.science/ . The project aims to examine different mechanisms of ageing, such as telomere dynamics and oxidative stress, combined with the study of fitness consequences of senescence to understand ageing mechanisms and how they interact with variation in lifelong health, reproductive history and endocrinological measures of stress and reproductive status in long-lived mammals.

The postdoc will take advantage of exceptional lifelong demographic and health data recorded for the Myanmar timber elephants combined with data on a range of correlates of ageing, condition, stress levels and reproductive status to conduct a comprehensive study on the links between reproductive investment and proximate correlates of reproductive and survival senescence. The post-doctoral researcher will investigate changes in annual health status of individual elephants, and how these link to physiological measures of health, ageing markers, reproductive success across life and longevity. Asian elephants are endangered and both wild and captive populations are predicted to vanish from Myanmar unless the vital rates improve.

Understanding health correlates of reproductive and mortality rates thus aids developing management and conservational policies.

The position allows for supervising Bachelor and Master students as well as for applying for own funding, and is thus a good opportunity for acquiring necessary experience for applying for faculty positions afterwards.

Applicants should have a PhD in fields such as evolutionary biology, ecology or ecophysiology.

Strong statistical skills, including extensive knowledge

in managing and analysing longitudinal datasets, as well as excellent written and verbal communication skills in English, evidenced by a good publication record in leading journals in the field, are a must. Some lab experience (telomere and oxidative stress analyses and/or hormonal analyses) would be a plus.

The position is for 22 months and should start at the latest the 1 st of November 2019. The successful candidate will have the possibility to apply to further Finnish / European funding to pursue the project past the present contract.

There will be a trial period of 6 months.

The salary will be determined in accordance with the Finnish university salary system for teaching and research personnel, and consists of two components: a work-specific salary component reflecting how demanding the position is, and a performance component reflecting an evaluation of the position-holders personal achievement. The salary for post-doctoral researchers is in accordance with the University salary system for teaching and research personnel levels 4V6 where the work-specific salary component is between 2535,20 - 3423,25 euros per month. The component based on personal performance adds a minimum of 6 % and a maximum of 50 % to the base salary. Applications should be accompanied by a max 2 pages motivation letter (describing applicant's research interests, qualifications and reasons for applying), a CV, a list of publications, a copy of diploma of the degrees, addresses of 3 potential academic referees and other documents that may affect to the selection need to be attached to the application. Application deadline is on Friday 13.9.2019. The applications must be submitted via the electronic application form of the University of Turku. A link to the application form is available above the announcement of this position at https://www.utu.fi/-en/university/come-work-with-us/open- vacancies (add 7757). The interviews will take place between the 23-26 th of September 2019.

— / —

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

UVirginia AntibioticResistancePersistence

The Department of Biology at the University of Virginia is seeking a Research Associate in the lab of Dr. Martin Wu (http://www.wulabuva.org/) to study the role of persister cells in recurrent Clostridium difficile infections.

The successful candidate will isolate C. difficile from clinical samples, characterize antibiotic resistance and persistence using population analysis, measure metabolite levels with LC/MS and use molecular tools and next generation genomic sequencing to determine the genetic mechanism of persistence. The is a highly interdisciplinary and collaborative project at the interface of clinical microbiology, antibiotic resistance, genomics, and microbial ecology and evolution, which provides the opportunity to interact with scientists from different fields and the opportunity to learn genomics and bioinformatics. The successful applicant will also learn to manage laboratory personnel, contribute to grant writing, and be primary author on manuscripts.

QUALIFICATION REQUIREMENTS: a Ph.D. in Microbiology, Molecular Biology or related field is required by the start date, A strong track record of publication in peer-reviewed journals is required. The ideal candidate would also have the ability to work effectively both independently and within a team, with strong oral and written communication skills.

Experience and Skills: Experience working with bacterial pathogen isolation and culturing. Experience with using anaerobic chamber is preferred but not Strong molecular biology skills: DNA/RNA isolation, PCR, cloning and sequencing Experience with next generation sequencing platforms, genomics, and using computational methods to manage, analyze, and visualize biological data sets. Programming skills in perl, python, R or C++ are preferred but not required. The ability to work effectively both independently and within a team, with strong oral and written communication skills. A strong track record of publication in peer-reviewed journals

APPLICATION PROCEDURE: Apply online at https://uva.wd1.myworkdayjobs.com/en-US/-UVAJobs/job/Charlottesville-VA/Research-Associate-in-Biology_R0009061 and attach a cover letter, a curriculum vitae, and contact information for three references.

APPLICATION DEADLINE: Review of applications will begin on August 15, 2019, but the position will remain open until filled.

This is a one-year appointment; however, the appointment may be renewed for an additional one-year increment, contingent upon available funding and satisfactory performance. For questions regarding this

position, please contact Martin Wu, Associate Professor, at mw4yv@virginia.edu,

For questions about the application process, please contact Richard Haverstrom, Faculty Search Advisor, at rkh6j@Virginia.edu.

For more information on the benefits available to postdoctoral associates at UVA, visit postdoc.virginia.edu and .

The University of Virginia, including the UVA Health System and the University Physicians Group are fundamentally committed to the diversity of our faculty and staff. We believe diversity is excellence expressing itself through every person's perspectives and lived experiences. We are equal opportunity and affirmative action employers. All qualified applicants will receive consideration for employment without regard to age, color, disability, gender identity, marital status, national or ethnic origin, political affiliation, race, religion, sex (including pregnancy), sexual orientation, veteran status, and family medical or genetic information.

mw4yv@virginia.edu

Vienna Bioinformatics

Applications are invited as a Postdoctoral Researcher to work with larger project entitled "Genome-wide molecular dating" (https://synergy.st-andrews.ac.uk/-genomemoleculardating/) at the Institute of Population Genetics, Vetmeduni Vienna. The position is for at least 12 months, and it is quiet flexible (e.g., it could also be part-time). It is paid according to standard Austrian personal costs (Gross income 3,800 Euro per month, https://www.fwf.ac.at/en/research-funding/personnel-costs/)

Standard phylogenetic methods reduce entire populations to single points in genotypic space by modelling evolution as a process in which a single gene mutates along the branches of a phylogeny. In this project, we are developing new theory and software to tackle the problem of species tree estimation and molecular dating genome-wide. Visits to St Andrews, Budapest and Aarhus for collaborations with Gergely Szollosi (Eotvos University, http://-ssolo.web.elte.hu/) and Asger Hobolth (Aarhus University , https://pure.au.dk/portal/en/persons/asger-hobolth(8d387f4e-86e9-4405-a50d-1e5a6efd97d8).html) are possible.

The successful candidate should have programming experience in language such as C, C++, Java and a scripting language such as Python or Perl. They will have a degree in Bioinformatics, Computer Science, Statistics, Mathematics, Physics or a related field. Prior experience with either phylogeny or population genetics, or comparative genomics is a benefit. To receive full consideration, applicants should submit a single PDF file by e-mail to Carolin Kosiol (carolin.kosiol@vetmeduni.ac.at or ck202@st-andrews.ac.uk) including (i) Cover letter with a brief summary of previous experience and motivation for the position and (ii) CV including a list of publications (iii) The names and contact details of 2-3 references. Informal enquires are welcome. Screening will start on the 26th August 2019.

Carolin Kosiol <carolin.kosiol@vetmeduni.ac.at>

Vienna DrosophilaExperimentalEvolution

Experimental Evolution in Drosophila

A postdoctoral position is available at the Institute of Population Genetics, Vetmeduni Vienna (Austria). The research focus of the Institute of Population Genetics is on understanding the genetics of adaptation. This central question in evolutionary biology is being tackled using up-to-date methods and a variety of approaches, including experimental evolution, quantitative genetics, functional genetics, empirical population genetics, bioinformatics and statistics.

The successful candidate will be part of a team of scientists studying adaptation of experimental Drosophila populations to temperature stress. Since our experimental evolution study is performed under controlled environmental conditions with a high level of replication we have a powerful system to successfully employ a combination of DNA sequencing, RNA-Seq, metabolomics and high-level phenotyping to characterize the architecture of adaptation in an out-crossing species. With some of our populations approaching 200 generations, this project provides the opportunity to follow adaptive trajectories through time.

We are looking for a candidate with excellent quantitative training and experience in handling large data sets. A background in population genetics and/or experience with the analysis of RNA-Seq and Pool-Seq data are a bonus. We are mainly targeting applicants with a keen

interest to take advantage of highly replicated genomic time series data to understand polygenic adaptation, but candidates interested to study the co-evolution of microbiome and host genome are also invited to apply. The successful applicant will supervise a team of technicians to collect high-level phenotypes (e.g. respiration, behavior, metabolism etc.).

Upon outstanding performance, a group leader position can be offered to establish her/his independent research at the institute.

The position is available for at least two years starting October 2019, but the exact starting date is negotiable. The application should be emailed to christian.schloetterer@vetmeduni.ac.at <christian.schloetterer@vu-wien.ac.at>as a single pdf containing CV, list of publications, a statement of research interests, and the names of three references with contact details. While the search will continue until the position is filled, applications should be received by 1.9.2019 to ensure full consideration.

Background:

Barghi N, Tobler R, Nolte V, Jaksic AM, Mallard F, Otte KA, Dolezal M, Taus T, Kofler R, Schlotterer C. 2019. Genetic redundancy fuels polygenic adaptation in *Drosophila*. PLoS Biol 17:e3000128.

Jaksic AM, Karner J, Nolte V, Hsu SK, Barghi N, Mallard F, Otte KA, Svecnjak L, Senti KA, Schlotterer C. 2019. Neuronal function and dopamine signaling evolve at high temperature in *Drosophila*. bioRxiv.

Kofler R, Senti KA, Nolte V, Tobler R, Schotterer C. 2018. Molecular dissection of a natural transposable element invasion. Genome Res 28:824-835.

Mallard F, Nolte V, Tobler R, Kapun M, Schlotterer C. 2018. A simple genetic basis of adaptation to a novel thermal environment results in complex metabolic rewiring in *Drosophila*. Genome Biol 19:119.

Tobler R, Franssen SU, Kofler R, Orozco-Terwengel P, Nolte V, Hermisson J, Schlotterer C. 2014. Massive habitat-specific genomic response in *D. melanogaster*populations during experimental evolution in hot and cold environments. Mol Biol Evol 31:364-375.

Christian Schlotterer Institut fur Populationsgenetik Vetmeduni Vienna Veterinärplatz 1 1210 Wien Austria/Europe

phone: +43-1-25077-4300 fax: +43-1-25077-4390 http://www.vetmeduni.ac.at/en/population-genetics/ Vienna Graduate School of Population Genetics http://www.popgen-vienna.at schlotc@gmail.com

WageningenU MicrobialEvolution

Two Postdoc positions on Asgard archaea and the origin of eukaryotes.

The research group of Prof. Dr. Thijs J. G. Ettema is looking for highly motivated and curiosity-driven candidates to fill in 2 PhD and 2 postdoctoral researcher positions within the framework of the ERC project "PRO2EUK". The aim is to gain a more profound insight into the evolutionary transition of prokaryotic to eukaryotic life using various (meta)genomics, phylogenomics and (co-)cultivation approaches. The project builds on the recently discovered Asgard archaea, a deeply-branching archaeal superphylum that currently represents the closest prokaryotic relative of eukaryotes in the Tree of Life (e.g. see Spang et al, Nature 521, 173-178 (2015) and Zaremba-Niedzwiedzka et al. Nature 541, 353-357 (2017)). The ERC project will have a total duration of 5 years, during which various aspects of Asgard archaeal diversity, physiology, cell biology and evolution will be investigated.

We are looking for the following profiles: - Profile 1 ("Phylogenomics"): A candidate with a strong level of expertise large-scale analyses of biological (microbial) sequence data (bioinformatics) and phylogenetics (genome-scale phylogenetic analyses, e.g. using maximum-likelihood and Bayesian methodology). - Profile 2 ("Metagenomics"): A candidate with a strong background in bioinformatics and metagenomics, including reconstruction of microbial genomes from large metagenomics datasets. Preferentially also experienced in using long-read sequencing technologies (PacBio, Nanopore, 10XGenomics). - Profile 3 ("Microbial genomics"): A candidate experienced in analyses of large biological datsets, such as (meta)genome, (meta)transcriptome, and (meta)proteome data. Substantial knowledge of microbial metabolism and cell biology is required, as is experience with programming in Python, Perl and/or R. - Profile 4 ("Microbial physiology"): A candidate with advanced knowledge of anaerobic microbial metabolism and demonstrated experience with (anaerobic) microbial cultivation/enrichment methods. Experience with cell labelling and visualisation techniques (e.g. FISH) and/or with cell sorting approaches (e.g. FACS) is regarded beneficial.

Note that all profiles mentioned above are suitable for both PhD students or postdoctoral researchers. State

clearly in your application if you are applying for a PhD student or Postdoc position.

We ask: - For the PhD position a Master degree in Biology, Microbiology, Bioinformatics, Biotechnology, Molecular Life Sciences or a related field. - For the postdoc position a PhD degree in Biology, Microbiology, Bioinformatics, Biotechnology, Molecular Life Sciences or a related field.

For both: - You are an ambitious and enthusiastic scientist with the ability to work together in multidisciplinary team in an international environment and to work independently. - You are a person with a pro-active attitude. - Good communication and presentation skills are required. - Fluency in English (both spoken and written) is a requirement. For international applicants (non-native English speakers) it is necessary to have: TOEFL internet-based 90 with a minimum of 23 for speaking, or IELTS (academic version) 6.5, with a minimum of 6.0 for speaking.

You can apply online at: https://www.wur.nl/en/-Jobs/Vacancies/Show/2-Postdoc-positions-in-microbial-genomicsevolution-.htm This vacancy is open until suitable candidates have been found for each position, although no later than October 1st 2019. Please note that applications sent by email will not be considered.

Please submit: - Motivation letter (1 page max), outlining your motivation and suitability for the position (PhD student or Postdoc) and profile (see above) of your choice, as well as your personal qualities and experience; - Curriculum vitae (2 pages max), including an abstract of master thesis (250 words max) and contact details of two or more references; - A copy of your degree certificates.

More information: - For more information about this position, please contact Prof. Dr. Thijs J. G. Ettema, email: thijs.ettema@wur.nl. - For more information about the contractual aspects, please contact Mrs. J. van Meurs, HR advisor, telephone number +31 317480101

https://www.wur.nl/en/Jobs/Vacancies/Show/2-Postdoc-positions-in-microbial-genomicsevolution-.htm http://www.ettemalab.org/ daniel.tamarit@wur.nl

WashingtonU AmoebaSocialEvolution

This position is for research in the Queller-Strassmann group. We focus on the evolution of interactions, especially in the social amoeba Dictyostelium discoideum. This has become a model system for the evolution of cooperation and conflict and the transition to multicellularity. We are also working on its symbiotic bacterial partners sometimes confer a farming advantage but also impose costs.

The position is in the biology department at Washington University in St. Louis and is available immediately but the starting date is negotiable.

David Queller and Joan Strassmann lead a friendly and interactive team of highly motivated, creative, and smart investigators. We are interested in your success and in a collaborative and productive approach to research and mentoring. We are seeking energetic postdocs with strong backgrounds some combination of evolutionary biology, social behavior, microbial evolution, genomics, or in methodologies appropriate to the system. We are also open to great ideas from you within the general area of social evolution using the microbial organisms we study We are committed to diversity and to the career success of our team members. Check out our website, (http://strassmannandquellerlab.wordpress.com/) for more information on our lab, or Strassmanns blog (http://sociobiology.wordpress.com).

If you are interested in joining our group, please send an email to Joan Strassmann (Strassmann@wustl.edu) with a single file including CV, statement of research interests, and the names, phone numbers, and email addresses of three references. Women and underrepresented minorities are particularly encouraged to apply. We will begin reviewing applications by 20 August 2019 and will continue to accept them until the position is filled. Postdocs may start immediately but date is negotiable.

“Queller, David” <queller@wustl.edu>

WorkshopsCourses

Berlin ComparativeGenomics Oct7-11

Course: Comparative Genomics (2nd edition)

Where: Free University Berlin (Germany)

When: 7-11 October 2019

Instructors:

Dr Fritz J. Sedlazeck (https://fritzsedlazeck.github.io/)

Prof. Dr. Ingo Ebersberger (https://-/scholar.google.com/citations?user=-LOOY3kYAAAAJ&hl=en)

Course overview

We will cover a broad range of software and analysis workflows that extend over the spectrum from assembling and annotating eukaryotic genomes, via the identification of single nucleotide variants (SNVs) and structural variants (SVs) within the population, to the assessment of their likely functional impact of the detected variants in an evolutionary context.

TARGETED AUDIENCE & ASSUMED BACKGROUND

The course is aimed at researchers interested in learning how to compare genomes and what can be learned from genomic similarities as well as variations. It will include information useful for both beginners and more advanced users. We will start by introducing general concepts of comparative genomics. On this basis, we will then continue to describe all major analysis steps from the raw sequencing data via the identification of variations to an assessment of their impact on the phenotype.

Attendees should have a background in biology. There will be a mix of lectures and hands-on practical exercises using command line Linux. We will therefore dedicate one session to introduce basic and advanced Linux concepts for processing data on Amazon cloud (AWS). Attendees should have also some familiarity with genomic data such as that arising from NGS sequencing experiments.

LEARNING OUTCOMES

Setting up a comparative genomics analysis environment with the CONDA package management system Identification of SNPs and SVs using de novo genome assembly and read mapping strategies Assessment of strengths and weaknesses of the different DNA sequencing technologies, Illumina, Pacific Bioscience, Oxford Nanopore, for the detection of variations Strengths and pitfalls of de novo assembly and mapping approaches for comparative genomics Hands on experience of state of the art methods to compare multiple genomes Annotation of variations and comparative genomics analysis Familiarity with biological sequence analysis in an evolutionary context

For more information about the course, please visit our website: (https://www.physalia-courses.org/courses-workshops/course33/)

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

Berlin CrisprGenomeEditing Oct28-30

Dear all,

Still places left on our 3-day course "Approaches and Computational tools for CRISPR Genome editing", which is being held at the Free University of Berlin (Germany) from the 28th to 30 October 2019

Instructors:

1) Dr. Luca Pinello ((http://pinellolab.org/)Harvard Medical School, USA)

2) Dr. Kendell Clement ((http://pinellolab.org/)Harvard Medical School, USA)

This course is aimed at researchers and technical workers who are designing CRISPR genome editing experiments or will be analyzing genome editing data. The material is suitable both for experimentalists who want to learn more about data analysis as well as computational biologists who want to learn about genome editing design and analysis methods.

The course will be delivered over the course of three days. Each day will include a lecture and laboratory component. The lecture will introduce the topics of discussion and the laboratory sessions will be focused on practical hands-on analysis of genome editing data. These sessions will involve a combination of both mirroring exercises with the instructor to demonstrate a skill as well as applying these skills on your own to complete individual exercises. After and during each exercise, interpretation of results will be discussed as a group. Computing will be done using a combination of tools installed on the attendees laptop computer and web resources accessed via web browser.

For more information about the programme, please visit our website: https://www.physalia-courses.org/courses-workshops/course53/ 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

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org http://www.physalia-courses.org/ Twitter: @physacourses mobile: +49 15771084054 https://groups.google.com/forum/-#!forum/physalia-courses info@physalia-courses.org

Berlin GenomicSelectionGWAS Oct28-Nov1

Course: Genome-wide analysis of selection signatures and genotype-phenotype associations

Where: Free University (FU) Berlin

When: 28th October -1st November 2019

Instructors:

Dr. Pablo Orozco-terWengel (Cardiff University, Wales (UK))

(https://scholar.google.co.uk/citations?user=-urqxLJgAAAAJ&hl=en)

Dr. Filippo Biscarini (CNR, ITA)

https://www.researchgate.net/profile/Filippo_Biscarini
This course is very suitable for those interested in learning how to make use of genomic information to study how selection has shaped the genome and how the genome influences measurable phenotypes.

The course comprises two approaches: one based only on genomic information, which will use populations genetics techniques to detect signatures of selection (both natural and artificial); the other approach will combine genomic and phenotypic data to identify genetic associations for specific phenotypes (i.e. GWAS, genome-wide association studies).

For the full programme, please see: (https://-/www.physalia-courses.org/courses-workshops/-course36/curriculum-36/)

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" <info@physalia-courses.org>

Berlin GenomicsWithBioconductor Sep16-20

Dear all,

Last 2 weeks to apply for our course " Genomics with R and Bioconductor"

Where: Free University (FU) Berlin (Germany)

When: 16-20 September 2019

Instructor: Dr. Ludwig Geistlinger - CUNY Graduate School of Public Health and Health Policy, New York (USA)

This course will provide biologists and bioinformaticians with practical statistical analysis skills to perform rigorous analysis of high-throughput genomic data. It covers the statistical concepts necessary to design experiments and analyze high-throughput data generated by next-generation sequencing, including: exploratory data analysis, principal components analysis, clustering, differential expression, and gene set analysis.

Course website: (https://www.physalia-courses.org/-courses-workshops/course19/)

For the full list of our courses and Workshops, please see: (https://www.physalia-courses.org/courses-workshops/-course11/)

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

cE3c Portugal 2 BiodiversityBiogeography

Course Natural History Collections and Biodiversity Organized by Maria Judite Alves, Raquel Barata, Cristiane Bastos-Silveira et al. |November 18-22 2019 @ Lisbon, Portugal

Objectives This course aims to: - evidence the importance of natural history collections for the study of biodiversity. - show new tools and approaches to extract and disseminate biodiversity data from natural history collections - increase awareness of young researchers for the scientific and culture value of Natural History Museums.

Course coordinator Maria Judite Alves (Researcher at the Centre for Ecology, Evolution and Environmental Changes (cE3c), and MUHNAC- Museu Nacional de Historia Natural e da Ciência)

http://ce3c.ciencias.ulisboa.pt/member/maria-judite-silva-cardoso-alves Intended audience This five days intensive course will be open to a maximum number of 16 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 in Biology or related area.

The course is free for 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (UL; UP) and Biology and Ecology of Global Changes (UL, UA). For information of fees for other participants see the programme details (access link below).

Deadline for applications: October 18, 2019

Candidates should send a short CV and motivation letter to Maria Judite Alves (mjalves@fc.ul.pt)

For additional details about the programme of the course, fees and to know how to register, click here, and access the specific course http://-ce3c.ciencias.ulisboa.pt/training/?cat For more information about the course, please contact by email:

Maria Judite Alves (mjalves@fc.ul.pt)

Course Island Biogeography organized by Ana Margarida Santos et al. | January 13-16, 2019 @ Lisbon, Portugal

Objectives: This four days intensive course introduces the field of island biogeography, a discipline that has long influenced other research areas such as macroecology, community ecology, evolution and conservation biology. This course covers the main aspects of island biogeography, and on completion of the course the students shall have acquired knowledge and understanding on: 1) Ecological/evolutionary theories developed from studies on islands, and its applications in other research areas. 2) Processes that occur during and after island colonization, that shape island communities. 3) Island evolutionary processes. 4) Applications of island biogeography to conservation biology

See the PROGRAMME at: http://-ce3c.ciencias.ulisboa.pt/training/?cat= Course INSTRUCTOR (coordinator): Ana M.C. Santos http://ce3c.ciencias.ulisboa.pt/member/anamcsantos) Researcher at cE3c

Intended audience This course will be open to a maximum number of 20 participants, being directed to PhD and master students as well as post-docs and professionals with a bachelor in Biology, Geography or related areas.

Minimum formation: Bachelor in Biology, Geography or related areas.

The course is free for a maximum of 10 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 6, 2019 Candidates should send a short CV and motivation letter to Ana Margarida Santos (ana.margarida.c.santos@googlemail.com).

For additional details about the course click here:

http://ce3c.ciencias.ulisboa.pt/training/?cat= Margarida Matos <mmmatos@fc.ul.pt>

Colombia 9thDNAmetabarcodingSchool Sept31-Oct6

DNA metabarcoding is a rapidly evolving method for assessing biodiversity from environmental DNA and bulk samples. It has a wide range of applications: biodiversity monitoring, animal diet assessment, reconstruction of paleo communities, among others. DNA metabarcoding uses molecular techniques such as PCR and next generation sequencing, and requires a broad range of skills, as it integrates molecular biology, bioinformatics, biostatistics, and ecology.

The DNA metabarcoding spring school is now in its ninth edition. This year, it is co-organized and funded by the metabarcoding.org team, Grow Colombia, the Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, the Andes University, the Earlham Institute and Ecopetrol in Colombia

The DNA metabarcoding school will be held from October the 31st at Bogota and from November the 1st to the 6th, 2019 at Villa de Leyva

All lectures and practicals will be presented in English. The symposium is open to anyone on the basis of a simple registration at the symposium registration. Candidates for the lectures and practicals must apply by email to the following address:

colombia2019@metabarcoding.org

Before noon Colombia time on September the 20th, 2019

For the application to the school the email must contain a brief curriculum vitae and a letter of motivation (one page max) indicating how the applicant's research will benefit from DNA metabarcoding and what (s)he is hoping to learn from this school. As part of the course, participants will have to give a flash talk (5 minutes) about their research and how it is related to DNA metabarcoding. The number of participants to the lectures and practicals of this school is limited to 24. It is compulsory for the participants to the lectures and practicals to also attend the Symposium. The selected participants will receive confirmation of acceptance by Tuesday 24 September.

Main lecturers - Inger Alsos (Tromsø University, Norway) - Aurélie Bonin (Milano University, Italy) - Frédéric Boyer (LECA, CNRS, France) - Anthony Chariton (Mac-

quarie University, Australia) - Eric Coissac (LECA, UGA, France) - Tristan Cordier (UNIGE, Switzerland) - Mailyn Gonzalez (Humboldt institute, Colombia) - Wilfried Haerty (Earlham Institute, United Kingdom) - Pierre Taberlet (LECA, CNRS, France) - Lucie Zinger (IBENS, ENS, France)

Course Schedule The lectures will cover different aspects of DNA metabarcoding. Molecular ecology practicals will present basic techniques for DNA extraction in the field, DNA amplification by PCR and MinIon sequencing. The bioinformatics practicals will introduce data analysis from raw sequences to basic ecological conclusions.

Venue The school will take place at the Andes University in Bogota for the first symposium day and at Casa Fundadoresin Villa de Leyva for the following day. Transfers between Bogota and Villa de Leyva will be organized by the school.

Attendees of the school will be welcomed in Bogota and will be transferred to Villa de Leyva by bus. Therefore, it will not be possible to arrive after the beginning of the school or to leave before the end.

Cost of the school:

The total cost for the school is estimated to be around 500 euro . This includes hotels, meals and the return trip between Bogota and Villa de Leyva. The lecture cost are covered by the school organizers. However, participants have to pay for their trip to Bogota. Participants from Colombia have the option to obtain financial support from the Earlham Institute.

To get there:

The symposium will start on the 31th October morning. Therefore, attendees will have to be in Bogota at least on the day before.

– Lucie Zinger, PhD Associate Professor

Ecology and Evolutionary Biology Section Institut de Biologie de l'Ecole Normale Supérieure (IBENS) Ecole Normale Supérieure 46 rue d'Ulm 75005 Paris FRANCE

Phone:+33 625 458 707 emails: lucie@zinger.fr; lucie.zinger@ens.fr Skype: lucie.zinger

zinger.lucie@gmail.com

Crete 2 GISwithR IntroENM Nov20-29

Dear evoldir members,

Transmitting Science is offering the course 'GEOGRAPHICAL INFORMATION SYSTEMS WITH R: USING R AS GIS (GREECE)'.

Instructors: Dr. NeftalíSillero (Centro de Investigaçao em Ciências Geo-Espaciais Portugal) and Dr. A. Márcia Barbosa (CIBIO-InBIO, University of Évora Portugal) Dates: November 20th-22nd, 2019 Location: Crete, Greece

COURSE OVERVIEW:

A Geographical Information System is a set of data, tools, software and hardware, designed to store, manage, visualise, analyse, and represent spatial data, either in vector (points, lines, polygons) or raster (image, pixels) format. GIS is behind many activities of our world: from Google Earth and Maps, GPS navigation management of logistic and transportation services, land-cover maps such as CORINE, territorial planning, production of topographical maps and other thematic cartographies, to natural risk analyses and calculation of species' potential distributions. Every activity using spatial data needs a GIS.

Do you know how to work with spatial data? Do you need to use a Geographic Information Systems (GIS) but you cannot buy professional software? Do not worry, there are many alternatives to freeware GIS that are at least as good as the professional solutions. However, it is not so well-known that you can use the famous programming language R as a GIS tool.

This course will teach you the basic theory and practice of GIS using R. By the end of this 3-day practical course, you will have the capacity to visualise, map, and analyse spatial data, in vector as well as raster format .

This course is orientated to PhD and MSc students, as well as other students and researchers working on any discipline using spatial data.

This course will be mainly practical, with some theoretical lectures. All spatial processes and analyses will be performed with R, which is free and open-source software and allows automated and fully reproducible workflows. Students will learn to import different types of spatial data, visualise the data, perform spatial anal-

yses, and represent the results in thematic maps.

PROGRAM: Wednesday, November 20th, 2019.

- Theory: Introduction to GIS. - Practical: Introduction to GIS with R: Import and plot data. - Theory: Cartography. - Practical: Cartographic projections.

Thursday, November 21st, 2019.

- Theory: Vector G database base operations. - Practical: Attribute and spatial queries: join/merge, filter/subset, select by attribute, select by location, summarize, add/calculate new attributes (columns), plot attributes. - Theory: Vector analyses. - P: Vector analyses: buffer, merge, dissolve, intersect, unite, select, calculate the area.

Friday, November 22nd, 2019.

- Theory: Raster GIS. - Practical: Raster analyses: rasterize, crop, mask, merge, distance surface, zonal statistics.

For more information and registration: http://bit.ly/GIS-with-R . Contact: courses.crete@transmittingscience.org

All the best, Haris Saslis, PhD Course Coordinator Transmitting Science www.transmittingscience.org haris.saslis@transmittingscience.org

---

Dear evoldir members,

Transmitting Science is offering the course 'INTRODUCTION TO ECOLOGICAL NICHE MODELLING'.

Instructor: Dr. NeftalíSillero (Centro de Investigaçao em Ciências Geo-Espaciais Portugal) Dates: November 25th-29th, 2019 Location: Crete, Greece

COURSE OVERVIEW:

This course will teach you the base theory of ecological niche modelling and its main methodologies. By the end of this 5-day practical course, you will have the capacity to perform ecological niche models and understand their results. You will be able to choose and apply the correct methodology depending in the aim of your study and type of datasets.

Ecological niche, species distribution, habitat distribution, or climatic envelope models are different names for similar mechanistic or correlative models, empirical or mathematical approaches to the ecological niche of a species, where different types of ecogeographical variables (environmental, topographical, human) are related with species physiological data or geographical locations, in order to identify the factors limiting and defining the species' niche. ENMs have become popular due to the need for efficiency in the design and implementation of conservation management.

The course will be mainly practical, with some theoretical lectures. All modelling processes and calculations will be performed with R, the free software environment for statistical computing and graphics (http://www.r-project.org/). Students will learn to use modelling algorithms like Maxent, Bioclim, Domain, and logistic regressions, and R packages for computing ENMs like Dismo and Biomod2. Also, students will learn to compare different ecological niche models with Ecospat package.

— / —

Cumberland Ohio EnvironmentalDNA Nov4-7

Workshop: Using environmental DNA for surveys and monitoring

Dates: November 4-7, 2019

Location: The Wilds Conservation Science Training Center, Cumberland OH

Instructor: Dr. Stephen Spear, Director of Wildlife Ecology at The Wilds

Environmental DNA is increasingly used as a monitoring tool for aquatic and even some terrestrial species. This 4 day workshop will provide a detailed introduction to eDNA methodology and how to apply the method into a monitoring framework. The workshop will combine lecture components with hands-on lab exercises. The workshop is geared toward focal species eDNA monitoring, although metabarcoding approaches will be demonstrated and discussed.

The following topics will be included:

* Overview of eDNA case studies using both water and soil sampling

* Collection and filtering of water and soil samples in the field

* Designing primers for species-specific amplification

* Laboratory extraction and amplification of eDNA samples using qPCR and metabarcoding primers

* Interpreting results and analytical tools for using eDNA in monitoring programs.

At the end of the workshop, each participant will have collected, extracted, and analyzed their own eDNA samples. Participants will also work in groups to design and implement a small eDNA research study during the course of the week.

This workshop is targeted toward both professionals and graduate students with limited first-hand experience with eDNA that are looking to learn more about the method or develop their own eDNA projects. No previous experience is required, although some prior experience in either genetic techniques or monitoring methods would be helpful.

The course will be located at The Wilds (https://-thewilds.columbuszoo.org), a 10,000 acre AZA conservation center located approximately 90 miles east of Columbus. Our facilities include a low-copy DNA lab, a general lab, classroom, Eastern hellbender conservation center, and many lakes and streams. Housing is available at the Wilds cabins at Straker Lake (https://thewilds.columbuszoo.org/home/visit/-stay-overnight/the-wilds-cabins-at-straker-lake). A limited number of spaces at our Conservation Science Training Center cabins will be available for students on a first-come, first-serve basis. Food service will not be available at The Wilds during the workshop, although each cabin comes with a kitchen that will allow participants to prepare their own meals.

Workshop fees and costs: The fee for the workshop is $700 for professionals and $500 for students. Housing at the cabins at Straker lake is an additional $100/room/night (each cabin has 3 rooms). Limited student housing at the CSTC cabins is available for $62.50 for the entire week.

To register for the workshop or to ask any questions, please contact Stephen Spear at sspear@thewilds.org.

“Spear, Stephen” <sspear@thewilds.org>

CzechRepublic 2020Genomics Jan5-Feb1

2020 Workshop on Genomics, Ã’eskÃÂ½ Krumlov, Czech Republic

We are pleased to announce that we are accepting applications for the Workshop on Genomics which is being held once again in beautiful Ã’eskÃÂ½ Krumlov, Czech Republic from 5-18 January, 2020. More information is below and can be found on our website at http://-evomics.org . Dates: 5-18 January, 2020

Application Deadline: 15 September, 2019 is the preferred application deadline, after which time people will be admitted to the course following application review by the admissions committee. However, later applications will certainly be considered for admittance or for placement on a waiting list.

Registration Fee: $1800 USD. Fee includes opening reception and access to all course material, but does not include other meals or housing. Special discounted pricing has been arranged for hotels, pensions and hostels. Information regarding housing and travel will be made to applicants following acceptance.

APPLY HERE: http://evomics.org/registration-form/-apply-2020-workshop-on-genomics-cesky-krumlov/ Useful Links: Direct Link to the Full Workshop Schedule: http://evomics.org/2020-workshop-on-genomics-cesky-krumlov-czech-republic/ General Workshop information: http://evomics.org Frequently Asked Questions (FAQ) about the Workshop and Ã’eskÃÂ½ Krumlov can be found here: http://evomics.org/-workshops/faq/ The 2020 Workshop on Genomics is being held from 5-18 January, 2020 in Ã’eskÃÂ½ Krumlov < http://en.wikipedia.org/wiki/-%C4%8Cesk%C3%BD_Krumlov >, Czech Republic. This will be the 10th time the Workshop will be held in the Czech Republic. The Workshop on Genomics was developed in response to the increasing demand for training on how to effectively analyze and manage data generated by modern sequencing technologies. The Workshop curriculum includes extensive coverage of fundamental techniques required of all studies utilizing modern sequence data. The first half of the Workshop focuses on management and modification of modern sequence data files using the Unix command-line and editors to manipulate large data files, best practices for sequence data generation, management and analysis and how to use R to analyze biological data. The second-half of the Workshop is devoted to specific sub-disciplines within the genomic sciences. While these topics may change from year-to-year, efforts are made to devote significant amounts of time to techniques being used widely in the field (e.g. transcriptomics, genome assembly, metagenomics, population genomics). For more information and online application see the Workshop web site - http://evomics.org ——

2020 Workshop on Microbial Ecology, Ã’eskÃÂ½ Krumlov, Czech Republic

We are pleased to announce that we are accepting appli-

cations for the Workshop on Microbial Ecology which is being held in beautiful Ã'eskÃÂ½ Krumlov, Czech Republic from 12-25 January, 2020. More information is below and can be found on our website at http://-evomics.org . Dates: 12-25 January, 2020

Application Deadline: 15 September, 2019 is the preferred application deadline, after which time people will be admitted to the course following application review by the admissions committee. However, later applications will certainly be considered for admittance or for placement on a waiting list.

Registration Fee: $1800 USD. Fee includes opening reception and access to all course material, but does not include other meals or housing. Special discounted pricing has been arranged for hotels, pensions and hostels. Information regarding housing and travel will be made to applicants following acceptance.

APPLY HERE: http://evomics.org/registration-form/-apply-2020-workshop-on-microbial-ecology/ Useful Links: Direct Link to the Full Workshop Schedule: http://evomics.org/workshops/2020-workshop-on-microbial-ecology/ General Workshop information: http://evomics.org Frequently Asked Questions (FAQ) about the Workshop and Ã'eskÃÂ½ Krumlov can be found here: http://evomics.org/workshops/faq/ The 2020 Workshop on Microbial Ecology is held in Ã'eskÃÂ½ Krumlov from

— / —

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

Edinburgh Metagenomics Aug28

Dear All

We have some spaces remaining on our brand new course: Metagenomics and Metabarcoding

When: 28 - 30 August 2019

Where: Peter Wilson Building (Room G155), The King's Buildings, The University of Edinburgh, Edinburgh, Scotland, UK

Instructors: Urmi Trivedi, Bioinformatician, Edinburgh Genomics; Amanda Warr, Research Geneticist, Roslin Institute; Rob Stewart , Bioinformatician, Roslin Institute; Albert Phillimore, Institute of Evolutionary Biology, University of Edinburgh (guest lecturer); Nathan Medd, Training and Outreach Manager, Edinburgh Genomics (demonstrator)

Description: The ability to identify organisms from traces of genetic material in environmental samples has reshaped the way we see life on earth. Especially for microorganisms, where traditional identification is hard or near impossible, metagenomic techniques have granted us unprecedented insight into the microbiome of animals and the environment more broadly.

This course focuses on the computational methods used to analyse the wealth of data produced by shotgun metagenomics and metabarcoding (Amplicon targeted metagenomics) studies.

This course will provide you the insights to the DNA metabarcoding analyses from preprocessing and quality control of the raw data to the construction of OTU/ASV tables, taxon assignment, diversity analysis and differential abundance analysis using QIIME2. Further, you will also learn about methods to generate the reference-based profile to generate microbial community features like taxonomic abundances or functional profile and how to identify the ones characterizing differences between two biological conditions.

You will then be introduced to methods used for assembly from metagenomics samples. Attendees will use tools to assemble metagenome assembled genomes (MAGs) from short read and long read data. We will discuss the different approaches and tools available for these assemblies and the benefits and limitations of each options.

Cost: £500

More info and registration here: https:/-/genomics.ed.ac.uk/services/metagenomics-metabarcoding For more information on this course and others coming up this summer, please see our website: https://genomics.ed.ac.uk/services/training Kind Regards

Nathan Medd

Training and Outreach Manager - Edinburgh Genomics

–

Edinburgh Genomics' Privacy Notice can be viewed at: http://genomics.ed.ac.uk/about-us/privacy-notice TRAIN edgenomics-training <edge-training@ed.ac.uk>

FortCollins SustainingBiodiversityInfrastructure Oct15-17

The deadline for our 3-day program management training is around the corner!

The Sustaining Biological Infrastructure Training Initiative provides scientists with lucrative program management skills enabling them to lead science programs with confidence. **The deadline for our 3-day intensive Strategies for Success course is August 30th**

This will be the last chance in 2019 to get this training!

Course: Strategies for Success Dates: October 15-17, 2019 Location: USGS Powell Center, Fort Collins, CO Come learn how to manage finances, strategically plan your program's future, and communicate your plan with stakeholders and potential funders, with our expert training team for 3 days in Colorado. This training is perfect for those transitioning into leadership roles, or current project directors looking to improve their management skills.

Unique among business skills courses, this course is tailored to the needs of the scientific community.

Learn more and register now while space is still available: www.esa.org/sbi Interested but not sure if this course is for you? Contact us, we would love to help! chelsea@esa.org

Chelsea Fowler <chelsea@esa.org>

IndianaU Metagenomics Oct7-9

Metagenomics Analysis Workshop - REGISTRATION CLOSING SOON

The National Center for Genome Analysis Support (NCGAS) at Indiana University seeks interested participants for a three-day workshop on metagenomic analysis.

Workshop page: https://github.com/NCGAS/-Metagenomic-analysis-workshop Registration page: https://redcap.uits.iu.edu/surveys/?s=NYE8DET3EN Deadline to apply: August 15th, 2019.

NCGAS is offering a three-day workshop on high performance computing (HPC) usage and metagenomic analysis. It will take place in October 7th to 9th, 2019 at Indiana University, Bloomington campus. Registration is free, but application is required.

The workshop will include discussions, lectures and hands-on tutorials, to cover topics important to constructing and analyzing metagenomic datasets. Material covers availability of HPC resources, and how to access these resources, while learning how to assemble and annotate metagenomics datasets. The goal of this workshop is to provide a comprehensive preparation for metagenomic analysis and other bioinformatic tasks.

This workshop will include the basic steps in metagenomic analysis - to assemble and annotate the datasets to identify taxa and function. In addition, we will discuss how to install programs locally, and other resources that support further downstream analysis to answer various research questions. While the material will make heavy use of XSEDE and IU machines, the material is transferable to any cluster.

For more information or questions, please contact bhnala@iu.edu

Sheri Sanders Bioinformatic Analyst National Center for Genome Analysis and Support (NCGAS)

NCGAS is a management unit of the Research Technologies division of UITS; NCGAS is affiliated with the Indiana University Pervasive Technology Institute.

"Sanders, Sheri" <ss93@iu.edu>

Israel AvianParasitologyMigration Nov

Join us this fall for a week-long intensive graduate field course on avian parasitology and migration. The course will take place in the Hula Valley of Israel, an important migratory stopover point, and will focus on lab and field techniques for researching avian parasites, immunity, physiology, and migration. Graduate credit and travel grants available. The deadline to apply is August 23. For more information see: http://english.telhai.ac.il/-avian-parasitology-on-a-migratory-flyway/ – Amanda Hund JSMF Postdoctoral Fellow Department of Ecology, Evolution, and Behavior University of Minnesota website: amandahund.weebly.com twitter:@AmandaHund

Amanda Hund <ahund@umn.edu>

Kiel EukaryoticGenomeAnnotation Sep19

You can still sign-up for the free training course on EUKARYOTIC GENOME ANNOTATION in Kiel, on September 19th 2019

COURSE OVERVIEW:

The constant drop in sequencing prices and the development of easy-to-use assembly programs makes it possible, even for small groups, to embark on a de novo genome project to obtain the full sequence of their species of interest. However, automatically annotating all genetic features in a eukaryotic genome, especially in non-model species with few or no sequenced closely related species, remains a challenge and standard pipelines still do not exist.

In this one day course participants will learn about these challenges and the current strategies that can be used to try to obtain the most complete set of genes from a de novo assembled eukaryotic genome. We will also discuss how additional data, such as RNA-seq, assembled transcriptomes or proteomic data, can be used to improve the annotation, which can inform decisions on how best to spend the budget during a genome project. The practical part of the course will explain how to automatically and manually annotate a genomic region and how that information can be immediately translated into biologically relevant data for the species of interest.

DETAILS:

Where: University of Kiel (Germany)

When: September 19th, 2019

Organizers: German Network for Bioinformatics Infrastructre (de.NBI) and Christian-Albrechts-Universität Kiel

Prerequisits: none

Registration: https://forms.gle/-ZkQ2RLwRJ9CXVmYH8 For question regarding the course, please contact Montserrat Torres, m.torres@ikmb.uni-kiel.de

We hope to see you there!

Best wishes,

Montse

– Dr. Montserrat Torres-Oliva Postdoctoral Researcher Institute of Clinical Molecular Biology Christian-Albrechts-University of Kiel

University Hospital Schleswig-Holstein Campus Kiel Am Botanischen Garten 11, 24118 Kiel, Germany

Fon: +49 (0) 431 / 500 - 15126 m.torres@ikmb.uni-kiel.de - www.ikmb.uni-kiel.de Montserrat Torres Oliva <m.torres@ikmb.uni-kiel.de>

LavalU Quebec SpeciationGenomics Sep2-6

Dear all,

The deadline for our courses at Laval University (Quebec City, Canada) this September has been extended to the 20th of August.

1) Speciation Genomics - 2-6 September 2019 - (https://www.physalia-courses.org/courses-workshops/-course37/)

Instructors: i) Dr. Mark Ravinet (Univeristy of Oslo, Norway); ii) Dr. Joana Meier (University of Cambridge, UK).

Overview: This course will provide a thorough introduction to the growing field of speciation genomics. The course aims to take students from the initial steps required for handling raw sequencing data to demographic modelling and inference of genome-wide signatures of selection and introgression. Through a combination of lectures covering key theoretical and conceptual topics, alongside hands-on exercises, participants will learn the most important computational approaches used in speciation genomics. This will include a heavy emphasis on data visualization and intepretation. After completing of the course, the participants should be able to begin using NGS data to shed light on the genomic aspects of speciation in their study system of choice.

2) GWAS - 9-13 September 2019 - (https://www.physalia-courses.org/courses-workshops/-course49/)

Instructors: i) Dr Filippo Biscarini (CNR, Italy); ii) Eric Normandeau (Laval University, Canada)

Overview: This course will introduce students, researchers and professionals to the steps needed to build an analysis pipeline for Genome-Wide Association Studies (GWAS). The course will, on one hand, describe all the necessary steps involved in a typical GWAS study;

on the other hand, we will build a reusable and reproducible GWAS pipeline.

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" <info@physalia-courses.org>

Leysin SwissAlps SingleCellOmics Oct13-18

Dear all, please note that the correct registration deadline for the previously announced Autumn School in "Single Cell Analysis" is August 31, 2019 (We apologize that an incorrect date was previously announced at the registration page.)

We are happy to be able to offer this unique opportunity and we are looking forward to your application! https://-www.sib.swiss/training/course/2019-10_single-cell Kind regards Bjorn Nystedt

*****

The SIB Swiss Institute of Bioinformatics (www.sib.swiss) and NBIS/SciLifeLab Sweden (www.nbis.se) are pleased to announce a joint Autumn School in

"Single Cell Analysis"

This special event will take place 13-18 October 2019 in Leysin, a nice all-season resort in the Swiss Alps. This school aims at training students and young researchers in cutting-edge methodologies about single cell analysis in the various omics. With a mix of lectures and hands-on sessions, supervised by expert speakers / tutors, and in a nice environment and atmosphere, we are convinced that this School will meet your expectations.

*PhD students from SIB and from a Swedish University have the priority but the School is open to everyone.

Detailed information and course application: https://-www.sib.swiss/training/course/2019-10_single-cell IMPORTANT: please note that your application will not be considered if you do not complete the form indicated in the course information page.

We look forward to meeting you at the Autumn School! With kind regards,

The organization committee: Bjorn Nysted, NBIS/SciLifeLab Grégoire Rossier, SIB

The scientific committee: Ssa Bjorklund, NBIS/SciLifeLab Charlotte Soneson & Michael Stadler, SIB and Biozentrum Vincent Gardeux, EPFL

Bjorn Nystedt, PhD Joint head of facility Bioinformatics Long-term Support (WABI) National Bioinformatics Infrastructure Sweden at SciLifeLab www.nbis.se, www.scilifelab.se/platforms/bioinformatics

BMC E10:3206, entrance C11 Husargatan 3, SE-752 37 Uppsala

Phone: 018 - 471 4413 E-mail: bjorn.nystedt@scilifelab.se

bjorn.nystedt@scilifelab.se

Nantucket PhylogeneticDevelopeR Nov5-8

Dear colleagues.

We are very happy to announce the 2nd edition of a graduate-level workshop on phylogenetic method development R. The course will be four days in length and take place at the University of Massachusetts Boston's Nantucket Field Station from the 5th to the 8th of November, 2019. The workshop is intended for (and open to) anyone from an evolutionary biologist with interest in phylogenetic methods and a little prior computer programming experience, to an intermediate or advanced computational biologist curious about honing their skills in R development for phylogenetics.

On the first 2.5 days of the workshop, course leaders Drs. April Wright, Josef Uyeda, Klaus Schliep, Claudia Solís-Lemus, & Liam Revell will provide an introduction to the primary data structures and methods of common phylogenetic R packages, the basics of computational algorithms for phylogenies, and an overview of other essential topics of software development in R (version control, unit testing, documentation, and R package development), the specific details of which will depend on the prior experience of the bootcamp participants. Over the subsequent 1.5 workshop days participants will work in break-out groups with workshop leaders to

develop small R packages on their chosen topics. These projects will focus on adding new functionality to existing R software in phylogenetics, and might range from tree manipulation, to phylogenetic inference, to comparative methods, to phylogenetic simulations, to the visualization of phylogenies or macroevolutionary data on trees.

The workshop is funded by awards from the National Science Foundation to Dr. Liam Revell (NSF DEB-1350474 and DBI-1759940), with additional support from the University of Massachusetts Boston. All accepted students originating from a U.S. port of origin will have their travel costs covered or defrayed, and room and board during the workshop will be provided. As the workshop will be held at a field station, accommodation is comfortable, but basic, and participants should be prepared to stay in multiple occupancy rooms.

To apply for the course, please complete a Google form that can be found at the following link: http://-www.phytools.org/nantucket2019/apply.html. Details of relevant programming background (computer languages, R knowledge, GitHub repositories, ...) should also be provided. Admission is competitive, and preference will go towards students with background in evolutionary biology, basic to moderate experience in computer programming (ability to read a data file into R or a similar language and parse it for information, familiarity with iteration and functions, ability to identify when to use basic datatypes such as vectors and dataframes, and comfort with using help documentation to find answers), and a compelling motivation for taking the course. Applications should be submitted the google form by September 10, 2019. Questions can be directed to klaus.schliep@umb.edu or liam.revell@umb.edu.

Once again, the link to apply is as follows: http://-www.phytools.org/nantucket2019/apply.html . All the best, Liam

– Liam J. Revell Associate Professor, University of Massachusetts Boston Profesor Asistente, Universidad Católica de la Ssma Concepción web: http://-faculty.umb.edu/liam.revell/, http://www.phytools.org

Academic Director UMass Boston Chile Abroad (starting 2019): https://www.umb.edu/academics/-caps/international/biology_chile Liam Revell <Liam.Revell@umb.edu>

Vienna ExptEvolution Dec2-6

Dear EvolDir community,

The Vienna Graduate School of Population Genetics is now accepting applications for the course "Experimental evolution: bringing theory and practice together" at the University of Veterinary Medicine in Vienna, December 2-6, 2019.

Experimental evolution is extensively used to address questions of evolutionary biology by exposing evolving populations to different environmental conditions. It offers the opportunity to replicate experiments and test for convergent outcomes. With the recent drop in DNA sequencing cost and the advance of sequencing technologies, the combination of experimental evolution with next generation sequencing of pools of individuals (Evolve & Resequence) has become a state-of-the-art method to link phenotypic responses to genetic changes. Although the availability of replicated time series data is one key advantage of E&R, the analysis of such data sets is still in its infancy. This course will introduce the participants to several new approaches for the analysis of genomic time series data covering the latest software tools as well as required statistical and computational skills. The course is targeted towards researchers interested in experimental evolution combined with NGS and will cover the design of experimental evolution studies as well as the analysis of Pool-Seq time series data. The course aims to introduce participants to:

- State-of-the-art software packages - Modeling of neutral data - Identifying selected regions - Comparison of n-point analysis with time series data - Haplotypes reconstruction from time-series data - Inferring linkage structure of Pool-Seq data - Estimating selection coefficients - Calling transposable elements in time series data - Inferring selection in transcriptomics data

Morning lectures by internationally renowned faculty will be followed by computer practicals on the analysis of experimental evolution data in the afternoon.

Faculty:

Anthony Long (California Irvine Univ., US) - confirmed Christian Schlotterer (Vetmeduni Vienna, A) - confirmed Dmitri Petrov (Stanford Univ., US) - *to be **confirmed* Henrique Teotonio (IBENS, FR) - confirmed Molly Burke (Oregon State Univ., US) - confirmed Neda Barghi (Vetmeduni Vienna, A) - confirmed

Robert Kofler (Vetmeduni Vienna, A) - confirmed Susan Bailey (Clarkson Univ., US) - confirmed

The course is free but will be restricted for the practical sessions (hands on computer lab).

Additional seats will be available for attending the lectures, only. Students and researchers are invited to apply by submitting a single .pdf file containing 1) a short CV, 2) a motivation letter and a statement of computer skills to popgen.vienna@gmail.com by September 30, 2019. Confidence in working with Unix command line as well as in R, is strongly recommended for the practicals. Participants are expected to arrange their own accommodation. Further information and updates available at: https://www.popgen-vienna.at/training/-experimental-evolution-course/ Best regards, Wei-Yun Lai, Thapasya Vijayan, Claire Burny & Sonja Lecic PhD students of the Vienna Graduate School of Population Genetics

Sonja LeÄiÄ <slecic8@gmail.com>

Wageningen GenomicDiversity Dec9-13

Dear all,

Wageningen University & Research organizes a 5-day course, in the framework of the EU Horizon 2020 project IMAGE (Innovative Management of Animal Genetic Resources).

Characterization, management and exploitation of genomic diversity in animals

Date: 9-13 December 2019 Location: Wageningen Campus Level: post-graduate (experience with SNP data is required) Info & registration: https://www.wur.nl/en/Education-Programmes/PhD-Programme/Graduate-Schools/Wageningen-Institute-of-Animal-Sciences/Show-1/Post-graduate-course-on-characterization-management-and-exploitation-of-genomic-diversity-in-animals-9-13-December-2019.htm Course content * Measures of genomic diversity * Diversity across breeds * Adaptive introgression * Functional genomics * Management of small populations * Optimal contributions

Confirmed lecturers * Dr. Mirte Bosse, Wageningen University & Research * Prof. Martien Groenen, Wageningen University & Research * Dr. Gabor Meszaros, University of Natural Resources and Life Sciences * Dr. Jack Windig, Wageningen University & Research

If you have further questions please check the website or contact me.

With kind regards,

Dr. Aniek Bouwman Researcher Not in the office on Monday

Wageningen U&R Animal Breeding & Genomics Wageningen Livestock Research P.O. Box 338, 6700 AH Wageningen, The Netherlands Droevendaalsesteeg 1, 6708 PB Wageningen, The Netherlands T +31 317 480495 (also mobile) E aniek.bouwman@wur.nl More about Aniek Bouwman < http://www.wageningenur.nl/en/Persons/ir.-AC-Aniek-Bouwman.htm >, @bouwman_aniek < https://twitter.com/bouwman_aniek >, LinkedIn < http://www.linkedin.com/pub/aniek-bouwman/-14/5b6/20a >, Scholar < https://scholar.google.nl/-citations?user=iSLKrWkAAAAJ&hl=en&oi=ao >

http://www.wur.nl/en/livestock-research < http://www.wur.nl/en/livestock-research%0d > Follow Wageningen Livestock Research on Twitter < http://twitter.com/WURlivestock >, Facebook < http://www.facebook.com/-wageningenlivestockresearch >, Youtube < http:/-/www.youtube.com/c/wageningenlivestockresearch >, LinkedIn < https://www.linkedin.com/company/-wageningenlivestockresearch > Disclaimer < http://-www.wageningenur.nl/en/Disclaimer.htm > Wageningen Livestock Research is part of Stichting Wageningen Research (Wageningen Research Foundation), and is registered at the Dutch Chamber of Commerce with number 09098104. The institute is NEN-EN-ISO 9001:2015 certified.

“Bouwman, Aniek” <aniek.bouwman@wur.nl>

WichitaStateU PlantGenomics

Are you interested in learning more about plant genomics and bioinformatics? Do you work in one of these EPSCoR states/territories?

Alabama, Alaska, Arkansas, Delaware, Guam, Hawaii, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Oklahoma, Puerto Rico, Rhode Island, South Carolina, South Dakota, Vermont, US Virgin Islands, West Virginia, Wyoming

If so, we encourage you to apply for a position in a recently funded EPSCoR plant genomics research and training network, the Consortium for Plant INvasion Genomics (CPING). CPING aims to 1) better understand plant invasion by investigating 5 major North American invasive species and 2) enhance genomics research and teaching in EPSCoR jurisdictions through training and research opportunities. Aim 2 will bring in a large number of botanists and plant biologists in EPSCoR jurisdictions who would like to improve their genomics and bioinformatics skills. Although many participants will be assistant/associate professors, funding for undergraduate students is also available. All participants will attend a summer short course where they will learn fundamental genomics and bioinformatics methods. There will also be opportunities for all participants to pursue independent research projects, collect data that will support collaborative projects, and participate in annual network-wide symposia.

Don't be bashful! There are opportunities for researchers at all skill and experience levels. We expect many applications from researchers that are currently using 'first generation' genetic techniques (Sanger sequencing, microsatellites, etc.) but that haven't made the jump to 'next-generation' and beyond genomic tools. However, we are also eager to include researchers at primarily teaching institutions who have limited opportunity to conduct primary research.

If you have interest in this opportunity, or would simply like to learn more, please complete the brief survey at the link below. There's no commitment at this point. Also, PLEASE help us spread the word by sending this to colleagues in EPSCoR jurisdictions who might be interested in learning plant genomics tools for teaching and research. In the meantime, please email me (james.beck@wichita.edu) with any and all questions.

Survey Link:

https://forms.gle/Xe6PAuNt1r962UNp6 James Beck Department of Biological Sciences Wichita State University www.becklaboratory.com/James "Beck, James" <James.Beck@wichita.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.