
E v o l D i r

October 1, 2018

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.



Foreword	1
Conferences	2
GradStudentPositions	12
Jobs	41
Other	76
PostDocs	83
WorkshopsCourses	125
Instructions	137
Afterword	137

Conferences

Bialowieza Woodpeckers CallAbstracts Mar16-20 ... 2	Oxford PopGenetics Jan3-6 7
CIBIO Portugal HostParasite Dec5-7 3	Portland Oregon Sex Asex Jun2-4 7
Edinburgh FisherCentenary Oct9 3	Portugal HostParasite Dec5-7 7
ESEB2019 Finland CallForSymposia Nov15 Deadline 3	PuertoRico ClimateAdaptation Feb 8
Finland MolEcolEvolution Oct10-12 4	PuertoRico EvolutionaryAnthropology Nov1-4 8
Helsinki ForestEntomology Jul19-24 4	RoyalHollowayC UK EvolutionNavigation Apr10-12 9
Leicester UK InsectGenomics Sep14 5	UHull InsectDataSIG Oct23 9
Manchester SMBE Jul21-25 5	Ventura California Speciation Mar10-15 10
Marseille 22ndEvolBiol Sep25-28 ClosingDate 6	Wellington MolluscEvolution Dec2-5 11
Marseilles 22ndEvolutionaryBiol ProgramFinal 6	ZSL London AnimalBehaviour Nov22-23 11
Marseilles EvolBiol Sep24-27 6	
MLBS Virginia SEPEEG Oct5-7 6	

Bialowieza Woodpeckers CallAbstracts Mar16-20

Registration and abstract submission for the 8th International Woodpecker Conference in Białowieża National Park (BNP) from 16 to 20 March 2019 are now open. We are soliciting abstracts for contributed talks and posters on any aspect related to the biology and conservation of woodpeckers. Due to the limited number of oral presentation slots, some presentations may be changed from oral to poster, according to the recommendations and ranking by the Scientific Committee. Abstracts must be submitted online at <https://www.woodpeckers2019.com>, where participants can also register and find other important information (accommodation, venue, deadlines, fees, etc.).

The conference will focus on the conservation and ecology of woodpeckers and will be jointly organized by Siedlce University, Museum and Institute of Zoology PAS Warsaw, Opole University, Adam Mickiewicz University Poznań, Warsaw University of Life Sciences (all

Poland) and the Special Interest Group (SIG) Woodpeckers of the German Ornithological Society (DO-G). The conference aims to bring together woodpecker researchers from across the globe and to provide an international forum for discussion on how woodpecker research may improve our understanding of behavior, ecology and conservation sciences. Please spread the word about it!

For inquiries, please contact Dorota Czeszczewik (dorota.czeszczewik@uph.edu.pl), head of the local organizing committee, or Gilberto Pasinelli (gilberto.pasinelli@vogelwarte.ch), chair of the scientific committee. Looking forward to seeing you in Białowieża!

“gilberto.pasinelli@vogelwarte.ch”

CIBIO Portugal HostParasite Dec5-7

TiBE, Trends in Biodiversity and Evolution, is an annual meeting organized by CIBIO-InBIO. TiBE2018 will be devoted to HOST-PARASITE INTERACTIONS. The conference will take place on December 5-7, 2018 at CIBIO-InBIO facilities in Vairão, Portugal. It will include 4 invited plenary talks (Eduardo Rocha - Institute Pasteur, Paris; Maria João Amorim - Instituto Gulbenkian da Ciência, Lisboa; Sylvain Gandon - Centre d'Ecologie Fonctionnelle et Evolutive, Montpellier; and Dina Fonseca - Rutgers University, New Jersey), 16 oral communications (to be selected) and poster sessions.

TiBE conferences aim to bring together senior researchers, post-graduate and graduate students working on the field of evolutionary biology to present and discuss cutting-edge findings in relevant topics related with speciation, molecular evolution, comparative genomics, population and conservation genetics research, among others. Held in an informal but stimulating scientific atmosphere, these conferences provide an excellent opportunity for strong interaction and brainstorming between students and more experienced researchers.

PROGRAMME

Click < <https://cibio.up.pt/tibe/details/tibe2018> > here to see the programme.

IMPORTANT DATES

Abstract submission deadline: October 5, 2018

Abstract acceptance results: October 26, 2018

Early registration: October 5, 2018 - November 15, 2018 (both included)

Late registration: November 16, 2018 - November 28, 2018 (both included)

To know more about this event, please visit < <https://cibio.up.pt/tibe/details/tibe2018> > CIBIO-InBIO's website or contact us at tibe@cibio.up.pt.

CIBIO - Centro de Investigação em Biodiversidade e Recursos Genéticos | InBIO Laboratório Associado, Universidade do Porto

Campus de Vairão Rua Padre Armando Quintas 4485-661 Vairão Portugal

t: +351 252 660 411 Ext. 248 f: +351 252 661 780

e: divulgacao@cibio.up.pt

w: <http://cibio.up.pt> | <http://inbio-la.pt/>

f: <https://www.facebook.com/cibio.inbio> CIBIO-InBIO Divulgação

Edinburgh FisherCentenary Oct9

Meeting to celebrate the centennial of R.A. Fisher's famous 1918 paper on the theory of quantitative trait inheritance: 100 years of quantitative genetics theory and its applications: celebrating the centenary of Fisher 1918

The meeting will take place on Tuesday October 9, 2018, at the Royal College of Surgeons, Edinburgh (<https://www.rcsed.ac.uk/>).

There will be 8 invited speakers, with the Fisher Memorial Lecture (delivered by Michael Goddard) at 5pm, followed by a reception. In addition, there will be four early career speakers and some posters Registration is through a website provided by the Royal Statistical Society (https://events.rss.org.uk/rss/frontend/reg/-thome.csp?pageIDq232&ef_sel_menu89&eventID#0).

THE DEADLINE FOR REGISTRATION IS FRIDAY SEPTEMBER 21.

B Charlesworth brian.charlesworth@ed.ac.uk Institute of Evolutionary Biology School of Biological Sciences University of Edinburgh Ashworth Laboratories Charlotte Auerbach Road Edinburgh EH9 3FL UK Tel: (44)-0131-650-5751

CHARLESWORTH

Brian

<Brian.Charlesworth@ed.ac.uk>

ESEB2019 Finland CallForSymposia Nov15 Deadline

Submissions for symposium proposals for ESEB 2019 (to be held in Finland from 19-23.8.2019) are now open (deadline 15.11.2018).

A defining feature of ESEB congresses is the "bottom-up" approach to determining the scientific content of each meeting. The vast majority of the scientific program is

arranged in symposia topics that are suggested by ESEB members, and the symposium organisers then also play a major role in selecting the oral and poster presentations from the submitted abstracts. Symposia topics can be on any theme related to evolutionary biology: specific or broad, emerging or well established. A symposium normally consists of around 5-12 oral presentations, of which 1-2 are invited, with remaining abstracts in the theme being presented together in the poster sessions. Invited speakers typically have their congress registration covered (but not travel or accommodation), and have extended speaking time.

Symposia proposals can be submitted at: <https://eseb2019.fi/symposia-and-abstracts> You will be asked to provide:

- The names and email addresses of the primary organiser (for all communication) and max. two co-organiser(s) (as a replacement), who must be committed to attend the whole meeting.
- The proposed symposium title.
- A max 200-word explanation justifying why you feel your proposed topic warrants a symposium at the conference.
- The names of two invited speakers (please check beforehand whether they are indeed available).

Balance, in terms of gender, nationality and career stage of invited speakers and symposium organisers will be included as one criterion used by the scientific committee when selecting symposia and successful symposium organisers are expected to do the same when selecting oral presentations. More details on ESEB's equal opportunity policies are available on the symposium submission page. ESEB also supports diversity via conference attendance aid grants.

Please note that symposium organisers are not allowed to present in the symposium they organise.

The deadline for submission is November 15, 2018. Proposals will be double-blind evaluated by the Scientific Committee, and the selected list will be communicated in January 2019.

Enquiries about symposium preproposals should be directed to craig.primmer@helsinki.fi.

Craig Primmer Organismal & Evolutionary Biology Research Program | Biotechnology Institute University of Helsinki, FINLAND Visiting: Room 3404, Biocenter 1C Mobile +358 503116374 craig.primmer@helsinki.fi Twitter @FishConGen <http://www.helsinki.fi/evolution-conservation-and-genomics> “craig.primmer@helsinki.fi” <craig.primmer@helsinki.fi>

Finland MolEcolEvolution Oct10-12

Dear all,

Dont forget to register for the 3rd Finnish Molecular Ecology and Evolution Symposium happening in Jyväskylä 10-12 October 2018. The deadline is 10th of September.

Please remind your colleagues as well.

<https://www.jyu.fi/science/en/bioenv/research/-biosciences/bioscience-conference> WELCOME!

“Knott, Emily” <emily.knott@jyu.fi>

Helsinki ForestEntomology Jul19-24

Dear colleagues,

The next International Congress of Entomology will be held in Helsinki, Finland in 2020 July 19-24 (<http://ice2020helsinki.fi/>).

We have been asked to organise the “Forest Entomology and Urban Landscape” section, where a number of symposia can be accommodated. We are inviting proposals for symposia with topics that would fit in this section.

Symposium presentations will be 15 minutes each (including time for questions), allowing for the possibility of one ‘double-presentation’/keynote talk of 30 minutes (i.e. 20 minutes for the talk and 10 minutes for questions/discussion). There will be eight presentations per symposium (or seven if a keynote talk is included).

Proposals to organize a symposium at ICE2020Helsinki should be submitted via the on-line submission system (https://submit.peerageofscience.org/conference/ICE_2020). Proposals should include a brief background/justification, the names of the organizers, a preliminary list of potential speakers, and any other relevant issues.

Deadline: 30 October 2018.

All further details can be found here: https://submit.peerageofscience.org/conference/ICE_2020 Andrea Battisti, Nathan Havill, Dmitry Musolin, Heli Viiri,

the “Forest Entomology and Urban Landscape” section conveners.

musolin@gmail.com

Leicester UK InsectGenomics Sep14

We have extended the abstract deadline until Thursday September 6th (this week), please see below information.

We would like to encourage any students to submit an abstract as there are generous prizes available. Additionally the conference offers a small friendly atmosphere ideal for honing your presentation skills.

Dear All,

We are excited to announce the next Royal Entomological Society Genomics Special Interest Group meeting! This is a one day meeting to be held in Leicester, UK on 14th September 2018.

The aim of this meeting is to bring together researchers working on any aspect of insect genomics. The day will consist of a series of contributed talks and a keynote lecture by Dr. Yannick Wurm from Queen Mary University of London. There will also be a poster session and subsequent wine reception. Additionally this year we have very generous prizes for best student talk and poster provided by the NERC CENTA doctoral training partnership, as such we particularly encourage students of all stages to submit an abstract.

You can register at:

<https://www.royensoc.co.uk/meeting/insect-genomics>
Registration costs just 15 pounds for the day and is reduced further for members of the Royal Entomological Society.

Please send abstracts to:

resgenomics2018@gmail.com

(250 word limit, indicate talk/poster preference)

Abstract deadline: 5pm on Friday August 31st (extended Thur 6th Sept).

Follow #EntoGenomics2018 on Twitter for regular updates and news.

Best Wishes,

Hollie Marshall and Katherine Beadle

(2018 Organising Committee)

Hollie Marshall <hollie_marshall@hotmail.co.uk>

Manchester SMBE Jul21-25

SMBE 2019 Call for Symposia

We're delighted to announce that the Society for Molecular Biology & Evolution is now accepting proposals for symposium topics for the 2019 Annual Meeting, taking place in Manchester, United Kingdom, from 21st to 25th July 2019.

Proposals should span the range of interests of SMBE members, including exciting new scientific developments, and should represent the geographic and gender diversity of our membership. For each accepted symposium, SMBE will provide partial financial support to help attract outstanding invited speakers.

For more details and to submit your proposal please visit the meeting website at [*http://smbe2019.org/-call-for-symposia/*](http://smbe2019.org/-call-for-symposia/) < <https://t.e2ma.net/click/dawlo-duvmg1/pnqzpf> >. The deadline for proposal submission is *November 02, 2018*. Successful applications will be confirmed by the middle of November.

If you have any questions, please email [*smbe2019@mci-group.co*](mailto:smbe2019@mci-group.co) <smbe2019@mci-group.co?subject=>. We look forward to your participation in the SMBE Annual Meeting next July in Manchester, UK.

Sincerely, The Local Organising Committee SMBE 2019 Manchester, UK < <https://t.e2ma.net/-click/dawlo/duvmg1/5frzpf> > Society for Molecular Biology & Evolution smbe@allenpress.com <smbe@allenpress.com?subject=> *Share this email:* < <https://t.e2ma.net/share/outbound/e/dawlo-duvmg1> > *Manage* < <https://app.e2ma.net/-app2/audience/signup/77681/25123/1643252259/?s=dtXjxRiAr3rCMJwWodlm7qLSje8npTrURf9UhgKpghY> > your preferences | *Opt out* < <https://t.e2ma.net/optout/dawlo/duvmg1?s=-GoX7Nkpm4WdabqmhVse8AyOyE5AaHZq2YPR0ZT3NDkQ&r=aHR0cHM6Ly9hcHAuZTJtYS5uZXQvYXBwMi9hdWRpZW5jZS9vcH> > using *TrueRemove*â Got this as a forward? *Sign up* < <https://app.e2ma.net/app2/audience/signup/77681/25123.24056355/> > to receive our future emails.

View this email *online* < <https://t.e2ma.net/-message/dawlo/duvmg1> >.

810 East 10th Street Lawrence, KS | 66044 US This email was sent to smbe.contact@gmail.com.

To continue receiving our emails, add us to your address book. < <http://smbe.contact@gmail.com> >

Dr Lulu Stader Executive Administrator, Society for Molecular Biology and Evolution
smbe.contact@gmail.com <smbe.meetings@gmail.com>

“Lulu Stader (SMBE admin)”
<smbe.contact@gmail.com>

Marseille 22ndEvolBiol Sep25-28 ClosingDate

Dear all, the registration closing date for the 22nd evolutionary biology meeting at Marseilles September 25-28 2018 is september 21

the program is available <http://aeb.fr/program-2/> we have still few spots available for poster presentations

best regards

Pierre Pontarotti DR CNRS

1 Aix Marseille Univ, IRD, APHM, Microbe , Evolution, PHYlogénie, Infection IHU Méditerranée Infection, Marseille France Evolutionary Biology team. 2 CNRS tel 33 (0) 4 13 7 32425 http://aeb.fr/?page_id=-1013 we are organizing the 22nd evolutionary biology meeting at Marseilles September 25-28 2018 aeb.fr

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

Marseilles 22ndEvolutionaryBiol ProgramFinal

The definitive program of the 22nd evolutionary biology meeting at Marseilles is available on aeb.fr It is still possible to register for the poster session

best regards Pierre

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

Marseilles EvolBiol Sep24-27

Dear all please note the date for the EBM 23

23rd Evolutionary Biology Meeting at Marseilles :September : 24-27 2019

see aeb.fr

inscription start 10/01/2018

all the best

Pierre

Pierre Pontarotti DR CNRS

1 Aix Marseille Univ, IRD, APHM, Microbe , Evolution, PHYlogénie, Infection IHU Méditerranée Infection, Marseille France Evolutionary Biology team. 2 CNRS tel 33 (0) 4 13 7 32425 http://aeb.fr/?page_id=-1013 we are organizing the 22nd evolutionary biology meeting at Marseilles September 25-28 2018 aeb.fr

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

MLBS Virginia SEPEEG Oct5-7

Please join us for the 44th annual SEPEEG conference at Mountain Lake Biological Station (MLBS). The conference will be held Oct. 5th-7th, 2018. The scientific fields represented at the meeting are diverse, and span evolution, ecology, genetics, and behavior. SEPEEG is a single-session meeting that provides a comfortable, engaging environment for formal and informal interactions between attendees. The meeting generally attracts at least 120 participants, who are at all career stages and from diverse institutions throughout the southeastern United States.

Please visit <http://mlbs.virginia.edu/SEPEEG-2018> for more information.

Registration Cost: Registration cost covers room, food, and conference expenses. General Registration Rate: \$135 Student Members of the American Society of Naturalists: \$90 Conference Attendees staying off site: \$105 (food is included in this cost)

Joshua Puzey <jrpuzey@gmail.com>

Oxford PopGenetics Jan3-6

Registration for the 52nd Population Genetics Group is now open! The meeting will be held in Oxford, UK, January 3rd-6th 2019. Plenary speakers are: Chris Jiggins, Tami Lieberman, Pleuni Pennings, and Gunter Wagner. Please see <http://populationgeneticsgroup.org.uk> for more details, to register and submit abstracts, and book accommodation. Attendance at the conference dinner is - unfortunately - limited to 200 people, so register soon to avoid disappointment. Further announcements will go out on Twitter (@popgroup #pgg52) and Evoldir shortly. We look forward to welcoming you in Oxford soon! Ravinder (on behalf of the PopGroup52 committee).

Ravinder Kanda <ravinder.kanda@gmail.com>

Portland Oregon Sex Asex Jun2-4

SAVE THE DATE for AGA2019

Sex & Asex: The Genetics of Complex Life Cycles 2-4 June 2019, Portland, Oregon

Many organisms across the tree of life have complex life cycles that include both sexual and asexual reproduction, or that are obligately asexual. Our planned speakers have been untangling the evolutionary effects of using one or both of these disparate reproductive modes.

Join AGA President Maria Orive and Key Distinguished Lecturer Sally Otto at a fabulous venue. More details soon!

*Anjanette Baker * Manager, American Genetic Association <<http://www.theaga.org/>> theaga@theaga.org
Anjanette Baker <theaga@theaga.org>

Portugal HostParasite Dec5-7

We are pleased to announce that registration and abstract submission to Trends in Biodiversity and Evolution 2018 ARE NOW OPEN.

TiBE2018 will be devoted to HOST-PARASITE INTERACTIONS. Globalization and ongoing climate change have brought new opportunities for disease spread and parasite/pathogen evolution. Concomitantly recent methodological advances presently allow overcoming most of the previous limitations on parasites detection, providing exciting opportunities for a better understanding of parasite communities and the interaction between these organisms and their hosts.

During four sessions, we will approach ongoing research on different aspects of host-parasite interactions: evolution and diversity of parasites, host-parasite molecular and ecological interactions, epidemiology and current challenges. We believe that this is an excellent opportunity to share and disseminate the cutting-edge research currently being done in this field. The conference will take place on 5-7 December, 2018 at CIBIO-InBIO facilities in Vairão, Portugal. It will include 4 invited plenary talks, 16 oral communications (to be selected) and poster sessions.

INVITED SPEAKERS

Eduardo Rocha - Institute Pasteur, Paris (France)

Maria João Amorim - Instituto Gulbenkian da Ciência, Oeiras (Portugal)

Sylvain Gandon - Centre d'Ecologie Fonctionnelle et Evolutive, Montpellier (France)

Dina Fonseca - Rutgers University, New Jersey (USA)

Details on the programme, registration and abstract submission are available < <https://cibio.up.pt/tibe/-details/tibe2018> > here.

IMPORTANT DATES

Abstract submission deadline: October 15, 2018 (NEW DATE)

Abstract acceptance: October 31, 2018 (NEW DATE)

Early registration deadline: November 15, 2018

Late registration: November 16 - November 28, 2018 (both included)

To know more about this event, please visit < <https://cibio.up.pt/tibe/details/tibe2018> > CIBIO-InBIO's website or contact us at tibe@cibio.up.pt.

CIBIO - Centro de Investigação em Biodiversidade e Recursos Genéticos | InBIO Laboratório Associado, Universidade do Porto

Campus de Vairão Rua Padre Armando Quintas 4485-661 Vairão Portugal

t: +351 252 660 411 Ext. 248 f: +351 252 661 780

w: <http://cibio.up.pt> | <http://inbio-la.pt/> f: <https://www.facebook.com/cibio.inbio> CIBIO-InBIO Divulgação

PuertoRico ClimateAdaptation Feb

Dear colleagues;

We (Jose Eirin-Lopez and Hollie Putnam) are organizing the special session "Environmental epigenetics: key mechanisms of acclimatization and adaptation to global ocean change" as part of the 2019 ASLO (Association for the Sciences of Limnology and Oceanography) Conference that will be held in San Juan (Puerto Rico) in February 2019.

The proposed session aims to attract cutting-edge research from investigators working on environmental epigenetics across different levels (from molecules to ecosystems), and using diverse model systems (especially ecologically and environmentally relevant species in aquatic environments). The ultimate goal is to provide a timely insight into the potential of this approach to revolutionize our understanding of ecological and evolutionary dynamics at a critical climate change juncture, in an invaluable marine setting.

Additional details about the session can be found here:

<https://aslo.org/sanjuan2019/sessions> In addition, general info and deadlines about the Conference can be found here:

<https://aslo.org/sanjuan2019/main> Please come and join us in San Juan for exciting discussions and to discover (or re-discover) the immense beauty of Puerto Rico.

Please help us spread the word by forwarding this message to other colleagues who may be interested in joining the session and/or attending this conference.

If you have any questions please don't hesitate in con-

tacting us.

Jose Eirin-Lopez, Florida International University (jeirinlo@fiu.edu) Hollie Putnam, University Of Rhode Island (hputnam@uri.edu)

Jose M. Eirin-Lopez, Ph.D.

Assistant Professor Environmental Epigenetics Group Leader Center for Coastal Oceans Research, Department of Biological Sciences Institute of Water and Environment (FIU Preeminent Program) Florida International University, Biscayne Bay Campus 3000 NE 151 Street, office MSB-360 North Miami, FL 33181, USA

environmentalepigenetics.com < <http://environmentalepigenetics.com/> > < <https://www.facebook.com/eelabfiu> > jeirinlo@fiu.edu
305 919-4000 (Office)

305 919-5631 (Lab, MSB-320)

305 919-4030 (Fax)

jeirinlo@fiu.edu

PuertoRico EvolutionaryAnthropology Nov1-4

Early Registration Deadline - ALAB-2018 - Mayaguez, Puerto Rico The deadline for early registration will be September 15th for the XV CONGRESS of the Latin American Association of Biological Anthropology, to take place on 1-4 NOVEMBER 2018, in MAYAGUEZ, PUERTO-RICO. Please visit the following link to submit your information and save up to 40% on registration (<http://www.pr-science.org/registration/>) The ALAB is a corporation that brings together scholars interested in the fields of Physical Anthropology and Human Biology. Its members can be located in Latin American countries or elsewhere if their investigations relate to Latin America. We will celebrate the fifteenth Congress of the ALAB in Mayagüez, Puerto Rico from November 1st to 4th, 2018. It will be the first time that the ALAB holds its Congress in the Eastern Caribbean. We expect a dynamic discussion of all the fields of action of biological anthropology, including the following symposia: §Forensic Anthropology in the Latin American Context: Towards a Reflection §A Continental Perspective of African Diversity in Caribbean and Latin American Populations §Ancestry and Public Topics §Genetics' Rescue of the Peopling of South America Pre-Columbian History §Biological Approaches to the Study of Social Complex-

ity in the Past §Quality of Life from Different Anthropological Perspectives §Discovery of Rare and Population-Specific Variants of Relevance to Precision Medicine in Understudied Populations §Stable Isotopes Applied to Paleo-Diet and Mobility Studies in Latin-American Archaeology §Biodemography: Interdisciplinary Perspectives in Population Studies §Genetics, Ancestry, and Disease in Modern Latin American Populations §From Theory to Practice: Applied Biological Anthropology in Latin America §The Role of Genetics, Physiology and the Environment in Shaping Non-Human Primates' Social Lives §Historic Bioarchaeology in Latin America §Bioanthropology of Obesity: A challenge for the Prevention of Chronic Diseases §Studying Population and Domestication Processes through Mitochondrial DNA §Obesity: Methodology and Epidemiological Projections from Biological Anthropology §Employing the Power of DNA to Untangle Caribbean History §Bioarchaeological Studies The ALAB congresses are held every two years since 1990, offering Latin American researchers and to those interested in anthropological studies on Latin America a periodic opportunity for the discussion of scientific experiences and issues linked to the development of the discipline in a local, regional and continental context. The overall objective of the Congress is to bring together scholars in our field in a healthy environment for the contact, discussion of problems and new ideas, and the development of collaborative networks of researchers and students. Deadline for early registration: September 15, 2018 Deadline for late registration: October 15, 2018 Late registration will be available late at the Conference table. Registration fees (in US dollars) Category Up to 15 Sept. 2018 After 15 Sept. 2018 Member * \$225 \$350 Non-member \$250 \$400 Student member * \$150 \$175 Student non-member \$175 \$200 General public — \$100 per day (\$25 for University of Puerto Rico students) Registration fees include: Card identification and attendance to all sessions The program of activities booklet Welcome reception Snacks and coffee The entrance to the banquet ALAB 2018 is not included. Optional Charges Registration Category Charge Banquet ALAB 2018 (Mayagüez Casino) * \$20 ALAB 2018 t-shirt \$12 *Tickets for the banquet ALAB 2018 (4 November) are limited to ALAB members and will be given only to the first 200 people who sign up for the banquet. You may choose to become an ALAB member here - <http://antropologiabiologica.org/index.php/-miembros/registro-de-miembro> s Please visit <http://www.pr-science.org/registration/> Taras K Oleksyk, Ph.D. Full Professor of Biology University of Puerto Rico Mayaguez, PR 00680 taras.oleksyk@upr.edu

Taras K Oleksyk <taras.oleksyk@upr.edu>

RoyalHollowayC UK EvolutionNavigation Apr10-12

Conference: Animal Navigation RIN19

Dear all, We are happy to receive contributions for RIN19, the 10th conference on Animal Navigation and Orientation hosted within the Royal Institute for Navigation (RIN) conference framework.

The conference will take place 10-12 April 2019 at Royal Holloway College, UK.

Please note that the deadline for online abstract submission is 3rd October, notification of provisional acceptance will be sent out by end November 2018. Direct link to abstract submission: <https://rin.org.uk/page/RIN19>

Don't miss out on this triennial event, this time we are excited to be celebrating the 10th conference in this series. We are looking forward to receiving your contribution and seeing you in April. Please visit the event homepage (<https://rin.org.uk/events/EventDetails.aspx?id=1108886&group=>) for further information or directly go to the registration page (<https://rin.org.uk/events/-register.aspx?id=1108886&itemid=fcca9d13-508f-4668-8d58-e5f25a561789>)

Best wishes, Miriam Liedvogel

liedvogel@evolbio.mpg.de Miriam Liedvogel Max Planck Research Group Behavioural Genomics Max Planck Institute for Evolutionary Biology August-Thienemann-Straße 2 | 24306 Plön | Germany phone: + 49 4522 763-225 | fax: +49 4522 763-281 www.evolbio.mpg.de/-3004473/group_behaviouralgenomics Miriam Liedvogel <liedvogel@evolbio.mpg.de>

UHull InsectDataSIG Oct23

Royal Entomological Society Special Interest Group on Insect Data

Tuesday, October 23, 2018 - 09:00 Venue: University of Hull

Confirmed speakers:

Dr David Roy (CEH), Dr Peter Mayhew (University of

York)

Flyer here: <https://tinyurl.com/insect-data-sig-flyer>

Comparative analyses across multiple species are a crucial tool for understanding biodiversity loss and resilience in the face of global change as well as evolution and adaptation. This kind of analysis requires curated data from many species as well as a phylogeny linking those species. Unfortunately, efforts at compiling such data for insect and other arthropod species lag behind similar efforts for vertebrates and plants. While many independent resources exist (such as databases and recording schemes) that catalogue various arthropod traits, e.g. ecological habitats, distribution and occurrence, there remains a need for efforts to coordinate these various resources in a centralised, user-friendly way, via e.g. shared protocols, structures and ID tags, and for researchers to integrate these data easily into their workflows.

The proposed Special Interest Group would bring together curators of independent resources with researchers and professionals interested in using comparative arthropod data - to present resources, and discuss and establish common data requirements and protocols. The project is intended to be ongoing as new resources emerge and are linked to the project, and greater integration is achieved. In the short term, one anticipated outcome is that participants are all simply more aware of, and familiar with, the existence, availability and protocols of various insect data resources. This in itself may likely lead to several new data-related collaborations. In the medium term, the resources themselves might be adapted to reflect agreed shared protocols, encouraging transparency and standardisation, and harmonizing the process of data retrieval from multiple resources. In the longer term, a steering group formed from members of the SIG might aim to create a central meta-platform linking through to the various resources to make integrated analysis much easier and to make these data more widely available to researchers from a wide array of disciplines.

Convenor: James Gilbert, james.gilbert@hull.ac.uk

Poster abstracts should be 150 words or fewer, submission deadline NOW EXTENDED TO 1 OCT; please send to the convenor. Registration is a pre-requisite for abstract acceptance.

REGISTRATION FORM HERE: <https://www.royensoc.co.uk/insect-data-special-interest-group> - Registration deadline 1 October.

On-campus childcare is available with advance booking, please contact the convenor for details and availability. The cost is 45.00, once confirmed please

book via the registration form and pay in the shop, <https://www.royensoc.co.uk/shop/insect-data-sig-campus-childcare> – Dr James Gilbert | +44 1482 465486 | james.gilbert@hull.ac.uk | jdgilbert.wordpress.com Lecturer & Programme Director for Zoology, School of Environmental Sciences, University of Hull, Cottingham Rd, Hull HU6 7RX | *I work from home on Thursdays* “I am dying by inches, for lack of anyone to talk to about insects..” Darwin, diary entry

James D Gilbert <James.Gilbert@hull.ac.uk>

Ventura California Speciation Mar10-15

MEETING REGISTRATION ANNOUNCEMENT:
REGISTRATION IS OPEN!

We are pleased to announce SPECIATION 2019, the third Gordon Research Conference (GRC) dedicated exclusively to speciation research. The conference will be held at the Four Points Sheraton / Holiday Inn Express, Ventura, CA during the week of March 10 - 15, 2019, co-chaired by Rebecca Safran (University of Colorado, USA) and Katie Peichel (University of Bern, Switzerland).

The conference will be directly preceded by a two-day Gordon Research Seminar (GRS) on March 9 - 10, co-chaired by Martin Garlovsky (Sheffield University, UK) and Sheela Turbek (University of Colorado, USA), that offers opportunities for early-career scientists to get involved at the forefronts of modern speciation research.

Please follow this link to learn more about these conferences and to register. <https://www.grc.org/speciation-conference/2019/> Invited presentations and discussion sessions at both the GRC and GRS will cover a broad array of timely topics in speciation research.

Please send questions to Rebecca.Safran@colorado.edu

Sincerely

Rebecca Safran, Katie Peichel, Martin Garlovsky, Sheela Turbek

Dr. Rebecca Jo Safran Associate Professor Department of Ecology & Evolutionary Biology N317 Ramaley Hall University of Colorado Boulder Colorado 80309 USA email: rebecca.safran@colorado.edu phone: 303.735.1495

Rebecca J Safran <rebecca.safran@colorado.edu>

Wellington Mollusc Evolution Dec2-5

The Malacological Society of Australasia and the organising committee of Molluscs 2018 are pleased to announce that the early-bird registration deadline has been extended until October 12!

Keynote speakers include: Amy Moran, University of Hawaii Satoshi Chiba, Tohoku University Serean Adams, Cawthron Institute Robert Cowie, University of Hawaii Pauline Ross, The University of Sydney

Symposia topics are: Systematics, taxonomy, and biogeography Aquaculture, fisheries, and human uses of molluscs Ecology, conservation, and reef restoration Biochemistry and physiology Invasive species and biosecurity Palaeontology Genomics and molecular biology Climate change Citizen science and community engagement Open symposium

For further details and to register, head to www.malsocaus.org. We hope to see you there!

Carmel McDougall 'V Molluscs 2018 organising committee

c.mcdougall@griffith.edu.au

ZSL London Animal Behaviour Nov22-23

All details of the meeting can be found on the event webpage here: www.zsl.org/science/whats-on/linking-behaviour-to-populations-and-communities-how-can-behavioural-ecology-inform

In summary: Title Linking behaviour to populations and communities: how can behavioural ecology inform conservation? An international symposium to discuss how understanding human-influenced changes in animal behaviour can support future conservation research

Dates 22-23rd November 2018 Location Huxley Lecture Theatre, Zoological Society of London, ZSL London Zoo, Outer Circle, Regents Park, London, NW1 4RY Registration Please register online via the webpage: www.zsl.org/science/whats-on/linking-behaviour-to-populations-and-communities-how-can-behavioural-ecology-inform Organisers Jakob Bro-Jorgensen, and

Kristine Meise, University of Liverpool and Daniel Franks, University of York Programme of speakers and talks Confirmed speakers are:

Daniel Blumstein, University of California - Los Angeles (UCLA)

Oded Berger-Tal, Ben Gurion University

Ulrika Candolin, Helsinki University

Tim Caro, University of California - Davis

Isabelle Côté, Simon Fraser University

Sarah Durant, Zoological Society of London

Sam Ellis, Exeter University

Jennifer Gill, University of East Anglia

James Herrera, Duke University

Kay Holekamp, Michigan State University

Kavita Isvaran, Indian Institute of Science, Bangalore

Kristine Meise, University of Liverpool

E.J. Milner-Gulland, University of Oxford

Kevin Parker, Parker Conservation

Elizabeth Parlato, Massey University

Bernt-Erik Saether, Norwegian University of Science and Technology

Matthew Silk, Exeter University

Daniel Sol, CREA, Spain

Colleen St Cassidy, University of Alberta

Joseph Tobias, Imperial College London

George Wittemyer, Colorado State University

Short summary The most immediate response of animals to human-induced environmental change is behavioural. This can have profound repercussions at the population and community level and is therefore of crucial relevance to conservation. This NERC/ZSL symposium will bring together leading experts in behavioural ecology and conservation to explore how behavioural ecologists can make a difference in support of conservation by relating their research to ecosystem processes. This meeting will critically assess the role of the behavioural ecological community in addressing conservation priorities so far and aims to inspire future conservation-oriented research and action with real impact. Now is a highly promising time for progress in this direction because of the emergence of strong analytical tools and conceptual advances in behavioural ecology in recent years, developments which have yet to find their way fully into the conservation arena.

Jennifer Howes <Jennifer.Howes@ioz.ac.uk>

GradStudentPositions

BowlingGreenStateU FishLifeHistory 12	UDuQuebecEnOutaouais HerpPopulationGenetics . 27
CharlesU Prague HybridisationBarriers 13	UGeorgia AntBeeGenomicsEpigenetics 28
ColoradoStateU Evolution 13	UHawaii Hilo ConservationBiol 29
EastCarolinaU FrogColorEvolution 14	UIdaho GalapagosIslandDiversification 29
ETHZurich EvolutionaryTheory 15	UKentucky EvolutionEcology 29
GeorgeWashingtonU EvolutionEcology 15	UKentucky QuantitativeEvolutionEcol 30
GeorgiaSouthernU InsectEvolution 16	UKentucky ThermalBiology 31
GeorgiaSouthernU PlantEvolution 16	UMassachusetts Amherst EvolutionaryGenomics . . 31
IllinoisStateU HostMicrobeInteractions 17	UMassachusetts Amherst MicrobeDomesticationGe- nomics 32
IndianaStateU EvolutionaryGenomics 17	UMelbourne EvolutionLizardPregnancy 32
LinnaeusU MoleRats 18	UMississippi DiseaseBehaviorSexualSelection 33
MarburgU EvolutionaryPlantEcol 19	UNewHampshire EvolutionaryGenomicsPhysiology 33
MississippiStateU EvolutionaryBiol 20	UNewOrleans MandrillMolEvolution 34
NHM Oslo SpeciationGenetics 97	UPittsburgh EvolutionEcol 35
NTNU Norway 4 EcoEvolutionaryDynamics 21	UtahStateU PlantMicrobeInteractions 35
OhioStateU EvolutionOfInsectSeasonalResponses . . 22	UTulsa AnimalEvolution 36
OhioStateU SnakeVenomEvolution 22	UWisconsin Milwaukee PopulationGenomics 37
OklahomaStateU EvolutionBehavior 23	UWolverhampton PopGenToads 37
Paris EvolutionSexualReproduction 24	VirginiaTech EvolutionaryBiology 38
PurdueU HoneybeeEvolutionaryGenetics 24	VirginiaTech EvolutionaryGenetics 39
RiceU EcologyEvolution 25	VU Amsterdam 2 EvolutionCommunication 39
StonyBrookU EvolutionaryBiol 25	
UAlabama MusselCommunityGenomics 26	
UConnecticut PlantComputationalGenomics 27	

BowlingGreenStateU FishLifeHistory

We seek a graduate student for a newly NSF-funded project examining the life history decisions made by male smallmouth bass. The student will begin in Spring 2019 (ideally), will be based at Bowling Green State University (working with Daniel Wiegmann), and will collaborate with faculty at Rice University (Scott Egan and Kelly Weinersmith) and Colorado State (Lisa Angeloni). We offer full funding for a Master's student, or partial funding for a PhD student (whose funding would subsequently be covered by teaching assistantships).

This project would be a good fit for a student interested in a career in natural resource management, evolutionary biology, and/or advanced quantitative methods.

Please send an email containing your CV to Drs. Daniel Wiegmann at ddwiegm@bgsu.edu and Kelly Weinersmith at Weinersmith@Rice.edu if you're interested. Thanks!

Here is an abstract for the project:

The realization that many, perhaps most, alternative reproductive tactics, or ARTs, depend on individual condition sparked a general interest in the proximate control of tactic expression and the ultimate control of tactic frequencies within populations. How ARTs coexist within a population is an evolutionary puzzle that is only partially resolved. ARTs are evolutionary solutions to reproductive competition, products of an investment strategy that accounts for individual condition and fit into a broader category of investment strategies, which includes life history decisions. ARTs reflect allocation responses to conditions under which individuals have developed. Project researchers will detail ARTs in a population of smallmouth bass (**Micropterus dolomieu**) from data collected in a ten-year, multigenerational

study that includes detailed information on individual reproductive behavior. The system has special intrigue because a non-genetic parental effect is hypothesized to cause tactic alternation within lineages, across generations, which may facilitate or impede adaptive evolutionary processes. To test the genetic basis of this tactic polymorphism, RADSeq from preserved tissue samples will be used to generate thousands of SNPs across the genome and paternity analysis will be applied to trace tactic choices by males in 240-381 lineages, across 1-5 generations to detail parent and offspring tactic choices. Developmental conditions and growth histories will be determined from field data and scale samples to identify factors that control the expression of tactics. Undergraduates from underrepresented groups in STEM and graduate students will be trained in genetics, genomics, bio-informatics and fisheries techniques. Results will be disseminated through press releases, podcasts, blog posts and an animated video made publicly available and distributed to resource managers and others to display where fishing licenses are sold.

Kelly Weinersmith <klw5@rice.edu>

CharlesU Prague HybridisationBarriers

MSc project: Endosperm-based hybridisation barriers in wild *Arabidopsis* Department of Botany, Faculty of Science, Charles University in Prague, Czech Republic

Polyploidy (whole genome duplication) has played a major role in plant evolution. Most angiosperms are polyploid, and the model plant species, *Arabidopsis arenosa* has naturally occurring diploid and autotetraploid cytotypes. Diploid and tetraploid populations meet at several stable contact zones across Europe, where mixed ploidy populations occur. Despite the two cytotypes being close enough to exchange genes, triploid individuals are rare.

Endosperm-based hybridisation barriers are known to play an important role in the patterns of gene flow between different species of *Arabidopsis*, but we are interested in exploring the role of endosperm development in interploidy crosses within a species, and the post-zygotic mechanisms resulting in the apparent selection against triploids.

The successful candidate will be supervised by Dr Emma Morgan, as part of Dr Filip Kolář's multidisciplinary

team of Plant Ecological Genomics at Charles University in Prague (<https://botany.natur.cuni.cz/ecolgen/>).

The main techniques used will be: (1) crossing experiments between plants of different ploidies and lineages (2) visualising endosperm cellularisation using confocal microscopy (3) screening of ploidy levels using flow cytometry

We offer: (1) additional experience with collaboration with other researchers and students (2) work in the historical centre of the UNESCO heritage site of Prague city (3) a possible contribution towards living costs in Prague (funding to be verified)

We require: (1) BSc degree in Biology/Ecology or a related field (2) motivation for interdisciplinary research at the border of ecology, botany and experimental plant biology

Desirable: (1) experience with design and data analysis of ecological experiments

Interested students should contact Dr Emma Morgan with a CV, short motivation letter and contacts of two referees. Applications will be gladly accepted asap, but start date is negotiable.

Emma Morgan Postdoctoral researcher Department of Botany Charles University in Prague Faculty of Science Benatska 2, 128 01 Praha 2 Tel: +420 221 95 1641 morgane@natur.cuni.cz

morgane@natur.cuni.cz

ColoradoStateU Evolution

Colorado State University is seeking outstanding graduate students in the field of evolutionary biology. CSU is home to a strong and diverse group of evolution-focused labs, many of which are accepting grad students this year. Interested students are highly encouraged to explore the research pages of CSU faculty and contact professors before applying to a CSU graduate program. The university is home to a number of departmental and interdisciplinary graduate programs, and prospective faculty mentors can assist in selecting the program that would be the best match for a student's interests. CSU faculty with research programs in evolutionary biology include:

Lisa Angeloni Department of Biology <http://rydberg.biology.colostate.edu/angelonilab/Site/Home.html> Mike Antolin Department of Biol-

ogy <http://www.biology.colostate.edu/people/-antolin/> Chris Funk Department of Biology <http://wp.natsci.colostate.edu/funklab/> Cameron Ghalambor Department of Biology http://sites.biology.colostate.edu/ghalamborlab/-Ghalambor_Lab/Welcome.html Kim Hoke Department of Biology <http://hokelab.weebly.com/> Ruth Hufbauer Bioagricultural Sciences and Pest Management <http://www.hufbauerlab.org/> John McKay Bioagricultural Sciences and Pest Management <http://www.mckaylab.colostate.edu/> Rachel Mueller Department of Biology <http://wp.natsci.colostate.edu/-muellerlab/> Dhruva Naug Department of Biology <http://rydberg.biology.colostate.edu/dhruva/> Paul Ode Bioagricultural Sciences and Pest Management <http://paulode.agsci.colostate.edu/> Kristen Ruegg Department of Biology <https://sites.google.com/rams.colostate.edu/-ruegglab> Mark Simmons Department of Biology <http://sites.biology.colostate.edu/simmonslab/> Dan Sloan Department of Biology <https://sites.google.com/site/-danielbsloan/> Colleen Webb Department of Biology <http://webblabb.github.io/> CSU is a world-class research university located in Fort Collins, CO, about an hour north of Denver and right at the foothills of the Rocky Mountains. Fort Collins is widely regarded as having a great quality of life at a reasonable cost of living. It has excellent opportunities for outdoor recreation, an active music scene, a strong biking culture, and numerous great restaurants and breweries.

dsloan@rams.colostate.edu

EastCarolinaU FrogColorEvolution

I am seeking a PhD student to carry out research associated with an NSF-supported project focused on the genetic underpinnings of mimicry and color pattern evolution in a mimetic radiation of poison frogs in Peru (see description below), starting in Spring or Fall 2019. Candidates must have a strong academic record and be motivated to continue learning. Desirable qualifications for the position include an interest in the evolutionary biology and genetics of tropical amphibians, and some combination of 1) background in evolutionary genetics or genomics, 2) experience working in a molecular genetics laboratory, 3) previous work with amphibians and captive breeding, 4) fieldwork on amphibians (especially in Latin America), 5) programming experience in R, Python and/or UNIX.

Direct support through research assistantships is avail-

able for 2 years, followed by support through teaching assistantships (at least 5 years of support in total). The Department of Biology at ECU is large and multidisciplinary, with strong research groups in evolution, ecology, behavior and genomics: see www.ecu.edu/biology for more information on the department. East Carolina University is located in Greenville, North Carolina, centrally located between Raleigh and the Outer Banks. The Summers lab focuses on evolution, ecology and behavior of the Neotropical poison frogs. See my lab research page at <http://blog.ecu.edu/sites/summersk/-research-page/> for more information. I encourage applications from minorities and under-represented groups of all kinds. Please send a letter detailing your research interests and experience, as well as a current CV (including coursework), GRE scores (if available), and names and addresses of three references, to Kyle Summers (summersk@ecu.edu).

This project combines three research groups with complementary skills and realms of expertise to investigate the genetic basis and population genomic processes underlying color pattern divergence in the context of mimicry in the Peruvian mimic poison frog, *Ranitomeya imitator*: Dr. Kyle Summers (East Carolina University), Dr. Rasmus Nielsen (UC Berkeley) and Dr. Matthew MacManes (University of New Hampshire). The project will make use of several different approaches: 1. Next generation sequencing (RNAseq, Illumina platform) will be used to produce transcriptomes across species, color pattern morphs, and color patches within morphs. These will be assembled and used to investigate patterns of differential gene expression. 2. Genome-wide marker arrays (exome capture sequences) will be used to screen transition zone samples and enable divergence and admixture mapping to identify candidate genes. 3. We will test the association of specific candidate loci with color pattern variation using pedigree analyses of candidate genes identified from 1 and 2, using a multigenerational pedigree. 4. We will investigate the expression patterns of these genes in developing embryos using designed hybridization probes. 5. We will use phylogenomic methods to reconstruct the evolution of the divergent populations of *R. imitator*, and of the color genes in those populations. 6. We will test specific hypotheses regarding selection and demographic processes in the transition zones and between mimics and models. Together these complementary, mutually reinforcing approaches will begin to reveal the genetic underpinnings and population genomics of color pattern diversity in this mimetic radiation of poison frogs.

Kyle Summers Dept. of Biology East Carolina University Greenville, NC 27858 252-328-6304

“Summers, Kyle” <SUMMERSK@ecu.edu>

ETH Zurich Evolutionary Theory

Position for Ph.D. student in multiscale mechanisms of evolution Application review begins November 15, 2018

The Theoretical Biology Group (www.tb.ethz.ch) at ETH Zurich is hiring a Ph.D. student to study multiscale mechanisms of evolutionary dynamics in microbes.

Description of the position

Evolution is a process that fundamentally spans multiple length and time scales, from the nanoscale of individual DNA base pairs to the macroscale of entire populations. Quantitative predictions of evolutionary dynamics must therefore address the interplay of processes at all of these scales. We are hiring a student to develop multiscale models of evolution by combining biophysical and systems-level modeling of cellular processes with models of population dynamics, focusing on microbes such as *E. coli*. The project will involve a combination of mathematical modeling (borrowed especially from statistical physics), simulations, and data analysis, including the opportunity to work in close collaboration with experimentalists as well as other theorists.

The position will be supervised by Dr. Michael Manhart (www.people.fas.harvard.edu/~mmanhart) in the group of Prof. Sebastian Bonhoeffer (www.tb.ethz.ch/people/person-detail.html?persid316), with close interactions with the Molecular Microbial Ecology Group (<http://www.mme.ethz.ch>) led by Prof. Martin Ackermann (www.mme.ethz.ch/people/person-detail.MTlxMzg2.TGlzdC8xNjQ2LC00OTcyMDA2NDk.html). The successful applicant will join the world-class research community at ETH and greater Zurich studying quantitative and systems biology. The position offers a highly competitive starting salary of 47,040 CHF as well as excellent benefits.

Qualifications

Applicants should have a master's degree in physics, theoretical or computational biology, theoretical chemistry, applied mathematics, or a related field. Some coding experience (e.g., Python or C/C++) is also valuable. A formal background in biology is not necessary, although applicants should demonstrate a strong interest.

Application instructions

Please e-mail the following to Dr. Michael Manhart at theor.biol.phd.position@gmail.com:

1. A cover letter describing your interest in the position, qualifications (including previous research experience), and how it will contribute to your long-term career goals
2. Your CV
3. Names and contact information for three references

We will begin reviewing applications on November 15, 2018 and continue until the position is filled. We value diversity and strongly encourage applications from women, persons with disabilities, and members of other groups underrepresented in science.

“mmanhart@fas.harvard.edu”
<mmanhart@fas.harvard.edu>

George Washington U Evolution Ecology

We are looking for a graduate student to join our research group beginning in fall 2019. The student would develop an independent research focus in line with ongoing lab projects. We are exploring how plant traits relate to community structure and function of plant-associated microbes using culturing and next generation sequencing techniques and consequences of these interactions for forest carbon cycling in USA and Australia as climate changes. The student would join an interactive lab group (<http://www.phylodiversity.net/azanne/>) that broadly focuses on carbon cycling, plant, microbe and termite structure and function, community ecology, and evolutionary ecology, both in the temperate and tropical systems. The graduate work will be completed at George Washington University. Washington, DC is a dynamic city with a wealth of ecologists and evolutionary biologists. We have strong links to area institutions, including the Smithsonian. George Washington University is located in the heart of DC, with easy access to numerous science, conservation, and policy based institutions. If you are interested in working with us, please send an email to me (Amy Zanne: azanne@gmail.com) with brief details about your GPA, GRE, research interests, experience, and why you want to go to graduate school. For information about applying to the program, go to the George Washington University, Department of Biological Sciences website (<https://biology.columbian.gwu.edu/apply-now>). The application deadline is 1 December 2018. I am also happy to answer any further questions you might have.

Dr. Amy Zanne Department of Biological Sciences
George Washington University

Science and Engineering Hall

800 22nd Street NW

Suite 6000

Washington, DC 20052 Office: 6690 SEH Office Phone: (202) 994-8751 Lab: 6420 SEH Lab Phone: (202) 994-9613 Fax: (202) 994-6100 Website: <http://www.phylodiversity.net/azanne/> Amy Zanne <aezanne@gmail.com>

GeorgiaSouthernU InsectEvolution

The Gibson lab in the Department of Biology at Georgia Southern University in Statesboro, GA invites applications for a Master's Degree in insect evolutionary genetics to begin Spring 2019. The research focus of the lab is on the genetic/genomic basis of traits in social and solitary Hymenopteran insects. Current projects/systems in the lab include:

- 1) speciation and physiology in *Nasonia* parasitoid wasps
- 2) the genetic basis of aggression in honey bees (*Apis mellifera*)
- 3) studies investigating genetics and chemical ecology of invasive Argentine ants (*Linepithema humile*).

Students are welcome to join existing projects or to develop projects within the scope of the lab. For more information, visit the Gibson Lab website (www.insectevolution.org).

Student support is available through teaching and research assistantships. In addition, there are competitive fellowships available through the Department and the College of Science and Mathematics. The application deadline for full consideration is October 1st, 2018.

Georgia Southern is a 27,000-student comprehensive research university with three campuses in southeast Georgia (<http://www.georgiasouthern.edu/>). The Department of Biology at the Statesboro campus has many resources available to students, including a new LEED certified research and teaching building, many possibilities for collaboration with our >40 faculty, and facilities for insect rearing, high throughput sequencing preparation, and microscopy.

Interested students should contact Dr. Josh Gibson at jgibson@georgiasouthern.edu prior to applying to the program. Additional information about the graduate program and the department can be found in the links

below.

Graduate Program

<http://cogs.georgiasouthern.edu/admission/master-of-science-biology/> <http://cosm.georgiasouthern.edu/biology/graduate-program-2/> Department of Biology

<http://cosm.georgiasouthern.edu/biology/> Joshua D. Gibson, Ph.D. Assistant Professor Department of Biology P.O. Box 8042-1 Georgia Southern University Statesboro, GA 30460 Office: (912) 478-7826 insectevolution.org

Joshua Gibson <jgibson@georgiasouthern.edu>

GeorgiaSouthernU PlantEvolution

M.S. Position starting Spring 2019, Plant Evolution and Ecology

The Schenk lab at Georgia Southern University invites applicants for a Master's Degree in plant evolution and ecology, starting Spring semester, 2019. Our lab group is interested in how botanical diversity has been shaped by the interactions among morphological, ecological, and species diversification. We apply statistical phylogenetic approaches that quantify and incorporate molecular, morphological, and ecological variation to plant systems in order to understand the evolutionary processes of how and why species diversify.

Tuition and stipend for competitive students that meet all requirements will be supported by research and teaching assistantships. For full consideration, the application deadline is October 1st, 2018.

Interested students should contact Dr. John Schenk (jschenk@georgiasouthern.edu) prior to submitting an application (the earlier the better). For more information, visit the Schenk lab website (<https://sites.google.com/a/georgiasouthern.edu/jschenk>) and the Department of Biology's website (<http://cosm.georgiasouthern.edu/biology/>). More information about the Biology graduate program can be found at the departmental web page (<http://cosm.georgiasouthern.edu/biology/graduate-program-2/>).

John J. Schenk, Ph.D. Assistant Professor of Plant Biology Georgia Southern University Herbarium (GAS), Curator Department of Biology 4324 Old Register Road Georgia Southern University Statesboro, GA 30460-8042 Office: 2260 Biology

Building Office phone: (912) 478-0848 Lab website: sites.google.com/a/georgiasouthern.edu/schenk Herbarium website: sites.google.com/a/georgiasouthern.edu/gasherbbarium jschenk <jschenk@georgiasouthern.edu>

IllinoisStateU HostMicrobeInteractions

The Sadd lab in the School of Biological Sciences at Illinois State University is seeking an exceptional and motivated graduate student (PhD preferred, but MS applications considered) to study evolutionary and ecological interactions between bumble bees and their beneficial gut microbes. Successful candidates will develop research projects that complement the aims of a NIH funded project building on ongoing studies investigating bee-microbe interactions, how host immunity influences these, and fitness relevant outcomes including pathogen infection. The lab integrates laboratory experiments and field collections with whole-organism, immunological, microbiological, and functional genomic approaches. More information on the Sadd Infectious Disease Ecology lab can be found here: <https://faculty.sharepoint.illinoisstate.edu/bmsadd> Competitive applicants will have prior research experience, quantitative skills, the ability to work independently and as part of a team, and strong oral and written communication abilities. Applicants with previous experience with the evolutionary ecology of host-microbe interactions, statistics and data visualization (e.g. R, Python), and analysis of RNAseq or metagenomic datasets will be preferred.

The position will be funded through a combination of research assistantships on Sadd lab grants and teaching assistantships provided through the graduate program of the School of Biological Sciences at Illinois State University. Additionally, applicants are strongly encouraged to apply for their own fellowships, with the NSF pre-doctoral fellowship (www.nsfgrfp.org) being one of the most appropriate.

A start date of January 2019 is preferred, although candidates for Fall 2019 may be considered. For initial unofficial consideration, please email pdfs of i) a cover letter stating your research interest and qualifications, including GRE scores, and ii) your CV including names and contact details of two references to Dr. Ben Sadd (bmsadd@ilstu.edu) by September 16th. This will allow time to discuss your research in-

terests and fit with the group before the target date of October 1st for applications to be in to the University. Please see <https://biology.illinoisstate.edu/graduate/> and tabs therein for general information on our graduate program in the School of Biological Sciences. Information about the requirements for official applications to the graduate program can be found here: <https://biology.illinoisstate.edu/graduate/graduatePrograms/applicationProcedure/> Please contact me with any enquires for additional information.

Dr Ben Sadd Assistant Professor of Infectious Disease Ecology School of Biological Sciences Illinois State University Normal, IL 61790-4120

email: bmsadd@ilstu.edu twitter: @Saddlab web: <https://faculty.sharepoint.illinoisstate.edu/bmsadd> tel: +1 (309) 438 2651 fax: +1 (309) 438 3722

“Sadd, Benjamin” <bmsadd@ilstu.edu>

IndianaStateU EvolutionaryGenomics

Graduate position opportunities in Ecological Genomics

We are looking for motivated students interested in behavioral evolutionary, and ecological genomics to join our laboratory at Indiana State University (ISU). These graduate positions are part of a new interdisciplinary initiative at ISU, The Center for Genomic Advocacy (TCGA), which is focused on the application of genomic technology to the betterment of society. TCGA is developing a state-of-the-art next generation sequencing facility, which is being used to provide hands-on experience for students as well as string infrastructure for modern genomic studies.

Graduate research will be expected to combine traditional behavioral ecology studies with next-generation sequencing technology to examine the evolution of polymorphism in the white-throated sparrow. Student will conduct extensive laboratory work as well as participate in field based data collection during the breeding season. This species exhibits a clear link between phenotype and genotype, making it an ideal system in which to pinpoint the determinants of complex sexual and parental behavior. We have amassed 30 years of detailed data on this species making it possible to identify the genetic, epigenetic, and environmental bases of behavior. Morphs of the white-throated sparrow provide a unique opportunity to study intraspecific genomic differences,

which have resulted from two separate, yet linked evolutionary trajectories. Such results can transform our understanding of the evolution of genomes.

To apply, please send a letter of intent and curriculum by October 31, 2018. The subject of the email should mention: WTSP project Graduate Position.

For more information about the positions, please feel free to contact Dr. Rusty A. Gonser (rusty.gonser@indstate.edu), at the Center for Genomics Advocacy (TCGA), Indiana State University, Terre Haute, IN 47809.

For more information about the lab, TCGA, the department, and the university, see:

<http://www.indstate.edu/biology/> <http://www.indstate.edu/> <https://www.indstate.edu/cgpps/graduate> <https://www.indstate.edu/cas/TCGA>

Dr. Rusty A. Gonser Professor, Department of biology Director of the Center for Genomic Advocacy (TCGA) Indiana State University Terre Haute, IN 47809

Phone: 812.234.9220 Email : rusty.gonser@indstate.edu

Zoe Delefortrie <zdelefortrie@sycamores.indstate.edu>

LinnaeusU MoleRats

LinnaeusU.CooperativeBreeding.MoleRats

Description We are seeking a highly motivated PhD student to be part of a newly established research group to investigate the causes and consequences of cooperative breeding in Damaraland mole-rats (*Fukomys damarensis*). The student will be involved in an ongoing field study in South Africa investigating the evolutionary causes and consequences of cooperative breeding and will use an established laboratory population to address questions about the physiological control of social behaviour in mole-rats.

Damaraland mole-rats are cooperative breeders that live in groups of up to 30 individuals. Breeding is limited to one reproductive female per group and non-reproductive males and females delay dispersal from the group and contribute to cooperative tasks (cooperative foraging, colony defense and allo-parental care). Individuals vary in investment in cooperative tasks but it is unclear how non-breeders affect the development of offspring and reproductive success in the groups. It is also largely unknown which physiological mechanisms underlie variation in cooperative behaviour.

At our field site, the Kalahari Research Centre (KRC, <http://kalahari-meerkats.com/kmp/krc/>), we are conducting research on a wild population of individually marked Damaraland mole-rats since 2014. The PhD student will be involved in maintaining this study population and will conduct field experiments manipulating breeding status and group size to investigate the costs and benefits of groups living and cooperative breeding to non-breeders and breeders. Additionally, the student will conduct hormonal manipulations of non-breeders and breeders to investigate the physiological control of parental and allo-parental care behavior in captive mole-rat groups maintained at the KRC.

The position is fully funded for 4 years and the successful applicant will be part of EEMiS, a multidisciplinary center of excellence within Linnaeus University, Kalmar, Sweden (www.lnu.se). The PhD student will be part of a large collaborative project that involves several international collaborators. The specific research questions can be adjusted to the interests and qualifications of the successful candidate.

According to the Higher Education Ordinance a person appointed to a doctoral studentship should primarily devote himself/herself to his/her own studies. An appointee may, however, work to a limited extent with education, research, artistic development, and administration. However, before a doctoral degree has been awarded, duties of this kind may not comprise more than 20% of a full-time post.

<https://lnu.se/en/education/PhD-studies/> **Requirements** A person fulfils the general entry requirements if he/she has been awarded a degree on second-cycle level (MSc), or completed the requirements for courses comprising at least 240 credits, of which 60 credits on second-cycle level, or in any other way, in Sweden or abroad, has acquired principally equivalent knowledge.

Specific requirements refer to A master in biology (or equivalent), ideally with specialization in animal ecology, evolutionary or behavioral ecology and physiology.

Excellent analytic skills and an interest in analyzing life history data, individual growth and fitness data, as well as an interest for experimental work in wild populations are essential.

The successful candidate needs to be enthusiastic and happy to spend 4-6 months per year in Africa at our research site.

Assessment grounds It is desirable that the applicant has experience with fieldwork in remote locations and has worked on wild animal populations and/or has a background in animal physiology. Experience with working on small mammals is considered an asset.

The application (in English) should contain a CV (with telephone and e-mail), documentation of exams and grades, a description of motivation and experiences relevant to the research project and any other documentation that the applicant would like to present. The candidates should provide at least two letters of recommendation (including contact information (telephone number and e-mail) for the reference persons). Applications must be made exclusively through the LNU recruitment platform (<https://tinyurl.com/molerat-phd>).

Contacts: For further information about the project please contact the project leader and principal supervisor: Markus Zöttl (markus.zottl@lnu.se), +46480446112.

Head of department: Per-Eric Betzholtz Institutionen för biologi och miljö Fakulteten för hälso- och livsvetenskap per-eric.betzholtz@lnu.se +46480446249 +46725296590

HR partner Christian Andersson christian.andersson@lnu.se +46470708506

— / —

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

MarburgU EvolutionaryPlantEcol

PhD position in Evolutionary Plant Ecology on local adaptation of Southern beech

We are looking for a highly motivated PhD student to work on local adaptation of Southern beech (*Nothofagus pumilio*) along the latitudinal and elevational gradients of the Andes in Patagonia, Argentina. The project will combine genomic and dendroecological data in association studies flanked by the analysis of gene flow and population structure in Southern beech. Field work involves the collection of *Nothofagus* samples for genetic analyses and the extraction of tree cores and is planned for 02/2019 - 03/2019 and 02/2020 - 03/2020. Further longer term stays are anticipated at the INTA lab in Bariloche. Lab analyses include NextGen sequencing of at least 800 candidate genes in 500 individuals, genotyping with microsatellites, and the measurement of annual increment from tree cores. The project is closely linked to the H2020 project GenTree ([\[h2020.eu/\]\(http://www.gentree-h2020.eu/\)\) and will include comparative data analyses with European tree species currently under study there.](http://www.gentree-</p>
</div>
<div data-bbox=)

What we offer

The project is funded by the German Research Council (DFG) and is carried out in close collaboration among researchers from the Faculty of Biology of the Philipps University Marburg, Germany and from INTA Bariloche, Argentina. Working place will be in Marburg, field work and parts of the lab work will be carried out in Bariloche. Marburg is a vibrant and tradition-rich university uniting ground-breaking research with excellent support for young scholars and researchers. Biodiversity and climate research are among the core research fields at the Philipps-Universität Marburg offers a charming setting with a medieval historical city center and vivid student life.

The position will open on January 15th, 2019 for three years. The salary is paid according to a public service position (65% of a TV-H E13 position) which equals a gross salary of about 2400 euro. From this, tax allowance, health insurance, social security etc. are withdrawn automatically, and the PhD students receives a net salary of ~ 1500 euro (for an unmarried person without children) in the first year. In the second and third year this increases to 2650 euro and ~ 1700 euro respectively).

PhD students will have the opportunity to enroll in courses offered by the Marburg Research Academy (MARA), the International Office, the Higher Education Didactics Office, and the Human Resources Development Office, and can participate in summer schools offered by EvolTree & GenTree.

What we expect

The successful applicant will hold an MSc-degree or equivalent (a degree with a standard period of study of at least 8 semesters) in Biology, Forestry, Geography or a related relevant discipline. The working language in the project is English. The ability to communicate and collaborate in an international team is required, as is the ability to work independently under physically and mentally demanding field conditions. As this dendroecological study lies at the crossroad of dendroecology and association genomics, a broad interest in these topics and the willingness for extensive literature surveys is required. We expect good knowledge in data handling and statistics. Prior experience in any of the fields of population genetics, dendroecology, bioinformatics, as well as in field work is beneficial. The capability to interpret scientific results and very good writing skills should be documented by a very good thesis or previous publications.

For science related questions, please contact

Dr. Katrin Heer (katrin-heer@uni-marburg.de)

Dr. Lars Opgenoorth (opgenoorth@uni-marburg.de)

Dr. Paula Marchelli (marchelli.paula@inta.gob.ar)

Dr. Alejandro Martínez Meier (martinezmeier.a@inta.gob.ar).

Further information

Marburg Research Academy (MARA)

<https://www.uni-marburg.de/en/mara> Doctoral Regulations at Philipps University Marburg

<https://www.uni-marburg.de/fb17/-studium/studiengaenge/promotion/-englischepromotionsordnung.pdf> *How to apply*

Send your application (including a motivation letter, CV, certificates and contact details of at least two references) mentioning the registration number fb17-0031-wmz-2018 as a single PDF to the Faculty of Biology of the Philipps-University of Marburg, to Galina Bauer, bau-erg@biologie.uni-marburg.de ; deadline 26th October 2018.

Please consult the official announcement that includes all legal terms under the following link:

— / —

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>

MississippiStateU EvolutionaryBiol

The Dapper Lab (www.amy-dapper.com) at Mississippi State University is recruiting graduate students (MS or PhD) for positions starting as soon as Spring 2019.

The Dapper Lab is broadly interested in using evolutionary genetic approaches to understand the origin and maintenance of genetic diversity 'V primarily through studying the evolution of reproductive processes. Students will have the opportunity to develop independent research projects that combine population genetic, quantitative genetic, bioinformatic, and/or molecular genetic approaches. Current topics of interest in the lab include the evolution of meiotic genes in mammals, experimental evolution of recombination in nematodes, and the rapid evolution of reproductive genes.

Interested students should contact Dr. Amy Dapper (dapper@biology.msstate.edu), providing a description of your research interests and experiences and a CV or resume.

If interested, please do not hesitate to email me, (even if your application materials are not complete). Applicants interested in applying for an NSF GRFP are encouraged to get in touch as soon as possible to discuss project ideas (Deadline: Oct. 22nd).

For full consideration for the spring semester, applications should be submitted to the department by November 1st, 2018. Information on Graduate Studies in the Department of Biological Sciences is available at <http://biology.msstate.edu/degrees/graduate/> Amy L. Dapper Mississippi State University Dept. of Biological Sciences 295 E Lee Blvd. Mississippi State, MS 39762

Email: dapper@biology.msstate.edu Phone: (662) 325-7575 Office: 007 Harned Hall

"Dapper, Amy" <dapper@biology.msstate.edu>

NHM Oslo SpeciationGenetics

Job description The Natural History Museum at the University of Oslo announces three fellowships connected to a project funded under the 'Toppforsk Program', jointly financed by the Research Council of Norway and the Natural History Museum: 'SpeciationClock: How fast does the 'speciation clock' tick in selfing versus outcrossing lineages?' The project addresses how and how long it takes for new, reproductively isolated plant species to arise and what factors influence the rate of speciation.

More about the project and positions The project is organized in four work packages (WPs) which will 1) establish a theoretical framework to understand and predict the effects of mating system on the speciation process, 2) measure the rate of accumulation of intraspecific postzygotic reproductive isolation (RI) in a large set of species representing the selfing-outcrossing spectrum and divergence times spanning the last ~1 million years, 3) test if the rate at which RI loci accumulate is higher in selfers, and 4) quantify the role that selection has played on RI loci using population genomic analyses in one selfing and one outcrossing species. We have selected the tropical African 'sky archipelago' as a study system because the populations in these isolated high mountains represent a wide range of divergence times and levels of intermountain gene flow. Field experi-

ments and collection of material for the SpeciationClock project will be conducted during two long field seasons, starting in the Ethiopian mountains in October 2018. The project also includes extensive cultivation and crossing experiments, genomic analyses, and niche modeling through time.

One of the postdoctoral fellowships (Postdoc no. 1) announced here is a two-year fellowship connected to WP1. The selected candidate for this position will be based at the NHM in Oslo, but will spend considerable parts of the time in France working with the WP1 Leader, Dr. Sylvain Glémin at the ECOBIO lab at the University of Rennes.

The other postdoctoral fellowship (Postdoc no. 2) is a three-year fellowship primarily connected to WP2, but will also contribute to WP3 and WP4.

The PhD fellowship is a four-year fellowship, of which 75% of the time will be devoted to the PhD programme, mainly connected to WP3 and WP4, and 25% of the time will be devoted to duty work for the museum (teaching, public outreach, collection work).

Principal investigator (PI): Christian Brochmann, Natural History Museum. Co-PI: Anne K. Brysting, Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biosciences.

Who are we looking for? We seek highly motivated, enthusiastic persons with good social skills and with the ambition to gain new insights and to publish papers in leading international journals.

You will be part of a team with two researchers, three postdocs, one PhD fellow, and several international collaborators, and be offered a unique opportunity for cutting-edge research in a multidisciplinary environment with a focus on academic and personal development. You will carry out research both independently and as part of the team.

To apply for the postdoctoral positions, you must have a completed PhD degree (or education equivalent to a Norwegian doctoral degree) within relevant fields of botany/evolutionary biology, or biomathematics (Postdoc no. 1). Applicants for the Postdoc no. 1 position need to have a solid background in evolutionary biology and population genetics with mathematical or programming skills. Experience in population genetics modeling will be favored. Good knowledge of mating system evolution and/or speciation processes will also be a plus. Applicants for the Postdoc no. 2 position need to have extensive experience with and strong motivation to carry out long and demanding field work under primitive conditions, and applicants with experience with niche modeling through time, plant cultures,

and crossing experiments will be preferred. Applicants for the PhD fellowship must have a Master degree or equivalent in evolutionary biology, preferably with experience with high-throughput sequencing approaches and relevant bioinformatics analyses.

We offer Postdoctoral fellowships: A salary of NOK 515 200 - 597 400 per year, depending on qualifications and seniority (position code 1352). PhD fellowship: A salary of NOK 449 400 - 505 800 per year, depending on qualifications and seniority (position code 1017). A professionally stimulating working environment. Pension agreement with Norwegian Public Service Pension Fund (SPK). Attractive welfare benefits.

How to apply Please provide an application letter specifying which fellowship you apply for, and including a statement of interest, a brief summary of your scientific work and interests, and a personal assessment focusing on how you fit the description of the person that we seek. In particular, please provide a numbered list to explain whether and how your qualifications

— / —

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

NTNU Norway 4 EcoEvolutionaryDynamics

Four PhD positions with connections to the Centre for Biodiversity Dynamics (CBD) are available at the Norwegian University of Science and Technology.

PhD project 1: The physiological and ecological challenges faced by small bats in summer Supervisor: Associate Professor Clare Stawski, clare.stawski@ntnu.no Co-supervisor: Professor Jonathan Wright (CBD)

PhD project 2: A mechanistic basis for the effects of pollutants on disease susceptibility and severity in the house sparrow Supervisor: Associate Prof. Veerle Jaspers, veerle.jaspers@ntnu.no Co-supervisors: Professor Henrik Jensen (CBD), Professor Atle M. Bones, Dr. Courtney Waugh

PhD project 3: Interactive effects of ecological and chemical disturbance on individuals and populations in the model organism *Daphnia* Supervisor: Professor Sigurd Einum (CBD), Sigurd.einum@ntnu.no Co-supervisors:

Associate Professor Erik Muller, Associate Professor Veerle Jaspers

PhD project 4: The role of energy budgets in eco-evolutionary dynamics of natural bird populations
Supervisor: Professor Henrik Jensen (CBD), Henrik.Jensen@ntnu.no
Co-supervisors: Associate Professor Clare Stawski, Bernt Rønning, Stefanie Muff (University of Zürich), Katja Räsänen (EAWAG, Switzerland)

Application deadline is October 15th 2018.

More information about the positions and how to apply can be found here: <https://www.jobbnorge.no/ledigestillinger/stilling/157329/four-phd-positions-available-at-the-department-of-biology?p=0&reset=1> Best wishes, Henrik Jensen E-mail: Henrik.Jensen@ntnu.no
Henrik Jensen <henrik.jensen@ntnu.no>

OhioStateU EvolutionOfInsectSeasonalResponses

Title: OhioStateUniversity.EvolutionOfInsectSeasonalResponses

Description: The Meuti Lab is seeking applicants for PhD assistantships starting in the Fall of 2019 in the Entomology Department of The Ohio State University, Columbus, OH, USA. This competitive assistantship will cover tuition, stipend and health insurance.

The project will focus on the evolution of seasonal responses in mosquitoes and other insect pests. Although distantly-related insects respond to the same environmental signal (daylength) to appropriately time their development with favorable seasons, these responses evolved independently. The successful applicant will compare the regulation of seasonal responses in the West Nile Virus vector, *Culex pipiens*, and the Brown Marmorated stink bug. The successful applicant will also hone a variety of molecular techniques (e.g. analyzing bioinformatics datasets, transforming embryos using CRISPR/Cas9 mutagenesis) and will have opportunities to apply their findings in evolutionary, ecological and applied contexts. Students will receive close mentorship as they prepare scientific manuscripts, develop original grant proposals, and present their research at scientific meetings, ultimately preparing them for competitive positions in industry, academia or government.

Deadline for applications: Submit all materials to The Ohio State University Graduate School no later than

December 1, 2018.

Qualifications: The successful candidate will have a bachelor's degree in the biological sciences or a related discipline. Minimum requirements to apply include previous research experience, a 3.6 or higher undergraduate GPA and a 75th percentile or higher average on the verbal and quantitative portions of the GRE.

Application materials: Interested candidates are encouraged to email Dr. Megan Meuti (meuti.1@osu.edu) to discuss the position in detail. Your email message should include:

- (1) a short statement of intent,
- (2) contact information for three references, and
- (3) a concise, current CV complete with
 - (a) GPA, degrees earned and relevant coursework,
 - (b) GRE scores and percentiles,
 - (c) publications and research presentations
 - (d) awards/scholarships/grants,
 - (e) other relevant skills/qualifications.

Students from non-English speaking countries should also provide TOFEL scores.

Additional information: Please see the lab website (u.osu.edu/meutilab) to learn more about our group and ongoing projects.

The Ohio State University Megan E. Meuti, PhD Assistant Professor College of Food, Agriculture and Environmental Sciences

Department of Entomology

Room 400A Aronoff Lab

318 W. 12th Ave

Columbus, OH 43210 Office: 614-688-2829 E-mail: meuti.1@osu.edu

Website: <http://u.osu.edu/meutilab/> “Nicol, Megan” <nicol.114@osu.edu>

OhioStateU SnakeVenomEvolution

PhD position in Snake Venom Evolution

The Gibbs Lab in the Department of EEOB at Ohio State University is recruiting a Ph.D. student, to begin in Fall 2019, to develop a dissertation project on the evolution of venom diversity at the molecular level among

closely-related species of New World snakes. The student will join a group that uses genomic, transcriptome and proteomic data to study snake venom proteins as models for the evolution of adaptations at the molecular level. The project would be part of an ongoing NSF (US)-FAPESP (Brazil) Dimensions of Biodiversity grant on snake venom evolution that involves institutions in the US (Ohio State, Florida State University, and Clemson University) and Brazil (Instituto Butantan). There would be the opportunity for training visits to these institutions.

The ideal applicant would have strong quantitative skills and proficiency or interest in learning bioinformatics techniques and experience in using molecular data to examine evolutionary questions. A Master's degree is preferred but not required. This is primarily a lab-based project but with the possible opportunity for limited fieldwork.

The student would join an active lab that applies genomic techniques and bioinformatics analyses to a wide range of questions in the evolutionary biology and conservation genetics of vertebrates. The Department of EEOB provides year-round financial support (~ \$28K/yr plus benefits and tuition) for PhD students for the duration of their program.

Interested students should contact Dr. H. Lisle Gibbs, Department of EEOB, Ohio State University at gibbs.128@osu.edu with a statement of interest, a CV, transcripts and GRE scores if available. I will start reviewing applications on 15 October. Please see the lab (<https://u.osu.edu/gibbslab>) and department (<http://eob.osu.edu/>) websites for more information.

Dr. H. Lisle Gibbs Professor, Department of Evolution, Ecology, and Organismal Biology Director, Ohio Biodiversity Conservation Partnership 300 Aronoff Laboratory Ohio State University 318 W. 12th Avenue Columbus, Ohio 43210-1242 USA T: 614 688 3861 F: 614 292 2030 E: gibbs.128@osu.edu <https://u.osu.edu/-gibbslab/> "gibbs.128@osu.edu" <gibbs.128@osu.edu>

OklahomaStateU EvolutionBehavior

The Reichert lab in the Department of Integrative Biology at Oklahoma State University is recruiting M.S. and Ph.D. students for Fall 2019.

The lab focuses on the evolution of animal communication, with a particular interest in acoustic commu-

nication in anurans and Orthopteran insects. Current projects include studies of assessment, communication and cognition during animal contests, the neuroethology of signal perception, sexual selection, particularly the measurement of mate preference functions in complex environmental conditions, the relationship between communication and social networks, and the effects of noise on communication. Much of our work is done in the field. We aim for an integrative approach to the study of animal behaviour, and students are encouraged to develop projects examining behavior at both the mechanistic and functional level.

The Department of Integrative Biology at Oklahoma State University has an excellent & highly collaborative group of researchers studying evolutionary biology and behavioral ecology: <http://integrativebiology.okstate.edu/people/faculty>. Graduate students in the department are supported by teaching assistantships and receive a stipend, including a full tuition waiver. In addition, there are opportunities for summer funding, fellowships and travel support. Stillwater offers a low cost of living and excellent biodiversity, making it an ideal place to pursue a graduate degree.

Interested candidates should contact Dr. Reichert (michaelreichert@ucc.ie) and send a CV (including contact information for 3 references) along with a statement describing previous academic and research experience, research interests and a summary of why you are interested in working in our lab group. The official deadline for applications to the University is February 1, however interested candidates should contact Dr. Reichert well ahead of this deadline; no student can be admitted into the graduate program without the support of an advisor.

We support and strongly encourage applications from students from groups traditionally underrepresented in the sciences. Students from these groups are especially encouraged to be in contact and we will work with you to find opportunities for you to carry out your graduate studies in our group.

For more information on Dr. Reichert and current research and opportunities in the lab, see <https://reichertlab.com/>. For information on applying to the graduate program in Integrative Biology at Oklahoma State, including requirements and application procedure, see <http://integrativebiology.okstate.edu/graduate-program?id=42:admission-to-graduate-program&catid=2> . Michael Reichert

"Reichert, Michael" <michaelreichert@ucc.ie>

Paris EvolutionSexualReproduction

A PhD position is open in the Teotónio lab at the Institut de Biologie de l'École Normale Supérieure (IBENS), in Paris, France (<http://www.ibens.ens.fr/-spip.php?article351>); as part of a collaborative research project between the host lab and that of Denis Roze at the CNRS Marine Station in Roscoff, France (<http://www.sb-roscoff.fr/en/roze-denis/58>).

The Teotónio lab uses *Caenorhabditis elegans* experimental evolution to study natural selection in the evolution of distributions in life-history, behaviour, metabolism and gene expression traits. We further investigate the population genomics of adaptation to novel environments.

The project will study the evolution of recombination under partial selfing with the main objectives being: (1) to determine natural selection on recombination modifiers using experimental evolution in *C. elegans*; (2) to describe the genetic variance components (dominance, epistasis) of fitness traits, explaining the evolution of recombination; and (3) to integrate theoretical models developed in the Roze lab with the experimental data.

Candidates are expected to have a master's degree in evolutionary biology and an excellent understanding of the fundamental problems of quantitative genetics and population genetics, including QTL and GWAS mapping. Candidates with experience in model organism handling, computer programming, experimental evolution and statistical analysis of large data sets are preferred. The project may involve the use of genetic transformation methods, so experience with molecular and developmental biology techniques is a plus. The PhD student will be expected to conduct full-time and independent research in the Teotónio lab, in close collaboration with other team members and with Denis Roze in Roscoff.

The PhD position is funded by the National Agency of French Research (ANR) for three years, subject to an initial evaluation after 6 months, with a potential one-year extension. Successful applicants can start their PhD as soon as November 2018.

To apply, send a CV, a letter of motivation, and the contact information for two referees as a single PDF file to Henrique Teotonio (teotonio@biologie.ens.fr), with subject PhD_ANR. Informal inquiries are welcome.

Some of the relevant background literature: Roze and Lenormand 2005. doi: 10.1534/genetics.104.036384. Roze and Barton. 2006. doi: 10.1534/genetics.106.058586. Roze D. 2015. doi: 10.1534/genetics.115.178533/-/DC1. Noble et al. 2017. doi: 10.1534/genetics.117.300406 Teotonio et al. 2017. doi: 10.1534/genetics.115.186288

teotonio <teotonio@biologie.ens.fr>

PurdueU HoneybeeEvolutionaryGenetics

Description: Two full-time Graduate Research Assistantships (Ph.D.) are available beginning Summer/Fall 2019 in the laboratory of Dr. Brock Harpur (beemolevo.com) in the Department of Entomology at Purdue University.

North American honeybee populations are non-native. They originate from European settlers who brought colonies from at least two highly-diverged source populations. How does admixture of highly diverged populations influence gene expression, gene regulation, phenotypic expression, and ultimately the evolution of traits? The Harpur lab is seeking two Ph.D. students to combine genomics, transcriptomics, computational biology, and biochemistry to tackle this question focusing on industry-relevant traits. Application of molecular techniques and outreach to beekeepers and the community will be an integral part of the students' training.

Contact: Interested candidates should contact Dr. Harpur (b.harpur@gmail.com) by November 17th, 2018. Please contact him with any questions. To be considered for this position send a C.V., contact information for 3 references and a 1-page cover letter describing research interests and background (use email subject line: "Grad Fellowship: Harpur Lab"). You can also meet Dr. Harpur in person at the 2018 ESA, ESC, and ESBC Joint Annual Meeting (Entomology 2018) in Vancouver.

About Purdue University: The Department of Entomology at Purdue is an integral part of the College of Agriculture, one of the world's leading colleges of agricultural, food, life, and natural resource sciences, ranked eighth globally in the 2016 QS World University Rankings. The College is deeply committed to the three land-grant missions (teaching, research, and extension), to international activities and perspectives that span all missions. The College has 11 academic departments

and includes 325 faculty, 2782 undergraduate students, and 690 graduate students. The College's strategic plan can be accessed at <https://ag.purdue.edu/plan/Pages/default.aspx> For more information on the Entomology Graduate Program, Purdue University and West Lafayette, Indiana see: <http://www.entm.purdue.edu/prospective-grads/>, <http://www.purdue.edu/> and <http://www.homeofpurdue.com/> The Department and College of Agriculture are committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Purdue is an ADVANCE institution - www.purdue.edu/advance-purdue . Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.

b.harpur@gmail.com

RiceU EcologyEvolution

The Department of BioSciences at Rice University invites applications for admission into our Ecology & Evolutionary Biology Ph.D. program. BioSciences is home to a vibrant community of faculty, postdoctoral, graduate, and undergraduate scholars in Ecology and Evolution, Biochemistry, Cell Biology, Genetics and Neuroscience. Our EEB program has particular strengths in animal behavior, population and community ecology, conservation biology, evolutionary ecology, and evolutionary genetics and genomics.

The following faculty members are potentially accepting graduate students for Fall 2019:

Lydia Beaudrot (beaudrot@rice.edu): community ecology, macroecology, and conservation biology of tropical mammals <http://lydiabeaudrot.weebly.com>

Adrienne Correa (ac53@rice.edu): coral reef virus isolation and characterization, multipartite symbioses, SISPA, omics, community ecology <http://www.owl.net/~ac53/index.html> *Scott Egan* (scott.p.egan@rice.edu): population genetics and genomics of rare species, environmental DNA surveillance, community metagenetics, conservation biology, evolutionary biology <https://sites.google.com/site/scottpegan/>

Volker Rudolf (volker.rudolf@rice.edu): Community, population, and disease ecology; climate change; biodiversity <https://volkerrudolf.weebly.com>

Julia Saltz (julia.b.saltz@rice.edu): Development and evolution of individual differences in behavior, behavioral genetics, evolutionary feedbacks, phenotypic plas-

ticity, learning. <https://saltzlab.wordpress.com> We offer highly competitive financial support, a supportive and friendly environment, and light teaching requirements for graduate students. We are located in Houston, Texas, an exciting, diverse, and affordable city with world-class opportunities for dining, arts, and entertainment and access to diverse terrestrial and aquatic environments. Rice is located beside one of the country's largest medical research centers, providing additional opportunities in bioinformatics and genomics.

Completed applications should be received by December 31 to ensure full consideration. Prospective applicants are strongly encouraged to contact potential faculty advisors before applying. Complete information about the graduate program, including application instructions and how waive the application fee, may be found at <https://biosciences.rice.edu/graduate-studies/eeb-grad-program> Julia B. Saltz Assistant Professor Biosciences at Rice University 6100 Main Street, MS-170 Houston, TX 77005 julia.b.saltz@rice.edu Saltzlab.wordpress.com

jbsaltz@gmail.com

StonyBrookU EvolutionaryBiol

GRADUATE OPPORTUNITIES IN ECOLOGY AND EVOLUTIONARY BIOLOGY

The Graduate Program in Ecology and Evolution < <http://www.stonybrook.edu/ecoevo/index.html> > at Stony Brook University is recruiting doctoral and master's level graduate students for Fall 2019.

The department has a long and distinguished history, being one of the first of its kind. It currently has a productive and diverse faculty working on broad array of questions involving microbes, plants, vertebrate and invertebrate animals and whole ecosystems. Field locales span the globe from the old and new world tropics to the Arctic and Antarctic polar regions, as well as the uplands, wetlands and coastal areas of Long Island and nearby New York City.

Upon admission, PhD students are guaranteed teaching assistantships upon acceptance, with additional support available through fellowships and research assistantships, as they become available. The deadlines for applications are* Dec. 1, 2018* for the PhD program. Admissions to the MA program are rolling until *April 15, 2019.*

Below is a listing of current local program faculty to

whom questions can be directed. It is* highly* recommended that PhD applicants contact potential advisors before submitting your application. For questions or assistance with the application process please e-mail our Graduate Program coordinator, Melissa Cohen melissa.j.cohen@stonybrook.edu.

DEPARTMENTAL FACULTY

H. Resit Akcakaya - Population and conservation ecology *<http://life.bio.sunysb.edu/ee/akcakayalab/>
 Stephen B. Baines - Aquatic ecosystem ecology and biogeochemistry *<http://life.bio.sunysb.edu/ee/baineslab/>
 Michael A. Bell - Contemporary evolution and biology of fishes <http://life.bio.sunysb.edu/ee/belllab/> Liliana M. Dávalos - Vertebrate phylogenetics, biogeography and conservation *http://lmdavalos.net/lab/The_Lab.html
 Walter F. Eanes - Evolutionary genetics of Drosophila <http://life.bio.sunysb.edu/ee/eaneslab/> Jessica Gurevitch - Research synthesis, plant population and invasion ecology *<https://gurevitchlab.weebly.com/>* Jesse D. Hollister - Plant evolutionary genomics and epigenetics <https://genomeevolution.wordpress.com/> Jeffrey S. Levinton - Marine ecology and paleobiology <http://life.bio.sunysb.edu/marinebio/levinton.main.html>
 Heather J. Lynch - Quantitative ecology and conservation biology *<https://lynchlab.com/>* Ross H. Nehm - Science education, evolution education, cognition https://www.stonybrook.edu/commcms/ecoevo/people/faculty_pages/nehm.html Dianna K. Padilla - Marine and freshwater ecology, conservation and invasion biology *<http://life.bio.sunysb.edu/ee/padillalab/> Joshua Rest - Evolutionary genomics *<http://life.bio.sunysb.edu/ee/restlab/Home.html>

Robert W. Thacker - Systematics, phylogenetics, and ecology https://www.stonybrook.edu/commcms/ecoevo/people/faculty_pages/thacker.html

John R. True - Evolutionary developmental biology *https://www.stonybrook.edu/commcms/ecoevo/people/faculty_pages/true.html Krishna M. Veeramah - Primate comparative genomics *<http://life.bio.sunysb.edu/ee/veeramahlab/> PROGRAM FACULTY IN OTHER DEPARTMENTS

Jackie Collier - Microbial ecology <https://you.stonybrook.edu/collierlab/> Nolwenn M. Dheilly - Evolution of Host-Parasite Interactions *<https://you.stonybrook.edu/dheilly/>* Andreas Koenig - Behavioral ecology of primates *https://sites.google.com/a/stonybrook.edu/idpas_faculty_profile_koenig/ David Q. Matus - Evolution of Cell Invasion *<https://you.stonybrook.edu/matuslab/> Catherine Markham - Behavioral ecology <https://catherinemarkham.com/> Janet Nye - Quantitative Fisheries Ecology

— / —

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

UAlabama MusselCommunityGenomics

A PhD position in comparative population genomics of southeastern freshwater mussels is available in the Lozier lab (<http://lozierlab.ua.edu/>) at the University of Alabama Department of Biological Sciences (<https://bsc.ua.edu/>) as part of a recently funded NSF Dimensions of Biodiversity project. We are looking to recruit a highly motivated PhD student to examine comparative population genetics of freshwater mussel communities in streams of the Mobile and Tennessee River basins, which is a major biodiversity hotspot for mussels and several other freshwater taxa. The project will involve extensive high throughput sequencing of numerous populations and species (including whole genome and reduced representation sequencing), with the goal of understanding how population and species level processes relate to broader eco-evolutionary processes. More details relating to the study objectives can be found at the project website (<http://mussels.ua.edu/>). The student will be expected to develop specific research questions relating to population, conservation, and landscape genetics within the context of these broader project objectives.

Applicants must have a strong academic record (GPA > 3.0), strong written and verbal communication skills, and a desire to build strong quantitative and data management skills. Experience in laboratory and computational analysis of modern genetic data is preferred. The student will work closely with a postdoc and another PhD student being simultaneously recruited by Carla Atkinson's lab (<http://atkinsonlab.ua.edu/>) at UA and with collaborators at the University of Mississippi, so an interest in working as part of a collaborative team is a must.

Interested applicants should send a (1) cover letter describing research experience and goals, (2) curriculum vitae, (3) unofficial transcripts and GRE scores, (4) a writing example, and (5) contact information of 2-3 individuals familiar with research/academic performance to Jeff Lozier (jlozier@ua.edu). Start date is negotiable for Spring, Summer, or Fall 2019 semesters. Review of materials will start immediately.

Jeff Lozier Associate Professor Biological Sciences The University of Alabama jlozier@ua.edu | lozierlab.ua.edu
“Lozier, Jeffrey” <jlozier@ua.edu>

UConnecticut PlantComputationalGenomics

The Plant Computational Genomics lab in the Department of Ecology and Evolutionary Biology at the University of Connecticut seeks motivated PhD students to join the lab in the Summer/Fall 2019. 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>).

RESEARCH TOPICS:

Potential research topics in our group 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 assembly and characterization of non-model plant genomes (and transcriptomes); 4) interrogation of natural genetic variation across populations in large, complex conifer genomes; 5) and your ideas here!

TO APPLY:

Financial support for Ph.D. students is available through research assistantships, teaching assistantships, and university fellowships. Learn more about our active research projects here <<https://compgenomics.lab.uconn.edu/-research/>>. 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 (1-2 pages), a CV, unofficial undergraduate/graduate transcripts, and GRE scores to Jill Wegrzyn (jill.wegrzyn@uconn.edu). Qualified candidates will be contacted directly for Skype interviews following review. Applications will be reviewed starting December 20th.

For more details on application materials and expectations in the lab, please read the following < <https://compgenomics.lab.uconn.edu/graduate-students-guide-for-expectations-and-mentoring/> > .

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 <jill.wegrzyn@uconn.edu>

UDuQuebecEnOutaouais HerpPopulationGenetics

A master position is available at the Université du Québec en Outaouais to work on vernal pool herps. A good knowledge of French is required and the following description is in French only:

Opportunité de bourse de maîtrise

Description du projet : La forêt tempérée feuillue de l’est du Canada, composée majoritairement par l’érable à sucre, revêt une importance socio-économique majeure. Ce biome forestier est caractérisé par la plus forte densité humaine au Canada, et génère d’importantes retombées économiques. Par ailleurs, cette forêt génère aussi un

large éventail de services écosystémiques qui ont une valeur considérable pour la société (e.g. habitat pour la biodiversité, régulation du climat, cycle des nutriments, activités récréatives, qualité de l'air, régulation du climat, pollinisation, approvisionnement en eau). Cette forêt est soumise à de fortes perturbations en raison des activités anthropiques, dont l'industrialisation, l'urbanisation, la sylviculture et le déboisement à des fins d'agriculture intensive. Concernant la sylviculture, deux principales approches de gestion forestière sont utilisées : les coupes à blanc (ou coupes totales, aménagement équienne) et les coupes de jardinage (ou coupes partielles, aménagement inéquienne). Malgré la pratique ancienne de ces deux approches, nous ne connaissons pas encore leur impact sur la biodiversité et les services écosystémiques. Afin d'étudier cet impact, ce projet évaluera l'effet de la gestion équienne et inéquienne sur la biodiversité des communautés d'amphibiens rencontrées dans les étangs vernaux de la forêt feuillue tempérée ainsi que sur la connectivité des populations. Ce projet se déroulera à Kenauk, une forêt privée de 230 km² sur laquelle différentes parcelles ont subi ces deux types d'aménagements. Dans un premier temps, ce projet permettra de valider l'utilisation du séquençage nouvelle génération pour obtenir une estimation précise et rapide de la biodiversité. Puis, la comparaison de la biodiversité de parcelles ayant subi des coupes totales ou partielles sera comparée à celle de parcelles n'ayant jamais été coupées afin d'estimer l'impact de différents aménagements forestiers sur la biodiversité. Enfin, l'impact de ces aménagements sur la connectivité fonctionnelle sera étudié par des méthodes de capture-marquage-recapture, télémétrie et de génétique du paysage. Le projet sera conduit en collaboration avec Kenauk Canada et Conservation de la Nature Canada, deux des propriétaires de la propriété forestières. Il apportera des connaissances inédites permettant d'améliorer l'aménagement forestier tout en préservant la biodiversité et les services écosystémiques. Le (la) candidat(e) évoluera dans l'environnement stimulant de l'Institut des Sciences de la Forêt tempérée (ISFORT; <http://isfort.uqo.ca/>).

Exigences : Le (la) candidat(e) doit avoir complété un premier cycle universitaire en sciences biologiques, ou sciences connexes. Il (elle) doit être disponible pour travailler sur le terrain en forêt durant l'été 2019 (ce terrain requiert une bonne condition physique) et aimer travailler en équipe. Les expériences et compétences suivantes seraient un atout: ——— -expérience de terrain en milieu forestier ——— -compétences en biologie moléculaire (extraction d'ADN, PCR, qPCR, séquençage) ——— -familiarité avec l'environnement UNIX et compétences en analyse de données (logiciel R)

et programmation (Python) ——— -connaissance des amphibiens (un atout)

Début du projet : Janvier 2019

Bourse : 15 000\$/an pour 2 ans

Supervision : Yann Surget-Groba (UQO-ISFORT) et Angélique Dupuch (UQO-ISFORT). Veuillez envoyer un relevé de notes de maîtrise, une lettre de motivation, un CV et le nom et les coordonnées de trois références à Yann Surget-Groba et Angélique Dupuch aux adresses suivantes: yann.surget-groba@uqo.ca et angelique.dupuch@uqo.ca. L'examen des candidatures se poursuivra jusqu'à ce que le poste soit pourvu.

"yann.surget-groba@uqo.ca"

<yann.surget-groba@uqo.ca>

UGeorgia AntBeeGenomicsEpigenetics

PhD Positions: NSF-supported graduate studies in evolutionary epigenetics and genomics of social insects in the Hunt Lab at the University of Georgia.

The Hunt Lab is broadly interested in how evolution produces variation in insect form and function. We use ants and bees as models for studying how evolutionary mechanisms shape variation in social behavior. We have two, recently-funded projects in the lab to support graduate students; both use functional genomic and transcriptomic methods to study the genetic and epigenetic factors that underlie differences in social structure.

The first project, in collaboration with Ken Ross at UGA, explores how a supergene and phenotypic plasticity influence variation in colony queen number and social behaviors in the fire ant *Solenopsis invicta*.

The second project, in collaboration with Sarah Kocher at Princeton University, investigates how gene regulatory evolution has influenced evolutionary variation in social behavior in halictid bees.

The Hunt Lab is a young and dynamic research group dedicated to fostering the success of its lab members. We are a part of the Entomology Department, one of many departments in the life sciences at the University of Georgia. The diversity and multitude of faculty at UGA results in diverse areas of expertise and coursework availability to help students reach their full potential. Students will take coursework and receive training in entomology, genetics, and bioinformatics.

Requirements: An interest in broad evolutionary questions and a strong desire to develop bioinformatic expertise. Applicants must meet requirements of admission to the Graduate School at the University of Georgia (see <http://www.caes.uga.edu/departments/entomology/graduate.html>). The start date is flexible.

More information about the Hunt Lab can be found online at <http://huntlab.uga.edu>. Prospective applicants should email Brendan Hunt at huntbg@uga.edu with a statement of interest.

“huntbg@uga.edu” <huntbg@uga.edu>

UHawaii Hilo Conservation Biol

Subject: M.S. in Tropical Conservation Biology and Environmental Science at the University of Hawaii at Hilo

The University of Hawaii at Hilo invites applicants to the master’s program in Tropical Conservation Biology and Environmental Science (TCBES). Please visit the TCBES website (<http://tcbes.uhh.hawaii.edu/>) for details about both the thesis and internship tracks. Priority deadline for applications: Dec. 1st, 2018.

Matthew L. Knope Assistant Professor of Biology University of Hawaii, Hilo 200 W. Kawili St., Hilo, HI 96720
Lab website: <https://matthew-knope.squarespace.com>
Matthew Knope <knope@hawaii.edu>

UIdaho Galapagos Island Diversification

PHD POSITION AVAILABLE: EVOLUTIONARY DIVERSIFICATION IN GALAPAGOS ENDEMIC LAND SNAILS

I have an opening for a PhD student to join the Parent Lab in the Department of Biological Sciences at the University of Idaho (<http://www.uidaho.edu/sci/biology>) starting in fall 2019 to work on the diversification of Galapagos endemic land snails. Examples of projects include (but are not limited to):

(1) Role of predation in diversification;

(2) Role of intra- and interspecific competition in diversification;

(3) Biogeography of species formation and species delimitation.

The position is funded through NSF, and funding is guaranteed for five years with a combination of research assistantship and potentially teaching responsibilities.

Our lab is affiliated with IBEST (Institute for Bioinformatics and Evolutionary Studies - <http://www.ibest.uidaho.edu>) and CMCI (Center for Modeling Complex Interactions - <http://www.cmciuidaho.org/>). Students with a desire to learn computational skills can opt to apply to the Bioinformatics and Computational Biology Graduate Program (<https://www.uidaho.edu/sci/bcb/degrees/phd>).

We have a very interactive department with a number of great evolutionary biologists (<http://www.uidaho.edu/sci/biology/people/faculty>). We are located in the Pacific Northwest, a beautiful part of the country with lots of opportunities for outdoor activities. Moscow is a nice small friendly town in relatively close proximity to Seattle and Portland.

Application information can be found at: <https://www.uidaho.edu/admissions/graduate>. Potential applicants are encouraged to contact me well before the departmental deadline in mid-December to discuss research interests. Please e-mail me with a brief description of your research interests and any research experience so we can discuss how joining my lab and the department might help you reach your career goals.

Best, Christine

- Christine Parent, PhD Assistant Professor

Biological Sciences University of Idaho 208-885-4016

ceparent@uidaho.edu <http://parentlab.weebly.com/>
“ceparent@uidaho.edu” <ceparent@uidaho.edu>

UKentucky Evolution Ecology

Graduate Recruiting in Evolution and Ecology at the University of Kentucky

The University of Kentucky < <http://www.uky.edu> > (UK) is recruiting outstanding graduate students in the fields of evolutionary biology and ecology. UK is the home of a diverse set of research groups that use laboratory, field, computational, and mathematical tools

to study questions in population and evolutionary genetics and genomics, ecological genetics, phylogenetics, evolutionary ecology, physiological ecology, conservation biology, behavioral ecology, plant ecology, and other fields in evolution and ecology. These research groups are housed in a number of departments on campus including the Departments of Biology and Mathematics in the College of Arts and Sciences and the Departments of Entomology, Plant and Soil Sciences, Plant Pathology, and Forestry & Natural Resources in the College of Agriculture, Food and Environment.

Research groups that support graduate study are listed below. Please contact individual faculty mentors about opportunities in their group and their department more broadly. Graduate funding depends on the department and research group and includes research and teaching assistantships. For example, the Department of Biology offers teaching assistantship support with competitive stipends for five years contingent upon progress to a PhD.

Department of Biology

* Carol Baskin. Plant ecology. < <https://bio.as.uky.edu/users/ccbask0> > * Phil Crowley. Evolutionary ecology. < <https://bio.as.uky.edu/users/pcrowley> > * Catherine Linnen. Adaptation and speciation genomics. < <http://www.linnenlab.com/> > * Nicholas McLetchie. Plant reproductive ecology. < <http://www.i-m.mx/McLetchie/McLetchieLab2/welcome.html> > * Craig Sargent. Behavioral and evolutionary ecology. < <http://darwin.uky.edu/~sargent/> > * Jeremiah Smith. Genome biology and evolution. < <http://www.i-m.mx/jeremiahsmith/SmithLabUKy/> > * Jeremy Van Cleve. Theoretical and computational evolution and ecology. < <http://vancleve.theoretical.bio> > * David Weisrock. Evolutionary genomics and phylogenetics. < <http://weisrocklab.com> > * David Westneat. Behavioral ecology. < <http://www.i-m.mx/DFWestneat/DavidFWestneat/> > ## Department of Mathematics ##

* David Murrugarra. Mathematical biology. < <http://www.math.uky.edu/~dmu228/> > * Olivia Prosper. Mathematical biology. < <http://www.ms.uky.edu/~ofpr222/> >

Department of Entomology

* Charles Fox. Life history evolution and behavioral ecology. < <http://www.uky.edu/~cfox/> > * David Gonthier. Ecology of agriculture and sustainable food systems. < <http://gonthierdavid.wixsite.com/djgonthier> > * Clare Rittschof. Pollinator behavioral ecology, neuroscience, and genomics. < <https://clarerittschof.com/> > * Nicholas Teets. Evolutionary

and physiological adaptations to extreme environments. < <http://www.teetslab.com/> > * Jennifer White. Ecology, evolution, and behavior of symbionts. < <https://entomology.ca.uky.edu/person/jennifer-white> > ## Department of Forestry & Natural Resources ##

* Mary Arthur. Forest ecology. < <http://forestry.ca.uky.edu/mary-arthur> > * John Cox. Wildlife and Conservation Biology. < <http://forestry.ca.uky.edu/john-cox> > * Steven Price. Ecology and conservation biology. < <http://pricelab.ca.uky.edu/> > * Jian Yang. Landscape ecology. < <https://forestry.ca.uky.edu/jian-yang> >

Department of Plant and Soil Sciences

* Rebecca McCulley. Grassland ecology. < <http://www.mcculleylab.org/> >

Department of Plant Pathology

* Christopher Schardl. Evolution of plant and endophyte mutualisms. < <https://plantpathology.ca.uky.edu/lab-schardl> >

— / —

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>

UKentucky QuantitativeEvolutionEcol

The Van Cleve Research Group (<http://vancleve.theoretical.bio>) in the Department of Biology at the University of Kentucky is currently recruiting Ph.D. students to join the lab in Fall 2019. The lab is generally interested in quantitative and mathematical approaches to evolutionary biology and ecology. Past and current research areas include social evolution and other topics in evolutionary ecology, the evolution of phenotypic plasticity and bet-hedging, and epigenetic processes including genomic imprinting (see here for publications: <http://vancleve.theoretical.bio/publications>).

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

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

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

Questions about the Biology Graduate program can be sent to Van Cleve ([<jvanclave@uky.edu>](mailto:jvanclave@uky.edu)) or the Director of Graduate studies, David F. Westneat ([<biodfw@uky.edu>](mailto:biodfw@uky.edu)).

Please note that applications should be received by ***January 1st 2019*** for full consideration.

– Jeremy Van Cleve

Assistant Professor Department of Biology University of Kentucky E-mail: jvanclave@uky.edu Webpage: <http://vanclave.theoretical.bio> Phone: (859) 218-3020

Jeremy Van Cleve [<jvanclave@uky.edu>](mailto:jvanclave@uky.edu)

UKentucky ThermalBiology

Graduate Assistantship in Drosophila Genetics and Thermal Biology

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

Contact : Nicholas Teets Email: n.teets@uky.edu Phone: (859)-257-7459 Lab website: <http://www.teetslab.com>

Description: The Teets Lab at University of Kentucky is seeking a PhD student with a focus in genetics and thermal biology. The successful applicant will work on an NSF-funded project to investigate the genetic and epigenetic regulation of thermal plasticity in *Drosophila*. The student will use cutting-edge techniques in quantitative genetics and epigenetic profiling to identify mechanisms that allow organisms to cope with stressful environments. This work is part of a collaborative effort with researchers from four different universities. For more information on the Teets Lab, visit the lab website (<http://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 applicant will start any time between January and August 2019, as mutually agreed upon. The assistantship includes a competitive stipend, tuition waiver, 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. For full consideration please submit application materials by December 1, 2018. 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.

["n.teets@uky.edu"](mailto:n.teets@uky.edu) [<n.teets@uky.edu>](mailto:n.teets@uky.edu)

UMassachusetts Amherst Evolutionary Genomics

The lab of Dr. Courtney Babbitt at the The University of Massachusetts Amherst is conducting a search for motivated candidates for PhD dissertation research in a number of areas related to gene expression, cis-regulation, adaptation and signatures of selection in humans and other primates. The human and chimpanzee genomes are quite similar, but many of our neural phenotypes are very different. Many of these differences may be driven by changes in gene expression, and some of those changes may have been adaptive during human evolution. We investigate the functional and phenotypic consequences of positively selected mutations within hu-

man gene regulatory sequences (cis-regulatory sequence). We are interested in questions such as: What are the functional consequences of signatures of adaptation in the human brain? What neural traits do they affect?

Tools commonly used in the lab are RNA-Seq, ATAC-Seq, MPRA, cell culture, and development of methods to transform iPSCs into neural tissue types. Students typically employ both wet lab and computational techniques in their projects.

Students are encouraged to apply through the Organismic and Evolutionary Biology (OEB) or the Molecular and Cellular Biology (MCB) programs at UMass Amherst: <http://gpls.cns.umass.edu/oeb/admissions> <https://gpls.cns.umass.edu/mcb/admissions> < <https://gpls.cns.umass.edu/mcb/admissions> >

For more information on Dr. Babbitt and our research, see our website: <http://www.babbittlab.org/> If interested, please send CV, summary of research interests and experience (if applicable), and contact information for 3 references to cbabbitt@bio.umass.edu.

Dr. Courtney Babbitt Assistant Professor Department of Biology Honors Faculty University of Massachusetts, Amherst Amherst, MA 01003 USA cbabbitt@bio.umass.edu <http://www.babbittlab.org> Courtney Babbitt <cbabbitt@bio.umass.edu>

UMassachusetts Amherst MicrobeDomesticationGenomics

Graduate position: Genomics of Microbial Domestication

The Gibbons lab (<https://sites.google.com/view/gibbonslabgenomics/>) in the Food Science Department (<https://www.umass.edu/foodsci/>) at the University of Massachusetts Amherst is accepting applications for a PhD student to start in August 2019.

The research of this PhD position will center on microbial domestication. Similar to crops and livestock, humans have a long-history of domesticating microbes in an effort to improve the digestibility, palatability, and longevity of food. Microbe domestication results in specialization to the food environment. We are interested in understanding the impact of domestication on the genomes and phenotypes of beneficial microbes used in the production of traditional fermented foods. Our lab incorporates cutting-edge DNA sequencing methodologies, computational genomics, population genetics,

molecular biology, and laboratory experiments.

Interested applicants should send an email with the subject “genomics of microbial domestication phd position”, a brief description of why you are interested in the position, and a current resume or CV to jggibbons@umass.edu.

– John G. Gibbons Assistant Professor Department of Food Science 102 Holdsworth Way 240 Chenoweth Lab University of Massachusetts Amherst, MA 01003 Email: jggibbons@umass.edu Phone: 413.545.1025 <https://sites.google.com/view/gibbonslabgenomics/> “jggibbons@umass.edu” <jggibbons@umass.edu>

UMelbourne EvolutionLizardPregnancy

Seeking PhD candidate to study the evolution of pregnancy in Australian lizards

We are seeking an outstanding student interested in the evolution of complexity to work on an ARC funded research project at the University of Melbourne, Australia.

Through this project you will develop and interrogate a reptile model for the evolution of maternal-fetal communication. This is a multi-disciplinary project which integrates fieldwork, cutting edge molecular and cell biology techniques, and bioinformatics.

You can work in one of the world’s best comparative reproduction laboratories. The lab includes a large group of talented molecular, reproductive, and evolutionary biologists and outstanding molecular facilities. The project is well funded with resources for personal development including conference travel.

The candidate must be eligible for a University of Melbourne PhD scholarship (deadline 30 September 2018 for international applicants or 31 October 2018 for local students).

If you are interested in joining our exciting project at Melbourne, please send an e-mail with an expression of interest, your CV and academic transcript to Oliver Griffith (oliver.griffith@unimelb.edu.au).

For information on PhD study at the University of Melbourne, including entry

requirements, see: <http://science-courses.unimelb.edu.au/study/degrees/doctor-of->

[philosophy-science/fees-scholarships?residency=-domestic#fees-scholarships](https://biology.olemiss.edu/-philosophy-science/fees-scholarships?residency=-domestic#fees-scholarships) For more information on the team you will be joining visit www.oligriffith.com and <https://renfreeshawlab.biosciences.uom.org.au/>
Oliver W. Griffith | Postdoctoral Associate

Gaylord Donnelley Environmental Postdoctoral Fellow,
Department of Ecology and Evolutionary Biology, Yale
University

Mobile: +1 908 340 7017 Website: <http://www.oligriffith.com>
Alternative E-mail: oli.griffith@gmail.com

“Griffith, Oliver” <oliver.griffith@yale.edu>

UMississippi DiseaseBehaviorSexualSelection

PhD position(s) in evolution/behavior/physiology of
host-parasite relationships

The Balenger Lab at the University of Mississippi is seeking 1 - 2 PhD students to join our research group beginning Fall 2018. Students should develop an independent research focus in line with ongoing lab projects. Current topics include 1) the adaptive value of phenotypic plasticity by recently acquired hosts in mediating effects of emerging pathogens, 2) the role of parasites in driving the evolution of host immunity and the expression of sexually selected traits. Our studies utilize relationships between common songbirds & the microbial pathogen *Mycoplasma gallisepticum* AND field crickets (*Gryllus* spp.) & the acoustically orienting parasitoid *Ormia ochracea*. (For examples of relevant publications see below.) Projects will utilize some combination of field, aviary, wet lab, and/or bioinformatic approaches; individuals are encouraged to pursue their own particular strengths and interests. Much of our fieldwork is conducted at the University of Mississippi Field Station (<http://fieldstation.olemiss.edu/>), which is close by and offers exciting opportunities for observational and experimental work.

Funding is guaranteed for 5 years, mostly through teaching assistantships, but research assistantships are also possible. Assistantships include benefits, a tuition waiver, and a competitive stipend (\$22K for PhD students in 2018). An additional competitive financial supplement is available for top applicants, and there are opportunities for summer RA support. Review of applications will begin February 1st. For more details see

the Biology Dept. website <https://biology.olemiss.edu/-programs/graduate/application-procedure/> Prospective students with a background in evolution, behavior, immunology, or disease ecology are strongly encouraged to apply. However, curiosity, determination and a collaborative attitude are the most important traits. We support and strongly encourage applications from students from groups traditionally underrepresented in the sciences.

Interested applicants should contact Dr. Balenger well before the deadline with brief details about your GPA, GRE, research interests, experience, and why you want to go to graduate school.

Balenger S.L., Bonneaud C., Sefick S.A., Edwards, S.V., and Hill G.E. (2015) Plumage color and pathogen-induced gene expression in a wild songbird. *Behavioral Ecology* 26: 1100-1110.

Balenger S.L. and Zuk M. (2015) Roaming Romeos: male crickets evolving in silence exhibit increased locomotor behaviors. *Animal Behaviour* 101: 213-219.

Balenger S.L. and Zuk M. (2014) Testing the Hamilton-Zuk hypothesis: past, present, and future. *Integrative and Comparative Biology* 54: 601-613.

Bonneaud C., Balenger S.L., Russell A.F., Zhang J., Hill G.E., and Edwards S.V. (2011) Rapid evolution of disease resistance is accompanied by functional changes in gene expression in a wild bird. *Proceedings of the National Academy of Sciences* 108: 7866-7871.

Susan Balenger, PhD Assistant Professor
Dept. of Biology University of Mississippi
balenger@olemiss.edu <http://susanbalenger.weebly.com/> balenger@olemiss.edu

UNewHampshire EvolutionaryGenomicsPhysiology

The MacManes Lab (<https://genomebio.org>) at the university of New Hampshire is interested in recruiting a PhD or MS student to work on a project recently funded by the NIH, starting in Fall if 2019. Specifically, the project aims to understand how mammals survive in harsh desert conditions, and includes training in function & population genomics, physiology, molecular evolution, and field research.

The ideal candidate has a demonstrated interest in evolutionary biology, a strong history of undergraduate (or

Masters level) research, or previous experience working in the Unix environment. The MacManes lab is highly supportive of people that come from non-traditional or under-represented groups, and we particularly encourage your application. Direct support through research assistantships is available for at least 3 years, followed by support through UNH-specific or external fellowships, or teaching assistantships.

The University of New Hampshire is located in Durham, NH, which is only 10 miles from the Ocean, 1 hour drive to Boston or Portland ME, and a few hours from the White Mountains. Southern New England is known for its outdoor activities, sports, and craft-beer scene.

To begin the application process, contact me at Matthew.MacManes@unh.edu, including a brief description of your research interests and experience, as well as a current CV (including coursework). Formal applications, submitted to <http://gradschool.unh.edu/>, are due 15Jan19.

Matthew MacManes University of New Hampshire
Durham, NH 03824

“MacManes, Matthew” <Matthew.Macmanes@unh.edu>

UNewOrleans MandrillMolEvolution

A Masters level fellowship in the molecular ecology of wild mandrills is available in Nicky Anthony's research group at the University of New Orleans (www.anthonylab.org). This fellowship is financed through a collaborative initiative between the Audubon Nature Institute and the University of New Orleans. The fellowship will provide a graduate student stipend and cover the costs of tuition. The selected student will be a part of a large collaborative team made up of faculty and students at the University of New Orleans (UNO), Universite des Sciences et Techniques de Masuku (Gabon) and the University of Stirling (UK).

The main goal of this project is to use non-invasive genetic methods to assess the relatedness structure and reproductive strategies of a horde of wild mandrills that has been the focus of ecological work for several decades at the Station d'Etudes des Gorilles et Chimpanzes at Lope National Park in central Gabon. The successful candidate will work closely with other members of this collaborative group and will be expected to manage non-invasive genotyping of this project on the UNO

campus as well as contribute to the analysis and publication of data. The candidate will also be expected to conduct one field season in Lope National Park with the Gabonese Ph.D. student and staff members from the National Park Service of Gabon and University of Stirling and to contribute to outreach and publication of research from this study. The ideal candidate will also have an ability or willingness to speak and write in French. Skills in molecular biology will also be considered an asset although the candidate will receive extensive training in the Spring of 2019. There will also be a one semester required teaching assignment at the start of the fellowship.

Candidates will apply for acceptance into the Master's program at UNO's Department of Biological Sciences, but will also be able to take advantage of resources at the Audubon Nature Institute's facilities in New Orleans, including the Audubon Zoo, Audubon Insectarium, and the Audubon Center for Research of Endangered Species (ACRES) for research purposes. The recently-established Alliance for Sustainable Wildlife, a partnership between the Audubon Nature Institute and the San Diego Zoo, also presents numerous possibilities for creative outreach and study of captive species from around the world housed at the 1,200 acre Freeport-McMoRan Audubon Species Survival Center in New Orleans. Opportunities for education and outreach exist through the many Audubon facilities.

The required start date will be in January 2019. Interested students should send a CV and brief statement of interest to Nicky via nanthony@uno.edu and be prepared to begin the application process to the Master's degree program no later than October 1st.

Description of Master's program: <http://www.uno.edu/-cos/biology/master-of-science-in-biological-sciences.aspx>

Link to UNO on line applications: <http://new.uno.edu/-admissions/apply> Nicola Anthony

Professor

Freeport-McMoRan Endowed Chair in Wildlife Sustainability

Department of Biological Sciences

University of New Orleans

New Orleans LA 70148

USA

Email: nanthony@uno.edu

Tel: 504 280-1362

Fax: 504 280-6121

www.anthonylab.org www.caballiance.org Nicola Mary Anthony <nanthony@uno.edu>

UPittsburgh EvolutionEcol

PhD opportunity in Ecology, Evolution, or Evolutionary Ecology

The Turcotte Lab of Evolutionary Community Ecology at the University of Pittsburgh is looking for a PhD student interested in ecology, evolution, or evolutionary-ecology. The lab tests the dynamic interplay between rapid evolution and community ecology in both lab and field settings. Many topics can be pursued including but not limited to how plastic and rapid evolutionary changes impact species coexistence and the eco-evolutionary responses of communities to environmental change. We address such topics using various plant and insect study systems and apply methods such as experimental evolution, community manipulations, modeling, and genetic analyses.

Please visit the lab webpage for more information: www.martinturcotte.net The Department of Biological Sciences is a dynamic and growing team of enthusiastic researchers and educators. Within the last 2 years we have hired 6 new assistant professors in ecology or evolution! The department also runs the Pymatuning Lab of Ecology, which is equipped with lab space and housing to facilitate field-based research in northwestern Pennsylvania. The City of Pittsburgh is a vibrant and beautiful place to live. It is often voted the 'Most Livable city in the U.S.'. All graduate students in the department are provided with a competitive stipend and benefits for 5 years through a combination of fellowships, TAs, and research assistantships. Although funding from the lab itself is available, I expect all prospective students to apply for external funding.

Prospective students should email me turcotte@pitt.edu with a few short paragraphs stating why you are interested in the lab and describe your past research experience. Please include your C.V., any publications, and contact information for a few references.

Martin Turcotte, Ph.D. Assistant Professor, Department of Biological Sciences University of Pittsburgh turcotte@pitt.edu

"Turcotte, Martin" <TURCOTTE@pitt.edu>

UtahStateU PlantMicrobeInteractions

The Schaeffer Lab in the Department of Biology at Utah State University (USU) is looking for MS/PhD students starting Fall 2019. Potential to start earlier however may be possible for the right candidate.

The lab uses experiments and field studies, coupled with chemical, molecular, and bioinformatic techniques, to examine the ecology and evolution of cross-kingdom interactions between plants, insects, and microbes in both natural and human-modified ecosystems. Many research topics can be pursued, including but not limited to, the chemical and evolutionary ecology of plant-pollinator-microbe interactions, microbial-assisted biocontrol of plant disease and invasives, among others. Students are welcome to work on systems in which research is already being pursued in the lab; however, I strongly encourage development of independent lines of research, as well as pursuit of external funding to support those efforts.

The Department of Biology and USU offer excellent opportunities for education, training, funding, and collaboration. All graduate students in the department are provided with a competitive stipend and benefits for up to 3 (MS students) or 6 (PhD students) years through a combination of fellowships, teaching assistantships, and research assistantships. Moreover, abundant opportunities for collaboration exist, given the vibrant research community that spans across the Biology department, Ecology Center, and two USDA-ARS labs focused on pollinating insects and poisonous plants respectively. Finally, being centered in the Cache Valley of northern Utah, Logan offers abundant recreation opportunities, given close proximity to the Wasatch Range, as well as National parks.

Prospective students should email me (schaeffer.robert@gmail.com) with a note expressing research interests, as well as a description of your past research experience. Please include your C.V. and contact information for three references. Ideal applicants will have: background in plant or microbial ecology, or related subject; strong written and oral communication skills; strong quantitative and/or bioinformatic skills; ability to work independently or part of a collaborative team.

Please visit the lab webpage for more information: www.robertnschaeffer.com Robert Schaeffer, Ph.D. Assistant Professor (starting Jan 2019) Department of Bi-

ology Utah State University schaeffer.robert@gmail.com
schaeffer.robert@gmail.com

UTulsa AnimalEvolution

The Department of Biological Science at The University of Tulsa invites applications for several Doctoral or Master's Research Assistantship Positions in Animal Evolution that could start in Spring or Fall of 2019.

Ron Bonett's lab (<https://ronbonett.weebly.com>) studies amphibian evolution and development, and currently has two available Graduate Student Research Assistantship positions. One is an NSF funded project to study endocrine system evolution in salamanders. The other involves State Wildlife Grant projects to study salamander biodiversity in the Ozarks Plateau and Ouachita Mountains. Contact: ron-bonett@utulsa.edu

Warren Booth's lab (<https://www.booth-lab.org>) is primarily interested in understanding how urbanization affects the evolution of organisms. Using genomic approaches and urban insect pests as model systems, ongoing studies aim to unravel how organisms invade and spread within urban environments, and understand both unique and co-evolutionary patterns that are exhibited within urban vs. non-urban populations. An NSF funded project currently tests the impact of heteroplasmy and recombination on mitochondrial evolution in an ectoparasite. Our lab also studies the evolution of parthenogenesis in reptiles. Contact: warren-booth@utulsa.edu

Charles Brown's lab (<http://www.cliffswallow.org>) studies the evolution of social behavior, and focuses mainly on an NSF-funded 37-year field study of cliff swallows in western Nebraska. Current objectives are to examine how fluctuating selection favors different group sizes, how food resources and foraging behavior have changed over the last 30 years, and the extent to which the birds have developed tolerance to ectoparasites since their initial exposure to high levels of infestations in the early 1980's. Contact: charles-brown@utulsa.edu

Matteo Avella's new lab (<https://www.ncbi.nlm.nih.gov/pubmed/?term=matteo+avella>) focuses on understanding the molecular mechanisms behind species specificity in gamete recognition across mammals, with particular focus on rodents and primates. Through the use of mouse genetics (mouse transgenesis and Cas9 gene editing), we address

fundamental questions in sperm-egg recognition and fertilization. My new research lab currently has two graduate students Research Assistantship positions available. Contact: maa8422@utulsa.edu

Matthew Toomey's new lab (<http://www.mbtoomey.net>) studies coloration and vision in animals with a focus on the mechanisms and functions of carotenoid and retinoid pigment metabolism. We seek students interested in integrating genomic, biochemical, and behavioral ecological approaches to understand the diversity and evolution of colorful displays and finely tuned visual systems. My new research lab currently has two graduate students Research Assistantship positions available. Contact: mbtoomey@gmail.com

The Department of Biological Science is in the College of Engineering and Natural Sciences (<https://engineering.utulsa.edu/biological-science/>) of The University of Tulsa (www.utulsa.edu) and offers M.S. and Ph.D. degrees. Our graduate program in Biological Science typically enrolls 20 to 25 graduate students. The majority of graduate students are full-time and supported from Departmental Teaching Assistantships or Research Assistantships. Stipends vary depending on the position, but typically range from \$17,500 to \$22,000 per year, and are usually accompanied by waiver of 9 tuition hours per semester (full time). The Graduate School offers annual research and travel grants, as well as other competitive fellowships. We welcome diverse applicants as we foster inclusive research groups.

Our department houses a fully functional user-run genomics core facility, confocal, SEM, and TEM microscopy, and animal colonies. Tulsa is close to a wealth of field sites in the Ozark Plateau, Tallgrass Prairie, and Ouachita Mountains. In general, eastern Oklahoma includes a wide variety of ecotones between eastern and prairie communities. The city of Tulsa is located on the Arkansas River in the rolling Osage Hills of northeastern Oklahoma, and is considered one of the most livable and affordable cities in the United States. The Tulsa metropolitan area has nearly a million people, with vibrant cultural and arts districts. The area also includes large city parks, biking trails and nearby lakes.

Applicants are strongly encouraged to contact faculty regarding the positions listed above prior to applying to the graduate program. Please include a statement of research and career interests, GPA(s), GRE scores,

— / —

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>

UWisconsin Milwaukee Population Genomics

The Alberto lab is searching for graduate students to join the lab in Fall 2019

The Alberto lab at UW-Milwaukee is seeking for a graduate student for Fall 2019 with particular interest topics ranging from a more conceptual molecular ecology (kelp forests, seagrass species) to more applied research topics such as genomic selection in macroalgae. The lab research interest is broad in all areas of population genetics and genomics, from fine-scale spatial genetic structure and demographic inference, local adaptation, oceanscape genetics and range-wide biogeographical analysis of model organisms. Our focus is both on empirical research through the acquisition of population genetics data, using molecular marker techniques, simulation-based hypothesis testing, and species distribution modeling.

Our closer collaborators have included the Santa Barbara Coastal LTER (<http://sbc.lternet.edu/>) based at UCSB, California, The Moss Landing Marine Laboratory in Central California, the Center for Marine Sciences at University of the Algarve, Portugal (<http://www.ccmr.ualg.pt/maree/>) and recently the University of Southern California and its Wrigley Marine Science Center. Students interested in developing projects in topics related to seagrass population genetics or the balance between clonal and sexual strategies, focusing marine or freshwater plant model species, are also welcomed to contact me. Please see my website for more information on our team (<http://alberto-lab.blogspot.com/>).

Much of our work involves some form of programming in R, students are expected to be motivated to learn how to code. However, while coding skills are a benefit, they are not required to successful applicants.

UWM has an active group of researchers studying evolutionary genetics and behavior: <https://uwm.edu/biology/research/ecology-evolution-and-behavior/>. Students would enroll in the graduate program in the department of biological sciences at UWM (<https://uwm.edu/biology/graduate/prospective-students/>), the deadline for applications is December 1. The minimum requirements for admission to the Biology Department include an undergraduate GPA of at least 3.0 and GRE scores (both verbal and quantitative) in the 50 percentile or

better. You can find more information on the Graduate School website <http://uwm.edu/graduateschool/>. All graduate students at UWM can be supported financially by teaching assistantships (TA) and receive a stipend, full tuition waiver, and health insurance. TA appointments are usually made at the 50% level, which involves a teaching commitment of 20 hours per week. MS students can expect TA support for up to 3 years and Ph.D. students up to 5 years. You must apply by December 1 to be considered for a TA position.

There are also other opportunities for funding, such as University-wide fellowships that are generally based on GRE and GPA, which are given to students after they have been enrolled at UWM for one year. More information at <https://uwm.edu/biology/graduate/funding/>. To apply please send me an email (albertof@uwm.edu) including 1) a statement of research interests, 2) a summary of your previous academic and research experiences, and 3) a summary on how your research interests might fit our lab. Finally, please include a CV (with GPA and GRE scores).

Filipe Alberto Associate Professor Dept. of Biological Sciences University of Wisconsin - Milwaukee 3209 N. Maryland Ave. Milwaukee, WI 53211 URL: <http://alberto-lab.blogspot.com/> Email: albertof@uwm.edu Tel: 414-229-6343

Filipe AOs Alberto <albertof@uwm.edu>

UWolverhampton PopGenToads

The Faculty of Science and Engineering (FSE) at the University of Wolverhampton is looking for a motivated and resourceful PhD student with an interest in amphibians, fieldwork and genetics to take up a partially funded 3-year PhD research project entitled 'Back to the future? Unravelling historic, current and potential future declines of the common toad, *Bufo bufo*, in the UK.'

Common toads, *Bufo bufo*, are declining across many parts of the UK, especially within England. The reasons and extent of these declines are not fully known, however they are likely a combination of habitat loss and fragmentation, other human impacts and disease. Many amphibians can survive with small population sizes, suggesting that neutral or adaptive evolution may enable populations to survive drastic declines.

It is uncertain what the impacts of current population

declines are on *B. bufo* across the UK and whether the species has been resilient to similar processes historically. The PhD student will compare genetic, morphological, population and environmental data to investigate geographic structuring, genetic diversity through time and the impacts of environmental change on toad populations. Using data generated for past and present toad populations, the student will build models for future population trends and provide important information about management strategies. The project will involve: fieldwork, molecular lab work (including extracting DNA from formalin fixed museum specimens and High-Throughput Sequencing) and morphological museum work.

The project will be based at the University of Wolverhampton (UoW) and will take place in collaboration with the University of Salford (UoS) and Amphibian and Reptile Conservation Trust (ARC); there will also be some involvement with the Institute of Zoology and British museums. The supervisory team consists of Dr Simon Maddock (UoW), Dr Robert Jehle (UoS) and Dr John Wilkinson (ARC). For informal enquiries please contact Dr Maddock - s.maddock@wlv.ac.uk.

The project will be based within the Rosalind Franklin Building, which is the University of Wolverhampton's new 22 million science building and houses a broad range of state-of-the-art research facilities.

Eligibility and How to Apply The student should have at least a 2:1 BSc with Honours and/or Merit at MSc level or equivalent in a relevant subject. The student should hold a valid driving licence. The ideal candidate should have some lab work and amphibian fieldwork experience. The student should be able to work independently and be able to manage small groups of volunteers and undergraduate students. If your BSc/MSc award was not delivered in English you will need to demonstrate proficiency in English at IELTS 6.5 or equivalent.

Deadline for applications: 19th October 2018 Interview date: 12th November 2018 Start Date: January 2019

The University of Wolverhampton values a diverse workforce and welcomes applications from all sections of the community. The University holds an Athena SWAN Bronze award in recognition of our commitment to improving employment practices for the advancement of gender equality.

Application process Please submit a covering letter outlining your interest in the research programme, and an up to date CV detailing your academic qualifications and relevant work experience together with the names of two academic/professional referees. Please e-mail your application to the FSE Research Administrator:

Pierre.Parson@wlv.ac.uk Funding Notes

This is a partially funded PhD, covering tuition and research fees. Presently, the student will be responsible for sourcing their own living expenses. The UK government are now offering UK and EU nationals the possibility of Doctoral Loans of 25,000 to help support PhD study (View Website < <https://www.findaphd.com/common/-clickCount.aspx?theid0610&type4&DIDI32&url=https%3a%2f%2fwww.gov.uk%2fdoctoral-loan> >), all of which can be used to cover living expenses. There may be opportunities for earning extra income through demonstration/tutorial work at UoW. We are currently trying to source additional funding to help towards living expenses.

VirginiaTech EvolutionaryBiology

The Uyeda lab (www.uyedalab.com) at Virginia Tech is seeking curious, creative and enthusiastic Ph.D. students for positions starting in the Fall of 2019. Graduate students will develop and conduct independent research using cutting-edge phylogenetic and macroevolutionary methods in a variety of empirical systems, ranging from plants to animals. The primary research goal of the lab is to understand how to connect macroevolutionary patterns to our understanding of biological processes at other scales (e.g. field studies, paleontology, quantitative genetics, biomechanics, etc.). Prior experience with macroevolutionary modeling and computational biology is not required and students will be encouraged to ask broad evolutionary questions in empirical systems. Along the way, students will gain experience with statistical modeling and computational techniques for studying evolutionary patterns using phylogenetic trees. Examples of ongoing projects in the lab include studies of the drivers of shifts in metabolic scaling across the tree of life, using anatomical relationships to model whole organism phenotypic evolution in vertebrates, and connecting biomechanical performance landscapes to macroevolutionary studies of adaptive radiations.

Students with interests in either empirical/field based projects or computational projects are encouraged to apply. The lab strongly values diversity and inclusiveness, and strives to support students from all backgrounds to achieve their academic, career and life goals. Applicants interested in applying for an NSF GRFP should email as soon as possible to discuss possible proposal topics. For full consideration, all application materials for the Ph.D.

program at Virginia Tech should be received by December 15th, 2018. Prospective students should contact me directly at (juyeda@vt.edu) for informal inquiries.

Virginia Tech offers graduate students a large collaborative community of faculty, postdocs and students, including our growing Ecology, Evolution and Behavior and Integrative Organismal Biology groups. Our department and University offer training in interdisciplinary research and prioritizes mentorship, collegiality and work-life balance.

Our students take advantage of many resources at Virginia Tech, including the Genomics Sequencing Center, the Fralin Life Science Institute, and the Global Change Center. Although students are encouraged to pursue extramural funding opportunities, accepted Ph.D. students are guaranteed 5 years of funding (including summers) through a combination of teaching assistantships and graduate research assistantships, which are available in the Uyeda lab. Our students have received fellowships through the Interfaces of Global Change program (<http://www.globalchange.vt.edu/igc/>), Institute for Critical Technology and Applied Science program (<http://www.ictas.vt.edu/education/docScholars.php>), and NIH funded IMSD program (<https://imsd.apsc.vt.edu/>).

Information about applications can be found at: <https://www.biol.vt.edu/Graduates.html> Josef Uyeda <juyeda@vt.edu>

VirginiaTech EvolutionaryGenetics

The McGlothlin lab at Virginia Tech is looking for enthusiastic and motivated Ph.D. students beginning in fall 2019. Students will develop independent dissertation projects in evolutionary genetics or evolutionary ecology that complement work in the lab. Ongoing projects in the lab examine molecular evolution of toxin resistance genes in snakes, lizards, and birds, evolutionary quantitative genetics of *Anolis* lizards, and social evolution theory (<http://www.mcglathlin.biol.vt.edu/research/>).

The McGlothlin lab is part of the growing Ecology, Evolution, and Behavior and Integrative Organismal Biology groups in Virginia Tech's Department of Biological Sciences. Interested students should contact Joel McGlothlin (joelmcg@vt.edu), providing a description of your research interests and experience, a CV or resume, and contact information for three references. Applicants interested in applying for a NSF GRFP are

encouraged to get in touch as soon as possible to discuss project ideas. For full consideration, applications to the department should be received by December 15, 2018.—

Additional information: McGlothlin lab:—<http://www.mcglathlin.biol.vt.edu/> Graduate—program:—<https://www.biol.vt.edu/Graduates.html> Grad—app:—https://www.biol.vt.edu/Graduates/how_to_apply.html Biological Sciences at VT:—<https://www.biol.vt.edu/> Ecology, Evolution, and Behavior at VT: https://www.biol.vt.edu/research/Ecology_Evolution_and_Behavior.html —

Joel W. McGlothlin Virginia Tech, Dept. of Biological Sciences Derring Hall 2125, 926 West Campus Dr. Blacksburg, VA 24061 <http://www.mcglathlin.biol.vt.edu> Email: joelmcg@vt.edu Phone: (540) 231-0046 Office: Derring Hall 4038

Joel McGlothlin <joelmcg@vt.edu>

VU Amsterdam 2 EvolutionCommunication

2 PhD positions on the evolution of communication in urban environments

Job / Project Description The Department of Ecological Science, section Animal Ecology of VU University Amsterdam has two PhD-positions available for the project: CITISENSE: 'Evolving communication systems in response to urban sensory conditions'

Animals have evolved an astounding variety of signals to attract mates, fend-off rivals or avoid predators. These animal communication systems play a crucial role in evolutionary processes such as adaptation and speciation. Understanding how these communication systems evolve is therefore very important, in particular in our rapidly changing world.

In the project CITISENSE, funded through an ERC starting grant to Wouter Halfwerk, the evolution of communication systems will be studied in urban and forest populations of the tungara frog in central Panama. The main aim is to understand how males of this species have adapted their calling behaviour to changes in noise and light levels that are associated with increased urbanization. Key questions that need to be addressed are:

1) How do male tungara frogs adjust their signals to altered sensory environments? We will assess plasticity

and heritability of signal divergence found between urban and forest populations. 2) How do male frog signals evolve in response to direct (via sender) and indirect (via receivers) selection pressures? We will expose forest sites to noise and light pollution and carry out experimental evolution using artificial phenotypes. 3) What are the evolutionary consequences of signal divergence? We will assess inter-and-intra sexual responses to signal divergence between urban and forest populations.

We are searching for two PhD-students who will address these questions as a team and who will i) carry out a large-scale field experiment in tropical rainforest in Panama; ii) carry out lab experiments on male sexual signaling and female preferences; iii) Assess correlations between behavioural, physiological and morphological traits associated with signaling; iv) Quantify heritability of signal components through breeding experiments and pedigree analyses.

Tasks: - execute the scientific research as detailed in the project description; - publish results in scientific journals as well as in a thesis; - assist in undergraduate courses given within the Department of Ecological Science; - adhere to the PhD educational program as prescribed by the Department. Requirements - a master's degree, preferably with a strong interest in ecology, evolution, and/or behavior and affinity with acoustics or other types of signal analysis. - experience with field experiments, behavioral studies, and/or sensory ecology; - excellent ability to communicate in both written and spoken English; - good social skills, ability to work independently and strong scientific motivation; About the Department

The Department of Ecological Sciences (DES), embedded in the Faculty of Sciences, answers fundamental ecological and evolutionary questions regarding the relationship between organisms and their environment at the full array of hierarchical levels: from molecular

ecology to ecosystem research. The department comprises a dynamic community of researchers and provides an excellent research environment with state-of-the-art facilities and high quality training. VU University Amsterdam is one of the leading institutions for higher education in Europe and aims to be inspiring, innovative, and committed to societal welfare. It comprises ten faculties and has teaching facilities for 23,000 students.

Further particulars The initial appointment will be for a period of 1 year. After satisfactory evaluation of the initial appointment, it can be extended to a total duration of 4 years at 1.0 fte, or 5 years at 0.8 fte. Information about our excellent fringe benefits of employment can be found at www.workingatvu.nl. Benefits include: - remuneration of 8,3% end-of-year bonus and 8% holiday allowance - generous contribution (65%) commuting allowance based on public transport; - discounts on collective insurances (healthcare- and car insurance); - a wide range of sports facilities which staff may use at a modest charge. Salary Payment will be according to the standard regulations, from euro 2,266.- up to euro 2,972- gross per month depending on experience and based on a full-time employment. Information For additional information please contact: Dr. W. Halfwerk (w.h.halfwerk@vu.nl). Upon request, applicants can obtain a full description of the project from Dr. W. Halfwerk. Application Applicants are requested to write a letter in which they describe their abilities and motivation, accompanied by a curriculum vitae and two reference names. Applications - in a single pdf-file only - should be sent to: ecologie.secretariaat.beta@vu.nl with the vacancy number in the subject before 1st of October 2018.

— / —

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>

Adelaide EvolutionaryMedicine	41	UAtlanta ComputationalBiologist	59
ChapmanU TeachingFacultyPosition	42	UCalifornia Davis BehavioralEvolution	59
ClemsonU DrosophilaTech PhenotypeVariation	43	UCalifornia Irvine EvoDevo	60
ClemsonU GenomicLabTech	43	UCalifornia SanDiego EvolutionaryBiol	61
ColdSpringHarborLab QuantitativeBiology	44	UCalifornia VertebratePaleontology	61
Columbia NYC LabTech EvolutionaryGenomics ...	44	UExeter ResTech SocialBeesAndWasps	62
CornellU EvolutionAnimalBehavior	45	UMemphis EvolutionaryImmunologist	63
CornellU MathBioInfectiousDisease	45	UMontana LabManager EvolutionaryGenomics ...	63
DurhamU 2 EcolEvolutionaryBiology	46	UOregon ResAssist RecombinationVariation	64
FloridaStateU EvolutionaryTheory	47	UPittsburgh 2 MathBio	64
GeorgeWashingtonU HumanPaleobiology	47	UPittsburgh 2 Microbiology	65
HarvardU EarthHistory	48	UPittsburgh AnimalCareTechnician	65
HarvardU PlantEvolution	48	Uppsala Sweden BioinformaticianGenomics	66
MartinLutherU AnimalEvolEcol	49	UppsalaU PlantEvolGenomics	66
MaxPlanckInst Cologne Programmer	50	UQuebec AbitibiTemiscamingue ForestPopGenetics	67
MissouriStateU EvolutionaryBiology	50	USDA Hilo BiologicalTechnician 1	68
MortonArboretum Chicago EvolutionaryBiol	51	USDA Hilo BiologicalTechnician 2	69
NewCollege Florida Epidemiology	52	USheffield BioinformaticDataAnalyst	69
NHM LosAngeles CuratorTerrestrialMammalogy ..	52	UTexas ElPaso ClimateAdaptation	70
NortheasternU MarineConservation	53	UToronto 3 EvolutionaryBiol	70
Okinawa 2ResTech AntBiodiversity	54	UToronto Mississauga Mycology	71
OklahomaStateU PlantEvolution	55	UUtah EvolutionaryGeneticsGenomics	73
OntarioInstCancerRes DirectorGenomics	55	UVirginia ResTech ParasiteEvolution	73
RutgersU Genetics	56	WellcomeSangerInst HeadTreeOfLife	74
SanFranciscoStateU EvolutionaryBiologist	57	Wiley editor	75
SSE Blog Editor Fellow	58	ZFMK Leibniz ComparativeGenomics Programmer	75
TulaneU LabTech EvolutionaryGenetics	58		

Adelaide EvolutionaryMedicine

The Department of Gastroenterology at The Queen Elizabeth Hospital is seeking to employ a motivated and experienced scientist to join our translational research team. This position seeks to combine evolutionary medicine, microbial genomics, bioinformatics and clinical microbiology. Exciting research opportunities exist in the areas of inflammatory bowel disease (IBD), faecal microbiota transplantation, dietary strategies in IBD, and manipulation of the microbiome.

Applications close 14 September 2018

Medical Scientist Department of Gastroenterology The Queen Elizabeth Hospital Adelaide, South Australia

LOCATION Central Adelaide Local Health Network, The Queen Elizabeth Hospital, Adelaide South Australia Reflecting a free and easy lifestyle, Adelaide is home to a mediterranean climate where you can immerse yourself in the rich South Australian arts and

culture scene, stroll along the spacious boulevards, or indulge and relax in one of the many fine cafes and restaurants. With sprawling picturesque coastlines and some of Australia's most awarded wine regions within reach, South Australia is an ideal setting to further your career.

JOB DESCRIPTION

Indicative Total Remuneration: AUD\$88,075 'V \$101,519 'V Temp F/T (up to 2 yrs) Job Ref: 665829

Hope is to build a permanent funding structure for an ongoing position during this time. The role will have a focus on microbiome analysis and clinical trial work. It would be a great chance for someone to build up a lab.

You will be responsible for coordinating and assisting in the management of current research projects for the Department of Gastroenterology at The Queen Elizabeth Hospital. Operating with professional independence to coordinate the facilitation of research projects, you will promote and foster relevant scientific research within the Department of Gastroenterology. You will be responsible for the day-to-day running of the Gastroenterology laboratory including the maintenance and ordering of

equipment and consumables, and maintaining records of budgets relevant to scientific projects. Developing advanced techniques and methodology and supervising existing methods and techniques, you will contribute to the writing and preparation of relevant data for publication and present findings at the meetings of scientific societies.

The Queen Elizabeth Hospital is a 311 bed, acute care teaching hospital that provides inpatient, outpatient, emergency and mental health services to a population of more than 250,000 people living primarily in Adelaide's western suburbs. It also houses The Basil Hetzel Institute for Medical Research, which is affiliated with the University of Adelaide, University of South Australia and the Flinders University of South Australia. It operates as the strategic nexus between clinical issues and research priorities, made possible by the close interface with the hospital's clinical activity.

Holding a Bachelor of Science or Bachelor of Applied Science (Medical Laboratory Science) or equivalent, you will have at least two years of experience as a research scientist in a similar field. In addition, you will have sound knowledge of microbiological analysis including PCR and bacterial culture techniques. Your sound laboratory and technical skills will be supported by your ability to interact and communicate effectively with research participants.

The South Australian public sector promotes diversity and flexible ways of working including part-time. Applicants are encouraged to discuss the flexible working arrangements for this role.

Appointment will be subject to a satisfactory Criminal History Check. Aboriginal and Torres Strait Islander applicants are encouraged to apply.

Applications close 14 September 2018

For further information and to apply visit www.sahealth.sa.gov.au/careers and search for Job Ref: 665829

Also see: <https://www.nature.com/naturejobs/science/jobs/651439-job-ref-665829-medical-scientist-gastroenterology> Contact: Dr Sam Costello sam.costello@sa.gov.au

martin.breed@adelaide.edu.au

ChapmanU TeachingFacultyPosition

Dear colleagues, Chapman University is hiring a new instructional assistant professor of biology with broad training in evolution, ecology and physiology. This is a wonderful opportunity for anyone interested in a full-time teaching opportunity; instructional faculty are valued members of the biology program and the Schmid College of Science and Technology here. Orange County is also a great place to live! Please see below for more details (or go to the job posting at <https://webfarm.chapman.edu/jobs/job.aspx?id=963>), and please don't hesitate to reach out if you have any questions!

Thanks,

Jeremy (more info below)

Chapman University, located in the heart of Orange County, California, is now ranked #5 among western universities by U.S. News and World Report, and has gained national recognition for its commitment to excellence through innovative research and teaching. Schmid College of Science and Technology embodies Chapman's mission of providing students with personalized educational experiences by fostering an outstanding community of teacher-scholars across a broad range of undergraduate and graduate programs. SCST just celebrated the opening of our new 140,000 foot home, the Keck Center for Science and Engineering, which features state-of-the-art laboratories, teaching spaces, and student collaboration areas. More information on Schmid College can be found at <http://www.chapman.edu/scst/index.aspx>. The Biological Sciences program is home to a diverse group of faculty with specializations in a broad range of fields, from molecular and cellular biology to ecology and evolution and more. The program houses an undergraduate degree in biology characterized by personalized education, small class sizes, innovative teaching, and strong student-faculty interactions. Instructional faculty play critical roles in the program for teaching, pedagogy, advising, and service, have the opportunity for promotion to associate and full professor, and have full votes at both the program and college levels.

Requirements include a Ph.D. in Biology or related field.

The ideal candidate would have broad training within evolution, ecology and physiology, experience teaching

at the introductory level in lectures and labs, ability to design class-based labs, and familiarity with evidence-based instructional approaches. In addition, the ideal candidate would demonstrate ability to teach fundamental concepts in cellular, molecular, and/or microbiology at the introductory level. Finally, the candidate should have excellent organizational, interpersonal, and communication skills.

Full job posting: <https://webfarm.chapman.edu/jobs/-job.aspx?id=963> Jeremy Hsu, Ph.D. Instructional Assistant Professor Schmid College of Science and Technology Chapman University

“Hsu, Jeremy” <hsu@chapman.edu>

ClemsonU DrosophilaTech PhenotypeVariation

The laboratories of Trudy Mackay and Robert Anholt at the new Clemson University Center for Human Genetics invite applications for a Drosophila Research Technician to support a newly awarded NIH grant. A major challenge of modern biology is to determine how DNA sequence variants give rise to phenotypic variation for complex organismal traits through modulation of regulatory gene networks. This research project seeks to reverse engineer natural genetic variation in Drosophila using CRISPR/Cas9 precise allelic replacement to functionally validate genetic associations of common and rare molecular variants and long non-coding RNAs with organismal phenotypes and transcriptional networks. Ideally, the successful applicant will have previous experience in Drosophila genetics, genetic transformation, CRISPR/Cas9 gene editing, and basic molecular biology (PCR, genotyping). Salary will be commensurate with credentials and experience.

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

For more information, go to:

https://cujobs.clemson.edu/psc/ps/JOBS/EXT/-c/HRS_HRAM.HRS_APP_SCHJOB.GBL?Page=-

[HRS_APP_JBPST&Action=U&SiteId=1&FOCUS=-Applicant&JobOpeningId=103333&PostingSeq=1](https://cujobs.clemson.edu/psc/ps/JOBS/EXT/-c/HRS_APP_JBPST&Action=U&SiteId=1&FOCUS=-Applicant&JobOpeningId=103333&PostingSeq=1)

– Trudy F. C. Mackay, PhD, FRS Self Family Endowed Chair of Human Genetics Clemson Center for Human Genetics Department of Genetics and Biochemistry Clemson University Self Regional Hall 114 Gregor Mendel Circle Greenwood, SC 29646 Email: tmackay@clemson.edu Tel: 864-889-0522

Trudy Mackay <trudy_mackay@ncsu.edu>

ClemsonU GenomicLabTech

Genomics Lab Technician

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

Please contact Chris Parkinson (viper@clemson.edu) with any questions.

JOB DUTIES:

60% - Essential - Research Activities:

Conduct complex molecular biological experiments.

Carryout basic bioinformatics tasks such as demultiplexing, trimming NGS reads, using the Geneious platform. Oversee and run the Agilent Bioanalyzer, the Illumina NGS sequencing platforms and other equipment.

25% - Essential - Lab Management:

CUGBF Ordering, invoicing, budgeting, record-keeping.

Assist in maintaining regulatory compliance.

Manage CUGBF inventory and records.

Oversee day-to-day maintenance of CUGBF space, fa-

cilities, and equipment.

15% - Essential - Personnel Oversight:

Assist in training personnel.

Assist in providing oversight for student researchers.

MINIMUM REQUIREMENTS:

Education - Bachelor's Degree - Biology or related field

Work Experience 2+ years

Salary: 32,838.00 - \$ 60,760.00 commensurate with experience

JobID 103510 - Lab Technician III

https://cujobs.clemson.edu/psc/ps/JOBS/-EXT/c/HRS_HRAM.HRS_APP_SCHJOB.GBL?Page=HRS_APP_JBPST&Action=U&FOCUS=Applicant&SiteId=1&JobOpeningId=510&PostingSeq=1

Department of Biological Science and

Department of Forestry, and Environmental Conservation
190 Collings St., 157b Life Sciences Facility,

Clemson University,

Clemson, SC 29634

(864) 656-3058

emailsigpict

Christopher L Parkinson <viper@clemson.edu>

The Simons Center for Quantitative Biology (SCQB) is a growing new center of excellence on the CSHL campus, which has been generously endowed with a \$50M donation from the Simons Foundation, plus other endowment gifts. The Center currently consists of eight faculty members with backgrounds in computer science, physics, applied mathematics, and genetics, and interests spanning genomics, plant biology, neuroscience, biophysics, and cancer. Members of the SCQB are fully integrated and highly collaborative with the broader CSHL faculty, but the Center maintains a strong focus on mathematical, computational, and theoretical pursuits.

TO APPLY: Send a Cover Letter, CV, Description of Research Accomplishments and Future Research Plans, and Three Letters of Reference in PDF format to QBjobs2018@cshl.edu with subject line "QB Faculty Search". Applications will be accepted until November 1, 2018 and reviewed on a rolling basis.

QUESTIONS about this position should be directed to Adam Siepel asiepel@cshl.edu.

Position Job Posting: <https://www.cshl.edu/about-us/careers/faculty-positions/> QB Center: <https://www.cshl.edu/research/quantitative-biology/> Irene Gill
Simons Center for Quantitative Biology Cold Spring Harbor Laboratory Office: 516-367-6834 | Fax: 516-367-5501 Email: gill@cshl.edu | <http://www.cshl.edu/scqb>
"Gill, Irene" <gill@cshl.edu>

ColdSpringHarborLab QuantitativeBiology

Assistant Professor - Quantitative Biology..

The Simons Center for Quantitative Biology at Cold Spring Harbor Laboratory (CSHL) invites applications for highly talented individuals to join the Simons Center for Quantitative Biology/CSHL at the Assistant Professor level. Successful candidates will have an outstanding record of research achievement and the ability to attract significant extramural research support. This position is for candidates focused on dry-lab research (experimental space is limited).

Specific research areas of interest include, but are not limited to: -Modeling and Analysis of Transcriptional Regulation and Epigenomics; -Sequence Assembly and Variant Calling for Emerging Technologies; -Evolutionary and population genomics; -Single-cell Analysis; -Cancer Genomics.

Columbia NYC LabTech EvolutionaryGenomics

Title: Lab Technician or Manager in Evolutionary Genomics Start: 2018 Flexible Location: Columbia University, New York City Department of Ecology, Evolution, and Environmental Biology (E3B). Lab URL: <https://eaton-lab.org> Job URL: <https://jobs.columbia.edu/applicants/Central?quickFind=171838> < <https://jobs.columbia.edu/applicants/Central?quickFind=171838> >

The Eaton lab in the department of Ecology, Evolution, and Environmental Biology seeks to hire a full time lab technician/manager for molecular laboratory work on plant evolutionary genomics.

The lab's work investigates the consequences of hybridization for phylogenetic inference, the evolution of reproductive characters, speciation, and diversification.

Several current projects are aimed at optimizing genomic library preparation methods for investigating these types of questions.

The ideal candidate will have experience with DNA extractions and library preparations, will have a strong interest in evolutionary genomics, and a meticulous attention to detail. Work in the lab will involve learning and implementing a diverse array of methods including DNA extractions, preparation of genomic libraries for Oxford Nanopore, RAD, WGS, tagmentation, and transcriptomics sequencing; providing support to or supervising and training students; maintaining lab databases; and ordering and maintaining supplies. Many opportunities will be available to contribute towards co-authorship in peer-reviewed publications.

This is a 12-month term appointment with the possibility of extension contingent on successful performance and continued funding.

Preferred Qualifications: Bachelors or Graduate degree in Biological Sciences.

Salary Range: \$35,000 - \$40,000 depending on qualifications.

Please submit applications and your CV to the Columbia jobs link (<https://jobs.columbia.edu/applicants/Central?quickFind=171838>). Interested applicants are also encouraged to contact Deren (de2356@columbia.edu) by email to submit a short personal statement and to discuss the position.

< <https://jobs.columbia.edu/applicants/Central?quickFind=171838> >

– Deren Eaton, Ph.D. Assistant Professor, Ecology, Evolution, and Environmental Biology Affiliate Member, Data Science Institute Columbia University <https://eaton-lab.org> Deren Eaton <de2356@columbia.edu>

CornellU EvolutionAnimalBehavior

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 of animal behav-

ior 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/11444>. 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: 1 November 2018.

Diversity and Inclusion are parts of Cornell University's heritage. Cornell is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

ps. Cornell is an amazing place to work, especially for those at the intersection of evolution and behavior! Ithaca is also a great place to live, in fact its gorgeous.

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

mshsheehan@cornell.edu

Michael Sheehan <mshsheehan@cornell.edu>

CornellU MathBioInfectiousDisease

POSITION: Tenure-Track, Assistant or early Associate Professor Academic year (9-month) appointment Department of Ecology and Evolutionary Biology College of Agriculture and Life Sciences, Cornell University, Ithaca, NY 14853

START DATE: Anticipated July 2019

OPPORTUNITY: We invite applications for a tenure track position in the Mathematical Biology of Infectious Disease at the level of Assistant or early Associate Professor. We are seeking candidates who use mathematical, statistical or computational approaches to model dynamics of infectious disease, informed by empirical data and with an emphasis on ecological systems. Research could be conducted at various scales of inquiry from dynamics of pathogens within individual hosts, to population-level spread of infection, to epidemiology of infection and disease at landscape and ecosystem lev-

els. The appointed faculty member will be expected to establish an independent, innovative, well-funded and internationally recognized research program. We are especially interested in candidates who will be interactive and motivated by collaboration with empirical biologists. This position is associated with the Cornell Institute of Host-Microbe Interactions and Disease (CIHMID) and is consistent with a campus-wide emphasis on expanding research and teaching in Infection Biology. Potential exists for intellectual connections and collaborations across multiple disciplines and units at Cornell, including: Computational Biology, the Center for Applied Mathematics, the Departments of Entomology, Microbiology, and Molecular Biology and Genetics, the School of Integrative Plant Science, the College of Veterinary Medicine and Weill Cornell Medicine.

QUALIFICATIONS: Applicants should have a Ph.D. in Mathematical Biology, Mathematics, Statistics, or related area and demonstrated excellence in research. Previous research should be focused on quantitative dynamics of infectious disease at any scale ranging from kinetics within a single host to landscape-scale epidemiology. Candidates should have a strong interest in collaborative research and a dedication to excellence in teaching. Post-doctoral experience is highly desirable.

SALARY/BENEFITS: Support will be competitive and commensurate with qualifications and experience. An attractive fringe benefit package is included.

APPLICATIONS: Candidates should submit via the website <https://academicjobsonline.org/ajo/jobs/11710>: a short cover letter, curriculum vitae, contact information for three references, a research statement, a statement of teaching interests and experience, and a statement of contribution to diversity, equity, and inclusion (<https://cals.cornell.edu/about/leadership/ofa/hr/-statement-contribution-diversity-equity-and-inclusion/>). Inquiries can be directed to Search Committee Chair, Alison Power, at mathbio_search@cornell.edu. Applications from women and minority candidates are actively encouraged. Review of applications will begin October 15, 2018 and continue until the position is filled.

ABOUT CORNELL: The Department of Ecology and Evolutionary Biology and the College of Agriculture and Life Sciences at Cornell embrace diversity and seek candidates who will help create a climate that attracts students of all races, nationalities, and genders. The College of Agriculture and Life Sciences is a pioneer of purpose-driven science and Cornell University's second largest college. We work across disciplines to tackle the challenges of our time through world-renowned research, education and outreach. The questions we probe and the answers we seek focus on

three overlapping concerns: natural and human systems; food, energy and environmental resources; and social, physical and economic well-being. Cornell University seeks to meet the needs of dual career couples, has a Dual Career program, and is a member of the Upstate New York Higher Education Recruitment Consortium to assist with dual career searches. Visit <http://www.unyherc.org> to see positions available in higher education in the upstate New York area. Cornell and Ithaca are family-friendly communities: Cornell has a comprehensive set of policies, services and benefits to help you, your partner and your children to feel welcome here, to support your well-being, and to support you in caring for your family. Visit Resources for Parent and Families website (https://hr.cornell.edu/sites/default/files/resources_parents_and_families.pdf) for more details. Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing

— / —

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>

DurhamU 2 EcolEvolutionaryBiology

The Department of Biosciences at Durham University seeks applications from talented individuals for two posts in Ecology/Evolutionary Biology: one at the Assistant Professor level, and another at the Full Professor level.

Assistant Professor: <https://www.dur.ac.uk/jobs/-recruitment/vacancies/bios19-52/> Full Professor: <https://www.dur.ac.uk/jobs/recruitment/vacancies/-bios19-54/> The Department of Biosciences is committed to recruiting and supporting the career development of applicants from underrepresented backgrounds. Durham University offers a generous scheme for maternity leave as well as arrangements for paternity leave and a nursery run by the University. The department is consistently ranked in the top 5 UK Biological Sciences Departments in the Complete University Guide, and was ranked 8th for Research Impact in REF2014.

As one of the UK's leading universities, Durham is an incredible place to define your career while enjoying a high quality work/life balance. We are home to some of

the most talented scholars and researchers from around the world who are tackling global issues and making a difference to people's lives.

The University sits in a beautiful historic city where it shares ownership of a UNESCO World Heritage Site with Durham Cathedral. A collegiate University, Durham recruits outstanding students from across the world and offers an unmatched wider student experience.

For more information, feel free to contact Dr. Steve Willis <s.g.willis@durham.ac.uk>

“DRURY, JONATHAN P.”
<jonathan.p.drury@durham.ac.uk>

FloridaStateU EvolutionaryTheory

Evolutionary or Ecological Theory at Florida State University

The Florida State University Department of Biological Science invites applications for a tenure-track faculty position, at the assistant professor level. We seek a creative and interactive individual using theory to answer basic questions in ecology, evolution, or the interface of these fields, and whose research will enhance existing strengths in our Ecology and Evolution research group. Candidates should demonstrate high potential for collaborations with empiricists, externally-funded research, and engaging instruction at both graduate and undergraduate levels. Applicants whose work combines theoretical and empirical approaches are welcome to apply, however priority will be given to those with a primary emphasis on theory. A PhD is required, and postdoctoral experience is preferred. Anticipated start date is fall 2019. More information about the E&E group and department can be found at <https://www.bio.fsu.edu/ee/>. Questions about the position may be sent to theory.search@bio.fsu.edu.

Please submit an electronic application as a single PDF document containing a cover letter, curriculum vitae, and statements of research and teaching interests at <https://jobs.fsu.edu>, Job ID 44237, and request three letters of reference via the same portal. Teaching statements should address engaging and mentoring diverse students. Preference will be given to applications received by Nov 01, 2018. The Department of Biological Science has a demonstrated record of accommodating dual-career couples. FSU faculty positions require successful completion of a crim-

inal background check. FSU is an Equal Opportunity/Access/Affirmative Action/Pro Disabled & Veteran Employer. FSU's Equal Opportunity Statement can be viewed at: http://www.hr.fsu.edu/PDF/Publications/-diversity/EEO_Statement.pdf. Individuals from traditionally underrepresented groups are encouraged to apply; a diverse workforce will maintain the excellence of the University, and offer our students richly varied perspectives.

The Florida State University Department of Biological Science (<https://www.bio.fsu.edu>) is an integrated group of over 50 faculty in the areas of Ecology and Evolution, Cell and Molecular Biology, and Neuroscience, dedicated to excellence in research and teaching. The university is located in Tallahassee, the capital city of Florida, which is situated in the Big Bend region of the state, an area with diverse and relatively undeveloped habitats. Tallahassee hosts a rich program in the performing arts and athletic events and is close to several state parks, rivers, a National Wildlife Refuge, the largest national forest in Florida, and the pristine beaches of the Gulf of Mexico. The Big Bend region is a biological diversity hotspot and provides ample access to research sites and outdoor recreational opportunities.

Emily Moriarty Lemmon, Associate Professor Department of Biological Science Co-Director, Center for Anchored Phylogenomics Florida State University 319 Stadium Drive Please ship packages to: 89 Chieftain Way, Biology Unit 1 Florida State University Tallahassee, FL 32306-4295 Phone: 850-645-9170 <http://www.anchoredphylogeny.com> <http://www.bio.fsu.edu/-chorusfrog/index.html> <http://www.bio.fsu.edu/faculty-moriarty-lemmon.php> Emily Moriarty Lemmon <chorusfrog@bio.fsu.edu>

GeorgeWashingtonU HumanPaleobiology

The George Washington University: Tenure-Track Assistant Professor of Anthropology - Human Paleobiology

The George Washington University invites applications for a tenure-track Assistant Professor position in Human Paleobiology in the Department of Anthropology, to begin as early as Fall 2019. We seek candidates with a research program that focuses on analyzing the hominin fossil record and/or its ecological context, and complements the current strengths of the faculty in the Center for the Advanced Study of Human Paleobiology

(<http://cashp.columbian.gwu.edu>).

Minimum qualifications: A Ph.D. in anthropology or a related field. ABD candidates will be considered, but must have all requirements for the Ph.D. completed by date of appointment. Applicants must have teaching experience, a strong publication record, and an active field or laboratory research program that can involve students. The Department seeks candidates with exceptional promise as scholars and teachers to offer courses at the undergraduate and graduate levels.

Application procedure: Applicants should complete the online faculty application at <http://www.gwu.jobs/postings/56194> and upload a statement of research interests, curriculum vitae, and include the names of three referees. Review of applications will begin on October 25, 2018, and will continue until the position is filled. Only complete applications will be considered. Employment offers are contingent on the satisfactory outcome of a standard background screening. The position is pending final budgetary approval.

The university is an Equal Employment Opportunity/Affirmative Action employer that does not unlawfully discriminate in any of its programs or activities on the basis of race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity or expression, or on any other basis prohibited by applicable law.

Chet Sherwood <sherwood@email.gwu.edu>

HarvardU EarthHistory

TENURE-TRACK PROFESSOR IN EARTH HISTORY

The Department of Earth & Planetary Sciences (EPS) invites applications for an open faculty position spanning the broadly defined fields of Geology, Geobiology and/or Geochemistry as they pertain to reconstructing and understanding the history of the Earth. This is a tenure-track appointment at the assistant level. We seek to attract an outstanding individual to establish an innovative research program and teach both undergraduate and graduate students. We are especially interested in individuals whose work spans the intellectual interests of Harvard faculty, including—although not limited to—the interactions between life, evolution, (bio)geochemistry, tectonics, and marine or terrestrial environmental change over geologic time. There is also

the opportunity to work with sister departments such as Organismic and Evolutionary Biology and the School of Engineering and Applied Sciences.

A doctorate or terminal degree in the broad area of earth history is required by the expected start date, currently July 1, 2019. We also seek candidates who have a commitment to teaching. We value diversity in our faculty and are committed to building a culturally diverse intellectual community. We particularly encourage applications from historically underrepresented groups, including women and minorities. Please submit applications online at: <https://academicpositions.harvard.edu/postings/8387>. Required materials include a cover letter, curriculum vita; a statement of research and teaching interests; four representative publications; and the names, institutional affiliations, and e-mail addresses of three references. Review of applications will begin November 1, 2018, and conclude when the position is filled.

Further information about EPS is available at <http://www.eps.harvard.edu/>. Address questions about the position to Professor David Johnston (johnston@eps.harvard.edu) and about the application process to Chenoweth

Moffatt (moffatt@eps.harvard.edu).

Harvard University is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority candidates are strongly encouraged.

“Cappo, Sabinna” <scappo@fas.harvard.edu>

HarvardU PlantEvolution

FACULTY POSITION IN PLANT BIOLOGY

The Department of Organismic and Evolutionary Biology at Harvard University, in partnership with the Arnold Arboretum of Harvard University, invites applications for a tenure-track faculty position in plant biology. We seek to appoint an individual whose scholarship will complement the research and teaching missions of the Department of Organismic and Evolutionary Biology. The area of scholarship within plant biology is open, and we especially encourage applications from those studying genomics, molecular genetics, developmental biology, whole plant physiology, ecophysiology, organismic biology, biomechanics, phylogenetics, evolution, ecosystems biology, ecology, community biology, and urban ecology. It is hoped that the successful candidate will have a research program that can incorporate

and leverage the extraordinary living collections of the Arnold Arboretum. The research laboratory will be situated in the recently opened 43,000 square foot state-of-the-art research facility in the Arnold Arboretum of Harvard University. Potential course offerings will be in the Department of Organismic and Evolutionary Biology, but may also serve students in Earth and Planetary Sciences, Environmental Science and Public Policy, and Molecular and Cellular Biology. The successful candidate will be expected to have a strong commitment to undergraduate and graduate teaching. The Department and Arboretum have strong linkages to a number of allied institutions, including the Harvard Forest, Harvard University Herbaria, Harvard University Center for the Environment, and the Museum of Comparative Zoology.

Special instructions: Applications should include a curriculum vitae, statements of research and teaching interests, 3-5 representative publications, and the names, institutional affiliations, and e-mail addresses of 3-5 references. Please submit these materials to <http://academicpositions.harvard.edu/postings/8469>. Review of applications and nominations will begin November 15, 2018 and conclude when the position is filled. Letters of nomination from third parties are also welcome and should be sent by e-mail to William (Ned) Friedman at ned@oeb.harvard.edu.

Contact information: Further information about the Department of Organismic and Evolutionary Biology and the Arnold Arboretum are available at <https://oeb.harvard.edu> and <https://www.arboretum.harvard.edu>. Contact email: Address questions about the position to Professor William (Ned) Friedman and about the application/nomination process to Christian Flynn in OEB at faculty_search@oeb.harvard.edu.

Harvard University is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.

“Preheim, Christopher S.”
<cpreheim@oeb.harvard.edu>

A full chair (tenured professorship) in Animal Ecology with a focus on molecular ecology is available from 01.04.2019 at Martin-Luther-University Halle-Wittenberg, Germany. We seek to appoint an internationally recognized scientist with a focus on the molecular ecology of insects. The successful candidate should hold a PhD and strengthen well-established research areas at the German Center for Integrative Biodiversity Research Halle-Jena-Leipzig (iDiv: <http://www.idiv.de>).

The candidate will have extensive experience both in conducting independent scientific research and in undergraduate and graduate education. Courses to be taught include all aspects of animal ecology. Requirements for application include 'habilitation' or an equivalent academic achievement (e.g. publication record as independent researcher after the PhD, PhD student supervision, and teaching experience), a proven track-record in internationally recognized research and appropriate teaching experience. Experience in the acquisition of third party funding is expected, as is knowledge of German, or a willingness to learn. Applications, including a cover letter, complete list of publications and academic teaching activities, evidence of successful acquisition of third party funding, and copies of certificates of the highest academic degree obtained, should be sent as a single pdf file via email (Dekanat@natfak1.uni-halle.de) not later than 17th October 2018.

Further details of the position are at: <http://wcms.itz.uni-halle.de/download.php?down=50067&elem=3152080> Robert (robert.paxton@zoologie.uni-halle.de)

MartinLutherU AnimalEvolEcol

The position is designed to attract evolution-oriented animal ecologists.

MaxPlanckInst Cologne Programmer

The Max-Planck-Institute for Plant Breeding Research (MPIPZ) in Cologne is looking for a Senior Scientific Programmer/ Analyst.

This is an independent, self-organized position in a vibrant international environment where fascinating, ground-breaking research is being conducted. You will have the opportunity to actively shape your role and tasks while working closely with leading scientists for whom you will provide research support, develop and maintain software systems that enable scientific tasks and operation of computer-based processes at the Institute.

Technical expertise, social competence, excellent communication skills and the willingness to constantly learn and dive into new topics are essential requirements to succeed in this position. Prior experience of working with biologists is desirable but not essential. Your duties

* Database programming * Web application development
* Mobile client programming * Server-side programming
* Analyze scientific processes and work flows and help automate them * Support of scientific applications * Training of scientific users * Reporting and presenting to Directors

Your profile

* Strong experience with advanced programming languages (Python, Java, C++ or similar) * Experience with SQL (MySQL or PostgreSQL beneficial) * Experience with Linux Servers (Debian beneficial) * Experience with source code repository systems (Git beneficial) * Fluency in spoken and written English, German beneficial * Ability to communicate with scientists and to translate the communication into software specifications

We offer an attractive setting in a brand new and friendly work environment, an ambitious team, excellent infrastructure, as well as interesting and varied tasks. Initially, the contract is limited to two years with excellent possibilities for renewal. Your salary will be based on your qualification and experience and follow recommendations of TVÄD. Social benefits correspond with those of the public service.*

The Max Planck Society is an equal opportunity employer. Handicapped individuals are particularly wel-

come to apply. Further, the Max Planck Society seeks to increase the percentage of women in those areas where they are underrepresented and therefore we explicitly encourage women to apply.

We are looking forward to receiving your full and comprehensive application by 05.10.2018. Please upload your application [<https://lotus2.gwdg.de/mpg/mkzf/sspa.2018.nsf/Bewerbungen>]. Only shortlisted applicants will be contacted and the search will continue until a suitable candidate is found.

For questions please contact Ute von Ciriacy-Wantrup at (ciriacy@mpipz.mpg.de).

“Schueller, Stefan” <schueller@mpipz.mpg.de>

MissouriStateU EvolutionaryBiology

Assistant Professor of Biology (Evolutionary Biology)
The Biology Department at Missouri State University anticipates an August 2019 opening for a tenure-track Assistant Professor with expertise in Evolutionary Biology. Requirements include a PhD in Biology or related area, peer-reviewed publications in evolutionary biology, and excellent communication skills. Duties include research in evolutionary biology, teaching courses in evolutionary biology and one or more of statistics, ornithology, or entomology to total 9 contact hours per semester; graduate (masters) and undergraduate advisement; and externally-funded research. A letter of application (including a commitment to working with diverse student populations), CV, names and contact information for 3 references, statements of teaching and research experience and interests, and copies of all university transcripts should be submitted online at: <https://jobs.missouristate.edu>. Employment will require a criminal background check at University expense. Application review begins on 16 November 2018 and continues until position is filled. Starting date is 12 August 2019. Direct queries to BrianGreene@MissouriState.edu

An Equal Opportunity/Affirmative

Action/Minority/Female/Veterans/Disability/Sexual Orientation/Gender Identity Employer and Institution

Sean P. Maher

Assistant Professor

Department of Biology

Missouri State University

417-836-6916 | 269 Temple Hall

Sean Maher <smaher02@gmail.com>

Morton Arboretum Chicago Evolutionary Biol

We are encouraging evolutionary biologists with strong quantitative skills to apply. Though listed as an ecology position, this person will work at the interface of paleoecology, niche modeling, and population genomics.

cheers, allan

Postdoctoral Researcher in Quantitative Ecology and Modeling

Based at The Morton Arboretum (near Chicago, Illinois)

The Morton Arboretum invites applications for a two year postdoctoral researcher to work on an NSF-supported Advances in Biological Informatics project, 'Quantifying biogeographic history: a novel model-based approach to integrating data from genes, fossils, specimens, and environments' (described here). The successful applicant will join an international team of researchers working in mathematics/ statistics, ecology, biogeography, distribution modeling, and population genetics. The postdoctoral researcher will collaborate with the project team to design, develop and implement novel methods for integrating datasets which have different characteristics and resolution (environmental, paleoecological, and genetic data) to make inference about shifts in species ranges and population sizes throughout the past 21,000 years (since the last Ice Age).

Applicants should have a Ph.D. (or Ph.D. defense scheduled in very near future) in the quantitative sciences (i.e., mathematical biology, statistics, theoretical ecology, or related fields), or in an ecological field plus experience with ecological modelling, species distribution or population modelling, or quantitative ecology. Interest or experience in Bayesian statistics, spatial modeling, state-space modeling, or data-driven modeling is beneficial but not required. Some experience in computer programming is beneficial. Other desired qualifications include a strong work ethic, problem-solving and time management skills, and experience communicating scientific results (oral and written). Applicants should be interested in working at the interface of statistics and ecology, and interested in contributing to a growing open-source project.

In addition to the main goal of model development, the postdoctoral researcher will be provided mentoring and opportunities for professional development, depending on their interests, including attending international scientific meetings, and mentoring in code development and scientific ethics. Other opportunities could include involvement in outreach (e.g., curriculum development, workshop implementation), supervising undergraduate researchers, guest lectures, networking, and participation in workshops and short courses (internally and externally). The postdoctoral researcher will have freedom to identify and attend relevant scientific meetings and professional development opportunities, for which funding will be provided.

The position is funded for two years, with possibility for continuing support pending future funding success. The postdoctoral researcher will be based at The Morton Arboretum and will primarily work with Dr. Sean Hoban, Dr. Andria Dawson (Mount Royal University, Calgary), and Dr. Adam Smith (Missouri Botanical Garden). The position will require some travel to work with collaborators at Mount Royal University and the Missouri Botanical Garden, as well as attend team meetings and workshops. All travel costs are covered by grant funds.

The Morton Arboretum is a world-class plant science research institute and public botanic garden near Chicago, USA, with research strengths in ecology, conservation, and genomics. The Morton Arboretum has ongoing collaborations with scientists at the Field Museum, University of Illinois Chicago, two National Laboratories, the Brookfield Zoo, and Chicago Botanic Garden.

Application materials must include four documents concatenated into two PDFs as follows:

One document to include:

1-2 page cover letter describing your qualifications and your interest in the project (project is described here)
evidence of scientific outputs (e.g. writing samples such as publications, dissertation, unpublished manuscripts, technical reports)

names and contact information for three references

Second document to include:

CV/Resume

Applications may be submitted until the position is filled, with applications received by October 15 to be guaranteed full consideration. A start date in winter 2018/2019 is preferred. Applicants must apply through The Morton Arboretum job system, via this link (<https://careers.hireology.com/themortonarboretum/-219960/description>) . Inquiries about the job or the application process are welcome- please contact Dr. Sean

Hoban (shoban@mortonarb.org), Dr. Adam Smith (adam@earthskysea.org), or Dr. Andria Dawson (andria.dawson@gmail.com).

The Morton Arboretum is an equal opportunity employer committed to achieving a diverse workforce.

– Allan Strand Department of Biology/Grice Marine Lab
College of Charleston

— / —

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>

NewCollege Florida Epidemiology

Assistant Professor in Epidemiology and Global Public Health at New College of Florida

New College of Florida invites applications for a tenure-track Assistant Professor position in Epidemiology and Global Public Health starting in August, 2019. A Ph.D. or similar terminal degree in epidemiology, public health science, or a related field is required by the time of appointment. The successful candidate must be committed to excellence in teaching and research. Postdoctoral research and teaching experience are preferred, including any obtained during residency or professional appointments. This position is one of several new faculty lines for 2019, including one in Medical Anthropology and another in Medical Humanities, as part of an exciting multi-year campus-growth initiative funded by the State of Florida (*<https://www.ncf.edu/about/growth-plan>*).*

New College is committed to recruiting and retaining a diverse faculty. Candidates from underrepresented groups, women and/or those whose knowledge or skills can support an inclusive culture and learning environment are especially encouraged to apply.

The teaching load is two courses per semester plus sponsoring of individual and group tutorials. In addition, faculty members provide academic advising, supervise Independent Study Projects (ISPs), sponsor undergraduate theses/projects, and serve on baccalaureate committees. The successful candidate should have a commitment to innovative liberal arts education at every level and engage in an active research program that involves undergraduates.

Situated on the Gulf Coast of Florida and Sarasota Bay, New College is a nationally recognized, selective public honors college with a 10:1 student/faculty ratio. Students are intellectually independent and highly motivated. Undergraduate research has a central role in the curriculum, and a senior thesis/project is required of all students. Students receive narrative evaluations in lieu of grades. New College is committed to excellence in undergraduate teaching and research and encourages collaborative student-faculty scholarship (*www.ncf.edu <<http://www.ncf.edu> >*). Facilities include a new wing of the science building and the Pritzker Marine Biology Research Center. A Masters Program in Data Science also offers excellent cyberinfrastructure resources and opportunities for on-campus collaboration.

Interested candidates should apply online at *<http://www.ncf.edu/employment> <<http://www.ncf.edu/employment> >* and should provide a curriculum vitae and an unofficial graduate transcript. In addition, please provide 1) a letter of application, 2) a statement of teaching philosophy (including introductory and advanced course proposals), 3) a diversity statement (including the candidate's contributions or plans to support an inclusive culture and learning environment), 4) a description of proposed research that includes how undergraduates would be involved and 5) the names of three references (including at least one who can address teaching). Review of completed applications will begin on Oct 31 and continue until the position is filled. According to Florida law, applications and meetings regarding applications are open to the public upon request. Applicants who need reasonable accommodations in order to participate in the selection process must notify the chair of the search committee 48 hours in advance of a meeting. New College is an Equal Opportunity/Equal Access Institution.

“boberle@ncf.edu” <boberle@ncf.edu>

NHM LosAngeles CuratorTerrestrialMammalogy

Curator, Terrestrial Mammals The Natural History Museum of Los Angeles County (NHMLA) seeks a Curator of Terrestrial Mammals to lead its research on urban mammals, to oversee the growth and care of collections, and to provide content for a variety of public programs. The successful candidate will conduct collection-based research in evolutionary biology and/or ecology broadly

defined and will be a leader in the care, understanding, and use of museum collections.

This position has a special emphasis on urban studies as this complements existing research and outreach strengths, and builds upon existing relationships with local organizations and community members developed by NHMLA's Urban Nature Research Center (UNRC). The UNRC engages in research that examines the effects of urbanization on wildlife using community science (=citizen science) approaches for surveying urban biodiversity. Qualified candidates may have research interests across the globe, but interest in advancing programs in Southern California through community science approaches is paramount.

NHMLA's mammalogy collection includes more than 98,000 specimens representing terrestrial and marine taxa. The specimens are prepared as study skins, skulls, skeletons and pelts, as well as ancillary collections of frozen tissues, bacula, and parasites, spanning all orders and most families within Mammalia. This collection is suitable for a broad range of evolutionary and ecological studies, including the effects of urbanization. The collection of terrestrial mammals has strong emphasis on North American (particularly Californian), Neotropical, and African mammals, with additional strengths in Old World fruit bats. The collection is complemented by the world-renowned Late Pleistocene-Holocene collection of the La Brea Tar Pits (a site administered by NHMLA), providing historical context for the diversity and ecology of terrestrial mammals in Southern California.

The successful candidate will have a record of outstanding research, excellent communication skills, and a demonstrated ability to engage the public and stakeholders; experience with the care, management, and operation of natural history collections is highly desirable. A Ph.D. and a strong track record of peer-reviewed publications focusing on evolutionary biology and/or ecology are required. The Curator will be expected to build an active and publicly appealing research program, to oversee the management and continued development of the terrestrial mammal collection, to lead all programs on urban mammals, and to supervise staff and volunteers of the Mammalogy Department. Additionally, the successful candidate is expected to develop working relationships with local universities, mentor students and postdoctoral fellows, strengthen NHMLA's presence in key professional and governmental networks, and maintain and sustain research through competitive grants and/or other funding from external sources. The Curator will be expected to participate actively in a broad range of museum activities, including exhibits, education, community science programs, educator and volunteer training, public communications, media inter-

actions, and fundraising activities. The Curator must have the vision and capability to build a research program that can be integrated with NHMLA's ongoing efforts to understand local biodiversity, and to shape the collections and research in ways that activate their scientific and public appeal.

NHMLA is seeking applicants who have demonstrated experience and commitment working with a diverse community. This is a full-time position with a salary and title commensurate with experience.

Application deadline is November 15th, 2018. The starting date is July 1st, 2019. Applicants should send a cover letter, vision statement, curriculum vitae, and contact information of at least three professional references as a single PDF document to Tyler Hayden at thayden@nhm.org, Re.: Terrestrial Mammalogy Curatorial Search.

The Natural History Museum of Los Angeles County is an Equal Opportunity Employer. Please, No Phone Calls.

Tyler Hayden <thayden@nhm.org>

NortheasternU MarineConservation

Position Title: MassBays Regional Coordinator and Associate Research Scientist

Northeastern University's Marine Science Center currently serves as the Regional Service Provider for MassBay's Metro Boston region, and is currently accepting applications for an open position for a Regional Coordinator and Associate Research Scientist. MassBays is an EPA National Estuary Program dedicated to protecting, restoring, and enhancing the estuarine resources of Ipswich Bay, Massachusetts Bay, and Cape Cod Bay. Meanwhile, the Marine Science Center is the marine research and education facility of Northeastern University, located in Nahant, Massachusetts.

Responsibilities: As the Mass Bays Metro-Boston Regional Coordinator & Associate Research Scientist, this position will work with faculty at Northeastern's Marine Science Center and other campuses, the MassBays staff, and stakeholders throughout the region to foster desired outcomes for the Bays (e.g., Improved habitat continuity and resilience, robust interagency and interdisciplinary collaboration and partnerships). This includes coordinating meetings among regional stakeholders, providing region-specific education and outreach, supporting

municipal and regional actions that promote resilient coastal habitats and communities, representing Mass-Bays on relevant networks and broadening its audience within metro Boston, and participating in relevant habitat research projects within the region.

In addition to serving as the Mass Bays Metro-Boston Regional Coordinator & Associate Research Scientist, this position will participate in ongoing coastal habitat research at Northeastern University's Marine Science Center. Research activities include assisting with analyzing and publishing ongoing projects, developing and preparing new grant proposals, providing functional and administrative supervision over supporting research staff, and transferring technical and statistical expertise.

Qualifications: Must have a Ph.D. or equivalent; experience coordinating stakeholder meetings, conducting science communication to diverse audiences, and working with coastal communities to support environmental sustainability; experience that demonstrates the ability to plan and execute research; previous supervisory experience; conversant in univariate and multivariate statistical methods; and established publication record.

To apply for this job, please follow the instructions posted at <https://neu.peopleadmin.com/postings/-57168>. Please contact Dr. Jonathan Grabowski (j.grabowski@northeastern.edu) with any questions about the position.

"k.lotterhos@northeastern.edu"
<k.lotterhos@northeastern.edu>

Okinawa 2ResTech AntBiodiversity

The Economo Lab (<http://arilab.unit.oist.jp/>) at the Okinawa Institute of Science and Technology Graduate University (<http://www.oist.jp/>) is seeking qualified applicants for two technician positions. The lab works at the interface of ecology, evolution, and natural history, with an empirical focus on ant biodiversity. We use a variety of approaches to understanding biodiversity including field expeditions, collections-based research, x-ray micro-CT, 3D modeling and morphometrics, phylogenomics, biodiversity informatics, and quantitative theory. Although two positions are described below, we are flexible with regards to division of duties among the two hired individuals.

RESEARCH TECHNICIAN:

Description: The hired individual will get involved with

a number of research activities in the lab including: curating an entomological research collection, managing lab databases, procuring lab supplies and materials, and performing miscellaneous tasks to support lab research. In addition, there are exciting opportunities to become an expert in X-ray micro-CT scanning and downstream applications such as segmentation, 3D modeling (e.g. <https://sketchfab.com/arilab>), morphometrics, 3D printing, and interacting with biodiversity data in virtual and augmented reality.

Qualifications: An undergraduate degree or higher in a scientific or technical field and experience with scientific research are required. Although there is no requirement for proficiency in a specific computational program/language, it is important that the person has strong computational skills and a high ability to learn different software and methods independently. Although not required by any means, experience with any of the following would be highly desirable: biodiversity collections management, 3D modeling, 3D animation, data management, computational phylogenetics, geometric morphometrics, GIS, HPC, VR/AR applications.

RESEARCH COMPUTING TECHNICIAN:

Description: The hired individual will be responsible for computational support of lab research including; designing and maintaining research databases, maintaining lab websites, assist with design and maintenance of bioinformatic data analysis pipelines, application support for utilizing HPC resources, and desktop support to lab members. In addition, there are opportunities to lead or participate in development of new technologies that facilitate and accelerate biodiversity research.

Qualifications: An undergraduate degree or higher in a scientific or technical field and experience with scientific research computing are required. As this position is not tied to a single application or task, the ideal candidate would have a good baseline of programming skills, including familiarity with both compiled and interpreted languages, and ability to learn independently. Proficiency with Linux, SQL-based database design and administration, and at least basic familiarity with server administration are required. Experiences with one or more of the following would be highly desirable but are not required; GIS, bioinformatics, phylogenetics, eoinformatics, parallel computing, and statistical computing.

Job Data: OIST is a newly established international graduate university located in the resort area of Onnason, Okinawa, Japan, and offers a high quality of life and good working conditions in an international environment. Logistical and financial assistance with relocation will be provided, along with a competitive salary and

benefits package. OIST is an English-language working environment, so knowledge of Japanese is not required.

To apply, please send a cover letter, CV, and list of three references with contact information to <econo@oist.jp> in an email with subject 'Research Technician Application' or 'Research Computing Technician Application', as appropriate. Informal inquiries are also welcome at the same address. Application review will begin immediately and will remain open until the positions are filled.

Evan P. Economo Assistant Professor Biodiversity and Biocomplexity Unit Okinawa Institute of Science and Technology Graduate University 1919-1 Tancha Onna-son Okinawa, Japan 904-0495 <http://arilab.unit.oist.jp/> www.antmaps.org "Evan P. Economo" <evanecono@gmail.com>

OklahomaStateU PlantEvolution

The Department of Plant Biology, Ecology, and Evolution at Oklahoma State University in Stillwater (<http://plantbio.okstate.edu>) seeks a tenure-track Assistant Professor to begin August 2019.

The ideal candidate will address fundamental questions in biology with research interests in plant secondary metabolism (broadly defined), including specialties such as biochemistry, genetics, molecular biology, and/or ethnobotany of plant secondary metabolites, or other related fields.

The position will complement departmental strengths in cell and molecular biology, genetics, evolutionary biology, and ecology, and help support the newly created pre-pharmacy and pre-forensics options in the plant biology major. The successful candidate is expected to build an innovative, externally-funded research program, and contribute to undergraduate and graduate teaching and mentoring. A Ph.D. in plant biology or related fields is required; postdoctoral experience is expected.

All applications should be submitted online through Interfolio (<http://apply.interfolio.com/54165>). Include 1) cover letter, 2) CV, 3) statements of research accomplishments and future objectives, 4) teaching philosophy and goals, and 5) at least three letters of recommendation, to be uploaded through Interfolio. Review of applications will begin November 1 and continue until position is filled, contingent upon availability of funding. Contact information: Destiny Goree, destiny.goree@okstate.edu,

405-744-5559. <http://plantbio.okstate.edu> . Oklahoma State University is an Affirmative Action/Equal Opportunity/E-verify employer committed to diversity and all qualified applicants will receive consideration for employment and will not be discriminated against based on age, race, color, religion, sex, sexual orientation, genetic information, gender identity, national origin, disability, protected veteran status, or other protected category. OSU is a VEVRAA Federal Contractor and desires priority referrals of protected veterans for its openings. OSU will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees or applicants as a part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the contractor's legal duty to furnish information. 41 CFR 60-1.35(c)

mark.fishbein@okstate.edu

"Fishbein, Mark" <mark.fishbein@okstate.edu>

OntarioInstCancerRes DirectorGenomics

Position: Director, Cancer Genomics Site: MaRS Centre, Toronto Department: Adaptive Oncology Reports To: Head, Adaptive Oncology Salary: Commensurate with level of experience Hours: 35 hours/week Status: Full-time Permanent

The Ontario Institute for Cancer Research (OICR) ranks among the world's top cancer research institutions and leads multiple national and international cancer research consortia including the International Cancer Genome Consortium, the Canadian Partnership for Tomorrow Program (a 300,000 participant precision health cohort), and the Global Alliance for Genomics and Health. OICR combines a vibrant genomics program with world-class informatics, imaging, diagnostic development, drug development and clinical trials groups in an environment that prioritizes collaboration, cross-disciplinary research, and research/clinical partnerships. OICR emphasizes

clinical translation and addresses significant challenges in cancer research with multi-disciplinary and multi-institutional teams.

OICR is seeking a Director of Cancer Genomics to join us to enhance and extend our innovative research program in cancer genomics and technology. The Director will act as a leader within OICR's Adaptive Oncology program, which blends -omics technologies with imaging, pathology and informatics in order to detect cancers at an early stage of their life cycle, to characterize tumour-host interactions, and understand how tumours adapt to therapy over time. This knowledge is used to develop innovative strategies for cancer management.

Research areas of particular interest include:

- Tumour/host interactions, including immunogenomics;
- Tumour tissue architecture, including single-cell analysis;
- Tumour heterogeneity, evolution and selection;
- Development of novel technologies, such as long read sequencing and liquid biopsies;
- Use of multiple -omics technologies to profile clinical specimens.

Qualifications

- PhD and/or MD at the mid-career to senior level with a proven track record in cancer genomics, next generation sequencing and technology development;
- A relevant international reputation and strong publication record;
- Proven leadership, management experience and communications skills;
- Previous experience in leading multidisciplinary, multi-institutional teams;
- Excellent and broad understanding of the field of genomics, epigenomics and informatics in oncology;
- Eligible to hold the rank of associate or full professor at an Ontario university.

Conditions of Employment

The position will be based at OICR's core laboratories in the MaRS Centre in Toronto, adjacent to Princess Margaret Cancer Centre, Toronto General Hospital, Mt. Sinai Hospital, SickKids, the University of Toronto's St. George Campus, and multiple other area research and health care institutions and biotech companies. The Genomics Program comprises 30 full-time staff combining lab technicians, bioinformaticians and computational biologists, and advanced instrumentation including the Illumina Novaseq for short-read sequencing, the Oxford Nanopore PromethION and PacBio for long-read sequencing, and the 10X Genomics Chromium for single-cell sequence analysis. The Director will have access to extensive retrospective and prospective collections of clinical and research materials and to world-class colleagues and collaborators in the fields of informatics, genomics, imaging, pathology, machine learning, and therapeutic development. An academic appointment

may be obtained at the University of Toronto. The initial appointment is for five years, renewable pending satisfactory review. A competitive salary and benefits package will be negotiated.

Launched in December 2005, OICR is an independent institute funded by the Government of Ontario through the Ministry of Economic Development, Job Creation and Trade.

To apply for this position, please upload a CV, research statement, and list of references.

For more information about OICR, please visit the website at www.oicr.on.ca. CLOSING DATE: Until Filled

OICR is an inclusive employer dedicated to building a diverse workforce. We encourage applications from all qualified candidates and will accommodate applicants' needs throughout all stages of the recruitment and selection process. Please advise the Recruiter to ensure your accessibility needs are accommodated throughout this process. Information received relating to accommodation will be addressed confidentially. The Ontario Institute for Cancer Research thanks all applicants. However, only those under consideration will be contacted. Candidates will be expected to provide their current employer as a reference.

Resume Format: If you elect to apply, you will need a text or HTML version of your resume so that you can cut and paste it into the application box provided. Before you submit the completed application, you will 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>

RutgersU Genetics

Tenure-Track Faculty Position in Genetics

The Department of Genetics in the School of Arts and Sciences at Rutgers, The State University of New Jersey seeks an outstanding tenure-track Assistant or Associate Professor to fill one of several new faculty positions in Genetics. The department hosts one of the oldest undergraduate majors in Genetics in the country, is a member of a strong Ph.D. program, and runs a new Genetic Counseling masters program. We are part of a vibrant

and interactive research community at Rutgers, an elite research institution, topping \$608 million in yearly research funding (FY2017). Rutgers Life and Biomedical Sciences includes over 200 faculty members in the Departments of Genetics, Molecular Biology and Biochemistry, Cell Biology and Neuroscience, the Robert Wood Johnson Medical School, the Human Genetics Institute of New Jersey, the Waksman Institute of Microbiology, the Center for Advanced Biotechnology and Medicine, and the Cancer Institute of New Jersey.

Our 30 faculty members drive federally funded research programs in broad areas of genetics and genomics including cancer, computational, developmental, evolutionary, molecular, neuro- and neuropsychiatric, population, reproductive, statistical, and epigenetics, conducting research in humans, mice, zebrafish, fruit flies, nematodes, yeast and bacteria. We seek individuals with research interests that will complement and/or expand our existing strengths. Core resources, generous start-up funds, and modern laboratory space will be provided. Appropriate candidates will be considered for appointment to the Human Genetics Institute of New Jersey.

Rutgers is a member of the AAU, the CIC, and the Big Ten, is an equal employment opportunity and affirmative action employer, and boasts tremendous diversity among students, faculty, and majors. We are deeply committed to increasing diversity and especially encourage applications from women and minority scholars. The New Brunswick/Piscataway campus is located in central New Jersey, close to New York City, Philadelphia, beaches, and countryside.

Candidates must have a Ph.D. and/or M.D. in genetics or a related field, a demonstrated record of significant research, the potential to make substantial contributions as an independent investigator, and a commitment to teaching undergraduate and graduate students. Applicants should submit a CV, a detailed statement of research interests, a teaching statement, and full contact information for three individuals willing to provide letters of reference. All job offers are contingent upon successful pre-employment background screening prior to commencement of employment. Applications should be submitted electronically at <http://jobs.rutgers.edu/postings/73614> and inquiries made to Ms. Mary Carmona, carmona@dls.rutgers.edu. Review of applications will begin October 15, 2018, and continue until the position is filled.

Rutgers, The State University of New Jersey, is an Equal Opportunity / Affirmative Action Employer. Qualified applicants will be considered for employment without regard to race, creed, color, religion, sex, sexual orientation, gender identity or expression, national origin,

disability status, genetic information, protected veteran status, military service or any other category protected by law. As an institution, we value diversity of background and opinion, and prohibit discrimination or harassment on the basis of any legally protected class in the areas of hiring, recruitment, promotion, transfer, demotion, training, compensation, pay, fringe benefits, layoff, termination or any other terms and conditions of employment.

Tenure-Track Faculty Position in Computational Genetics

The Department of Genetics in the School of Arts and Sciences at Rutgers, The State University of New Jersey seeks outstanding tenure-track Assistant or Associate Professors to complement the existing faculty in computational genetics, moving our program into exciting new areas and expanding our existing strengths. The department hosts one of the oldest undergraduate majors in Genetics in the country, is a member of a strong Ph.D. program, and runs a new Genetic Counseling masters program. We are part of a vibrant and interactive research community at Rutgers, an elite research institution, topping \$608 million in yearly research funding (FY2017). Our computational group collaborates with other Department of Genetics faculty and Rutgers scientists within the Division of Life Sciences, the Departments of Computer Science and Statistics, the Waksman Institute of Microbiology, the Center for Advanced Biotechnology and Medicine, the Robert Wood Johnson Medical School, the Institute for Quantitative Biomedicine, the Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), the Center for Human Evolutionary Studies, and the Cancer Institute of New Jersey.

— / —

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

SanFranciscoStateU EvolutionaryBiologist

The Department of Biology at San Francisco State University offers an exciting opportunity for a Tenure-Track Assistant Professor position in Evolutionary Biology beginning August 2019. We seek a colleague who conducts

research on evolutionary processes in natural populations (especially non-model organisms). We are particularly interested in researchers who integrate their field and/or laboratory work with mathematical modeling or with conservation issues such as climate change, disease, urbanization, or biodiversity.

Applicants must be committed to developing an externally funded research program and contributing to both undergraduate and graduate programs through teaching and mentorship of student research. We are especially interested in candidates who demonstrate a commitment to increase the access and success of underrepresented students in biology, or who have detailed plans to accomplish such goals.

Ph.D. and post-doctoral experience in a related field are required. Candidates must have an active record of research related to their specialty area as well as evidence of external support or the potential for external funding of these activities. Candidates will be expected to teach an evolution course for biology majors as well as additional courses within their area of expertise at the undergraduate and graduate levels. Please see the Department's website for additional details on job requirements <http://biology.sfsu.edu/announcements/job-opportunity_eb> or contact Andy Zink <zink@sfsu.edu> with questions about the position.

Please submit the following materials online to <<https://academicjobsonline.org/ajo/jobs/11661>> by September 28, 2018 (review of applications will continue until the position is filled): 1) letter of intent/interest; 2) current CV; 3) a statement on how your teaching and scholarship align with the commitment of the Biology Department to foster an inclusive and diverse academic community; 4) teaching statement; 5) research statement; 6) representative sample of published papers; 7) contact information for three references (letters of recommendation will be requested at a later date).

SFSU is a comprehensive, urban university that serves the ethnically diverse Bay Area. The mission of San Francisco State University is to create an environment for learning that promotes appreciation of scholarship, freedom, human diversity, and the cultural mosaic of the City of San Francisco and the Bay Area; to promote excellence in instruction and intellectual accomplishment; and to provide broadly accessible higher education for residents of the region, state, the nation, and the world. SFSU and the Department of Biology are committed to a diverse professoriate that includes women and individuals from underrepresented minority groups. SFSU is an EEO/AA employer.

Andy Zink <zink@sfsu.edu>

SSE Blog Editor Fellow

*The Society for the Study of Evolution (SSE) is pleased to announce a call for applicants to the position of Blog Editor Fellow to begin January 1, 2019. *

*The Blog Editor Fellow will create and curate a blog highlighting the effective and essential work SSE members are doing to engage and educate the public and to interface with other SSE members. The Blog Editor Fellow will solicit, manage, and publish at least three articles per month from regular contributors, and will write one editorial per month on a topic of their choosing. The fellowship stipend will be \$6,000 USD per year. Applications close October 1, 2018. *

*Learn more about the position and how to apply here: <http://www.evolutionsociety.org/news/display/-2018/8/22/call-for-sse-blog-editor-fellow-applications/> *

Kati Moore *Communications Specialist* *Society for the Study of Evolution* communications@evolutionsociety.org
www.evolutionsociety.org SSE Communications
 <communications@evolutionsociety.org>

TulaneU LabTech Evolutionary Genetics

I am hiring a Lab Research Technician to do research on the genetics of local adaptation and speciation in Monkey flowers and to help set up my research laboratory at Tulane University in New Orleans, LA. For more information and to apply please visit <https://jobs.nola.com/Job/54268353/laboratory-technician-job-in-new-orleans-la> or my website <https://kathleengferristulane.wordpress.com>. Deadline for applications is *September 30th. *Thanks! Kathleen Ferris, PhD Assistant Professor Department of Ecology & Evolutionary Biology Tulane University New Orleans, LA (Email) kferris@tulane.edu (Twitter) <https://twitter.com/ferrisifolius> Katie Ferris <kgferris@gmail.com>

UAtlanta ComputationalBiologist

Assistant Professor of Anthropology - Computational Biologist Emory University - Atlanta, Georgia
<https://apply.interfolio.com/53932>

The Department of Anthropology and the Institute for Quantitative Theory and Methods at Emory University invite applications for a joint tenure-track assistant professor position, with tenure home in Anthropology. We seek a scholar with an active anthropological research program addressing core issues in biological and/or cultural evolution, using the tools of computational biology with application to empirical datasets. Candidates must have a doctoral degree, an excellent research record, and a demonstrated commitment to teaching at the undergraduate and graduate levels. Qualified candidates will be able to teach advanced statistics courses and introductory courses in Anthropology. Ability to interact effectively with faculty in two broadly inclusive departments is important.

Applications should include a curriculum vita, a research statement, a teaching statement, and complete contact information for three references. The Department of Anthropology, Emory College and Emory University embrace diversity and seek candidates who will participate in a climate that attracts students of all ethnicities, races, nationalities, and genders. In a separate statement, please reflect upon your experience and vision regarding the teaching and mentorship of students from diverse backgrounds.

Applications will be accepted through November 9, 2018. To apply for this position, please visit (apply.interfolio.com/53932) and submit your materials free of charge through Interfolio. Emory University is an equal employment opportunity and affirmative action employer. Women, minorities, people with disabilities and veterans are strongly encouraged to apply.

John Lindo <jlindo@emory.edu>

John Lindo, JD, PhD Assistant Professor Department of Anthropology Emory University

“Lindo, John” <john.lindo@emory.edu>

UCalifornia Davis BehavioralEvolution

BEHAVIORAL EVOLUTION OR ECOLOGY, UNIVERSITY OF CALIFORNIA, DAVIS -The College of Biological Sciences, University of California, Davis invites applications and nominations for a tenure-track position in the Department of Evolution and Ecology at the ASSISTANT PROFESSOR level. Candidates must have a Ph.D. (or equivalent) in the biological sciences or related fields. We seek candidates with research interests that will complement and build upon existing faculty strengths in ecology and evolutionary biology; this may include but is not limited to the study of mechanisms of behavior, behavioral evolution using comparative methods, modelling, or the impacts of behavior on ecological processes. We welcome a broad spectrum of applicants, spanning diverse systems and approaches. We seek a colleague who is committed to participating in the departmental community through collaborative teaching, research, service and graduate mentoring and who will embrace UC Davis' Principles of Community. Letters of recommendation should specifically address this aspect of the application. The successful candidate will be expected to teach in undergraduate and graduate programs, and should be committed to mentoring and fostering diversity.

Applicants should submit materials online at <https://recruit.ucdavis.edu/apply/JPF02427>. which contains additional information about the position. The application should include: curriculum vitae, description of current and projected research, summary of teaching interests and experience, and three publications. Applicants should also provide contact information for three referees. Once entered, referees will be prompted by email with upload instructions for their letters. Open until filled, but all application materials, including letters of recommendation, must be received by November 5, 2018 to assure full consideration. Faculty contact: Gail Patricelli (gpatricelli@ucdavis.edu). Administrative contact: Korie Martinez (kmartinez@ucdavis.edu).

The University of California is an affirmative action/equal opportunity employer committed to excellence through diversity and strongly encourages applications from all qualified applicants, including women and minorities. UC Davis is responsive to the needs of dual career couples, is dedicated to work-life balance through an array of family-friendly policies, and is the recipient

of an NSF ADVANCE Award for gender equity.

Jay Stachowicz

Jay Stachowicz <jjstachowicz@ucdavis.edu>

UCalifornia Irvine EvoDevo

Assistant Professor in Developmental and Cell Biology and Ecology and Evolutionary Biology

Applications are invited for a tenure-track faculty position at the level of Assistant Professor. As part of a joint search between the departments of Developmental and Cell Biology and Ecology and Evolutionary Biology, we are seeking candidates studying evolution and development (evo-devo), broadly defined. As UCI prides itself on its collaborative culture, an ideal candidate will synergize with current faculty whose areas of research include developmental gene regulation, pattern formation, comparative genetics, and computational or systems biology approaches to evo-devo. We welcome applicants that use a broad range of organisms as research models.

The successful applicant is expected to conduct a strong research program and to contribute to the teaching mission of the University of California. See <http://devcell.bio.uci.edu/> and <http://ecoevo.bio.uci.edu> for more information on the departments. Please send curriculum vitae, 3 page summary of research accomplishments and goals, a brief statement of teaching and mentoring experience and philosophy, a separate statement that addresses past and/or potential contributions to diversity, equity and inclusion, and at least three letters of reference via the online recruitment URL: <https://recruit.ap.uci.edu/apply/JPF04959>. Criteria for the research, teaching, and diversity statements are provided at the online recruitment URL. Applications completed by November 15, 2018 will be granted full consideration. Any questions about the suitability of an applicant for this opportunity can be directed to the search chair, Zeba Wunderlich, zeba@uci.edu.

The School of Biological Sciences is recognized as a national leader in the development of programs designed to increase the participation of underrepresented minorities in the biomedical sciences (<http://port.bio.uci.edu/about/>) and is firmly committed to the ideals of equity, diversity, and inclusion. Career partners programs are available to meet the needs of dual-career academic partners. Subsidized faculty and staff housing and a Mortgage Origination Program are offered to facilitate

the purchase of a home. UC Irvine (<https://uci.edu/>) is located 10 minutes from the coast and is the youngest member of the prestigious Association of American Universities. The city of Irvine is home to excellent parks, schools, entertainment opportunities, and a diverse citizenry.

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. A recipient of an NSF ADVANCE award for gender equity, UCI is responsive to the needs of dual career couples, supports work-life balance through an array of family-friendly policies, and is dedicated to broadening participation in higher education.

REQUIREMENTS

Curriculum Vitae

Cover Letter

Statement of Research 'V Three Pages.

1. Detail the candidate's previous research experience, with a description of the significance and implications of the work.
2. Provide a plan of their future independent research program.
3. Indicate how the candidate's research program will synergize with the research environment at UCI.

Statement of Teaching 'V One page.

1. Indicate the candidate's teaching experiences to date, including experience with teaching/lecturing to undergraduates/graduate students or other populations. This should include the candidate's experience mentoring others in the line of research or outreach activities.
2. Detail the candidate's teaching approaches and philosophies, as to how they will engage in effective teaching strategies.

Statement of Contributions to Diversity 'V One page.

Applicants will be evaluated on how they will advance UCI's Commitment to Inclusive Excellence (<http://www.uci.edu/diversity/>). This statement should:

1. Indicate how the candidate has demonstrated awareness of the issues faced by historically underrepresented or economically disadvantaged groups and the benefits of a diverse and inclusive faculty.
2. Provide evidence (if any) of the candidate's track record and success in activities aimed at reducing bar-

riers in education or research for underrepresented or disadvantaged groups.

3. Detail specific plans (if any) to contribute through campus programs, new activities, or through national or off-campus organizations.

— / —

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

UCalifornia SanDiego EvolutionaryBiol

Assistant Professor: Microbial Ecology

The Section of Ecology, Behavior, and Evolution in the Division of Biological Sciences (www.biology.ucsd.edu) invites applications for a faculty position in Microbial Ecology at the tenure-track Assistant Professor level. We are broadly searching for a microbial ecologist. Research topics could include, but are not limited to, soil microbial community structure and function, plant-microbe interactions, and the role of microbiomes in species interactions in nature. This position will complement existing strengths in this area. All candidates must have earned a Ph.D. or equivalent degree, and be committed to teaching at the undergraduate and graduate levels. In addition to excellence and creativity in research and scholarship, successful candidates must also demonstrate a commitment to equity and inclusion in higher education. We are especially interested in candidates who have created or contributed to programs that aim to increase access and success of underrepresented students and/or faculty in the sciences, and/or have detailed plans to accomplish such goals.

The Division of Biological Sciences at UCSD is a vibrant center of scientific discovery, innovation, and collaboration. Our large research base spans many areas of biology and has one of the most celebrated graduate programs in the country. We are committed to academic excellence and diversity within the faculty, staff, and student body.

Salary is commensurate with qualifications and based on University of California pay scales. Initial review of applications will commence on October 26, 2018 and will continue until position is filled. Interested

applicants must submit a cover letter, curriculum vitae, 3-5 references, statement of research, statement of teaching, a statement describing their past experience and leadership in fostering equity and diversity and/or their potential to make future contributions, and 3-5 publications. For information on preparing diversity statements and divisional initiatives to promote diversity, see: <http://facultyequity.ucsd.edu/FacultyApplicant-C2D-Info.asp> and <http://biology.ucsd.edu/diversity/index.html>. Applications must be submitted through the University of California San Diego's Academic Personnel RECRUIT System: <https://apol-recruit.ucsd.edu/apply/JPF01864> Further details about the required application material can be found at: <http://biology.ucsd.edu/jobs/apply-lrf-lsoe.html> UCSD is an Affirmative Action/Equal Opportunity Employer with a strong institutional commitment to excellence through diversity (<http://diversity.ucsd.edu/>). All qualified applicants will receive consideration for employment without regard to gender, race, color, religion, sex, sexual orientation, national origin, disability, age or protected veteran status.

“Graves, Kim” <kjgraves@ucsd.edu>

UCalifornia VertebratePaleontology

Assistant Professor, Vertebrate Paleontology Department of Integrative Biology/University of California Museum of Paleontology University of California, Berkeley The Department of Integrative Biology (IB) and the University of California Museum of Paleontology (UCMP) at the University of California, Berkeley invite applications for a full time tenure-track position in vertebrate paleontology at the Assistant Professor level.

Potential start date is July 1, 2019.

IB and the UCMP are world-renowned for their dedication to understanding the evolution, systematics, paleoecology, geological history, and paleobiology of life on Earth using field studies, museum collections, and laboratory research. We seek exceptional candidates working in any area of vertebrate paleontology, and on any vertebrate group, whose research emphasizes collection, laboratory, and/or field-based studies within a comparative context. Possible research areas include (but are not limited to) the evolution of major adaptations, functional morphology, microevolutionary and/or macroevolutionary patterns and processes, response of vertebrate taxa and fauna to global climate change

through time, paleophysiology, paleoecology, comparative morphology, developmental paleobiology, and the application of phylogenetics to major evolutionary problems. The successful candidate will be expected to maintain a strong externally funded active field and/or laboratory research program, to contribute to building and using UCMP collections, and to participate in UCMP research, education, and programmatic needs. Candidates will also contribute to teaching in the undergraduate and graduate curricula of the Department of Integrative Biology, develop a first-class research program that trains graduate and undergraduate students, and possesses a commitment to education, outreach and service.

The Berkeley campus values diversity, equity and inclusion as exemplified by the following principles of community: We recognize the intrinsic relationship between diversity and excellence in all our endeavors. We embrace open and equitable access to opportunities for learning and development as our obligation and goal. Our excellence can only be fully realized by faculty, students and staff who share our commitment to these principles. Successful candidates for our faculty positions will demonstrate evidence of a commitment to equity and inclusion. Financial and in-kind resources are available to pursue activities that help accelerate our efforts to achieve our equity and inclusion goals.

Required Minimum Basic Qualifications: -Enrolled in a Ph.D. degree or equivalent international degree program
Additional Qualifications: -Ph.D. (or equivalent international degree) must be held by start date -Evidence of contributions made to advance diversity, equity and inclusion
Preferred Qualifications: -PhD in vertebrate paleontology/paleobiology, or some related field -Ability to communicate effectively -Highly motivated -Interested in undergraduate and graduate teaching, public outreach, and museum collections
Applications must be received by October 15, 2018. To apply, please go to the following link: <http://apptrkr.com/1280994> Please direct all questions to Integrative Biology Academic Personnel ib_recruit@berkeley.edu.

Applicants should include the following required documents: - Cover Letter - Curriculum Vitae - Brief Description of Research Accomplishments - Statement of Research Objectives - Statement of Museum Engagement - Statement of Teaching Interests - Statement of Contributions to Diversity, addressing past and/or potential contributions to diversity through research, teaching, and/or service.

o Please visit this link for assistance with writing the required statement on contributions to diversity: <https://ofew.berkeley.edu/recruitment/>

[contributions-diversity/support-f](#) aculty-candidates
- List of Publications - Significant Publication #1 - Significant Publication #2 - Significant Publication #3
- Large Publication File (Optional) In case file needs to be split - Large Publication File (Optional) In case file needs to be split - Large Publication File (Optional) In case file needs to be split
Applicants should arrange to have three letters of reference submitted online. All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are produced via a third party (i.e.

dossier service or career center), to the UC Berkeley statement of confidentiality (<http://apo.berkeley.edu/evalltr.html>) prior to having their referees submit their letters.

The Department of Integrative Biology and the University of California Museum of Paleontology, UC Berkeley, are committed to addressing the

— / —

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>

UExeter ResTech SocialBeesAndWasps

RESEARCH TECHNICIAN: SOCIAL EVOLUTION IN BEES & WASPS

We seek an enthusiastic, self-motivated person with an interest in genetics/animal behaviour/entomology for a full-time post starting October 2018 in the research group of Professor Jeremy Field at the University of Exeter, Cornwall Campus, UK (see http://biosciences.exeter.ac.uk/staff/index.php?web_id=-Jeremy.Field). The post will run until December 2020, with the potential for it to be extended for a further year. The job will involve a combination of mainly molecular but also field-based work towards understanding the evolution of castes and social behaviour in primitively eusocial bees (*Lasioglossum*) and wasps (*Polistes*). As well as labwork, the postholder will assist with fieldwork in the UK and potentially elsewhere in Europe. There will also be postdoctoral researchers working on the project. The successful applicant will have an MSc or PhD in a relevant subject, experience of DNA/RNA

molecular techniques and fieldwork, and a full driving licence.

The closing date for completed applications is midnight on 26th September. Interviews are expected to take place during the week of 15 October.

For full details, including how to apply, enter the job reference number (P63840) as a keyword in the University of Exeter job search engine at: https://jobs.exeter.ac.uk/hrpr_webrecruitment/-wrd/run/etrec105gf.open?wvid=3817591jNg Jeremy Field Professor of Evolutionary Biology Centre for Ecology and Conservation University of Exeter Penryn Campus Cornwall TR10 9EZ

“Field, Jeremy” <J.P.Field@exeter.ac.uk>

UMemphis Evolutionary Immunologist

Job: UMemphis.Immunologist

Tenure-track Assistant Professor in Comparative Immunology, beginning in August 2019.

The Department of Biological Sciences at the University of Memphis (www.memphis.edu/biology) invites applications for a nine-month tenure-track position in comparative immunology (research and teaching) at the Assistant Professor level. Candidates must have an earned doctorate (Ph.D.) in immunology or other relevant discipline (such as ecoimmunology, computational immunology, disease ecology, physiology, ecology, evolutionary immunology) from an accredited institution. We seek candidates with postdoctoral training, a record of peer-reviewed publication and scholarly accomplishments commensurate with experience, and evidence of funding potential. Competitive startup funds and salary are available and salary will be commensurate with experience.

The successful candidate will be broadly trained, with expertise in ecoimmunology, computational immunology, disease ecology, or environmental aspects of comparative immunology. We encourage applications from researchers using integrative approaches and non-model organisms to examine environmental influences on immune function, disease spread, or physiological mechanisms driving variation in immunity. The candidate will teach an undergraduate course in immunology; additional teaching assignments will depend on the candidate's expertise and departmental needs. The successful

candidate will be expected to develop a research program that involves both undergraduate and graduate students and will also pursue the external funding necessary to maintain a successful research program. Faculty members are expected to engage in service activities at the department, college, and university levels and serve as a mentor to students in their research and professional development. The University of Memphis is a leading metropolitan research institution with 25 faculty members specializing in diverse sub-disciplines of the biological sciences. The Department serves approximately 500 majors and over 50 M.S. and Ph.D. students. The interdepartmental Program in Bioinformatics, the Ecological Research Center & Meeman Biological Station, the Integrated Microscopy Center, and the W. Harry Feinstone Center for Genomic Research, are all administered through the department and offer outstanding opportunities for research, teaching, and collaboration.

Candidates should submit a letter of application, statements of research interests and teaching philosophy, and a CV at <http://workforum.memphis.edu/>. Up to three representative journal articles may also be submitted. Applicants should also provide contact information for three individuals who can provide references. Review of applications will begin October 5, 2018, the closing date for application. Inquiries should be directed to Dr. Matthew Parris, Chair, Comparative Immunology Faculty Position, Department of Biological Sciences, University of Memphis, Memphis, TN 38152, USA (email: mparris@memphis.edu).

The University of Memphis is an Equal Opportunity/Affirmative Action employer. We urge all qualified applicants to apply for this position. Appointment will be based on qualifications as they relate to position requirements without regard to race, color, national origin, religion, sex, age, disability or veteran status.

Emerson Keith Bowers <ekbowers@memphis.edu>

UMontana LabManager Evolutionary Genomics

Laboratory Manager 'V Evolutionary Genomics, University of Montana

The laboratory of Jeffrey Good at the University of Montana seeks a full time research lab manager. The Good lab uses diverse genomic and genetic approaches to understand mammalian development, adaptation,

and speciation. We seek a highly motivated candidate with good organizational skills, a strong background in molecular biology, genetics, evolution, and/or genomics. The successful candidate will lead data collection for large-scale comparative and population genomic experiments in diverse mammalian systems, systems genetic experiments in rodent models, and contribute to the overall intellectual environment of the lab. A B.S. or equivalent in biology or a related field and previous experience with molecular research are required. Candidates with previous experience working on mammalian reproduction and development, or collecting and/or analyzing genomic data (e.g., WGS, WGBS, exome sequencing, RADseq, RNAseq, ATACseq) are strongly encouraged to apply.

The University of Montana offers a vibrant research community. The Good lab shares newly constructed molecular and computational space with five other outstanding groups, as part of an entire floor dedicated to evolutionary genomics research. For more information on our research please visit thegoodlab.org. Interested applicants are encouraged to contact Jeff (jeffrey.good@umontana.edu; @jeffreymgood) to discuss the position prior to applying.

To apply, visit <http://bit.ly/2066umjobs> and upload a single PDF containing a cover letter describing your interest in the position and qualifications, a current CV, and the names and contact information for three references. Applications will be reviewed upon receipt and the position will remain open until filled. The position is available immediately with a flexible start date contingent on the needs of the preferred candidate.

ADA/EOE/AA/Veteran's Preference Employer

– Jeffrey M. Good, Ph.D.

Associate Professor Division of Biological Sciences The University of Montana 32 Campus Drive, HS104 Missoula MT 59812 Phone: 406-243-5771 Fax: 406-243-4184 Website: <http://www.thegoodlab.org/> Jeffrey Good <jeffrey.good@mso.umt.edu>

UOregon ResAssist Recombination Variation

The Singh lab at the University of Oregon invites applications for a research assistant. Current work in the Singh lab is aimed at determining the individual and joint contributions of genetic and environmental

factors to recombination rate variation and to assess the impact of that variation for adaptation and genome evolution. A competitive applicant would be someone who has strong organizational and communication skills and who has experience with *Drosophila* genetics.

For more information and to apply, visit <http://careers.uoregon.edu/cw/en-us/job/522894/research-assistant> Nadia Singh <nsingh@uoregon.edu>

UPittsburgh 2 MathBio

The Dietrich School at the University of Pittsburgh invites applications for two tenure-track faculty positions at the Assistant Professor level in Mathematical and Computational Life Sciences to begin in the fall term of 2019. Successful candidates will be placed in the departments most suitable for their backgrounds and research programs from among the Departments of Mathematics, Biology, Neuroscience, Physics, and Chemistry. We seek outstanding scientists who will enhance and complement our existing strengths and who will collaborate with members of our sizable neuroscience, biology, biophysics, and biochemistry communities.

One position is in Mathematical and Computational Neuroscience. Candidates working on the following topics are especially encouraged to apply:

* Circuits and information flow in neuroscience * Neuronal and population dynamics * Synaptic mechanisms and dynamics * Neuronal membrane properties and ion channel function

The other position is in Mathematics and Theory of Biological Processes. Candidates working on the following topics are especially encouraged to apply:

* Mathematical ecology * Evolutionary theory * Cellular sensing and signal processing * Epigenetic and gene network dynamics

The University of Pittsburgh is an active center for interdisciplinary research in the life sciences offering exciting opportunities for collaborations across departments as well as with our highly ranked medical school. The University is currently ranked third in the nation in total NIH funding, and the city of Pittsburgh is often voted 'most livable' in the nation. These positions represent part of a vision to grow our community of researchers at the interface of mathematics, physics, chemistry and the life sciences.

Successful candidates will have a Ph.D. and should demonstrate substantial research accomplishment and dedication to teaching. They will be expected to establish an extramurally funded research program, train graduate students, and actively participate in undergraduate education. Review of applications will begin on October 23, 2018, and will continue until the positions are filled. Applicants can apply online at: <https://facultysearch.as.pitt.edu/apply/index/MjQy>. Candidates should submit (a) a cover letter, (b) a CV, (c) a statement of research accomplishments and future plans, (d) a brief description of teaching interests, (e) a brief description of how your research, teaching or service demonstrates a commitment to diversity and inclusion, and (f) at least three letters of reference (for each reference, you will have the opportunity to input an email address through Interfolio's Online Application system and a notification will be sent to the designated address with instructions). The positions are pending budgetary approval. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer and values equality of opportunity, human dignity and diversity. EEO/AA/M/F/Vets/Disabled.

Person to Contact:

Erika Carpio 139 University Place Room 302 Pittsburgh, PA 15206 412-624-8361

TURCOTTE@pitt.edu

is currently ranked third in the nation in total NIH funding, and Pittsburgh is a city that is often voted "most livable" in the nation. Further information about the Department of Biological Sciences is available at: <http://www.biology.pitt.edu>. Successful candidates will have a Ph.D. and postdoctoral research experience and will be expected to establish an extramurally funded research program, train graduate students, and actively participate in undergraduate science education. To ensure full consideration, applications and reference letters should be received by 21 September 2018. Applicants can apply online at: <https://facultysearch.as.pitt.edu/apply/index/MjMz>. Candidates should submit (a) a cover letter, (b) a CV, (c) a 2-3-page statement of research accomplishments and future plans, (d) a brief description of teaching interests, (e) a brief description of how your research, teaching or service demonstrates a commitment to diversity and inclusion, and (f) at least three letters of reference. For each reference, you will have the opportunity to input a personal email address or an email address generated through Interfolio's Online Application Delivery. An email notification will be sent to the designated address with instructions about uploading letters of recommendation into our system. The positions are pending budgetary approval. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer and values equality of opportunity, human dignity and diversity. EEO/AA/M/F/Vets/Disabled.

TURCOTTE@pitt.edu

UPittsburgh 2 Microbiology

The Department of Biological Sciences at the University of Pittsburgh invites applications for two tenure-track faculty positions in the area of Microbiology. The position is anticipated at the ASSISTANT PROFESSOR level. We seek an outstanding scientist who will enhance and complement existing strengths in our broad-based interactive biology department; our faculty include those with active research programs studying viral, prokaryotic and eukaryotic microbes. Candidates working in the following areas are especially encouraged to apply: - Microbial genetics and genomics - Host-pathogen or host-symbiote interactions - Microbial physiology - Microbial pathogenesis - Microbial ecology and evolution The Department of Biological Sciences is a highly interactive community dedicated to mutual success in our research, education and outreach missions. Low teaching loads and highly competitive start-up, compensation and benefits packages are offered. The University

UPittsburgh AnimalCareTechnician

The Stephenson Lab at the University of Pittsburgh, Dietrich School of Arts & Sciences, is seeking a technician to manage animal (fish) care, maintenance of laboratory equipment, purchase supplies, and help supervise undergraduate lab assistants. This position will also be responsible for generating and analyzing data for ongoing projects on host-parasite ecology and evolution (guppy-Gyrodactylus) and providing technical assistance to other personnel involved in these projects who are using similar techniques. Excellent communication skills, experience with fish maintenance (particularly in recirculating systems such as Aquaneering) and basic molecular techniques are preferred. The incumbent will help train new personnel who are recruited to the project and help supervise the efforts of undergraduates. The Dietrich School of Arts & Sciences is

committed to building a culturally diverse staff. The role requires excellent interpersonal and relationship-building skills and the ability to work effectively with a wide range of individuals and constituencies in support of a diverse community. Research in the Stephenson Lab focusses on disease evolutionary ecology. We are interested in the factors that influence infectious disease transmission in natural populations. For directly transmitted parasites, transmission between conspecific hosts is largely determined by host social behaviour. Our research focusses on how biotic and abiotic conditions modify this social behaviour. Work in the lab mostly uses the guppy and its gyrodactylid parasites to investigate how changes in these ecological conditions, and hence transmission, may drive evolutionary change in both the host and parasite. More information about the lab can be found at jfstephenson.com, and about the position at <https://www.pittsource.com/postings/166587> For more information or to make an informal inquiry about the position, please send a CV and a cover letter to Jess Stephenson (jess.stephenson@pitt.edu). Review of applications will begin immediately. The position will remain open until the right candidate is found.

“Stephenson, Jessica F” <jess.stephenson@pitt.edu>

Uppsala Sweden BioinformaticianGenomics

Permanent position as bioinformatician in genomics

National Bioinformatics Infrastructure Sweden (NBIS) is looking for a new expert to support Swedish researchers in DNA-sequence based bioinformatics (genomics more than transcriptomics). The position is in Uppsala, Sweden, and is completely focused on support. It is not a research position. Work will most likely involve genome annotation, but could also include comparative genomics, meta-genomics, or other areas depending on the qualifications of the applicant. Personal suitability for the position is stressed, and with over 60 experts in the organisation there are a lot of opportunities for learning new subjects and gaining new skills.

Deadline is Oct 22.

Please see here for more information and how to apply: <http://uu.se/en/about-uu/join-us/details/?positionId=226605> You are very welcome to contact henrik.lantz@nbis.se if you have any questions.

Henrik Lantz Support manager, NBIS Uppsala, Sweden
N?r du har kontakt med oss p? Uppsala universitet med e-post s? inneb?r det att vi behandlar dina personuppgifter. F?r att l?sa mer om hur vi g?r det kan du l?sa h?r: <http://www.uu.se/om-uu/dataskydd-personuppgifter/> E-mailing Uppsala University means that we will process your personal data. For more information on how this is performed, please read here: <http://www.uu.se/om-uu/dataskydd-personuppgifter/> Henrik Lantz <henrik.lantz@imbim.uu.se>

UppsalaU PlantEvolGenomics

Tenure-track position as Assistant Professor in Plant Evolutionary Genomics at Uppsala University

Department of Ecology and Genetics, division in Plant Ecology and Evolution, Evolutionary Biology Centre.

The position includes research, teaching at graduate and undergraduate level, outreach activities and some administration. The holder is expected to establish research of highest international standards within the subject area, and to contribute to the development of research and teaching of the department.

The ranking of eligible applicants will be based primarily on research and teaching expertise, of which particular weight will be given to research expertise.

Research in Plant Evolutionary Genomics involves molecular analyses to understand evolutionary and ecological processes underlying the generation and maintenance of biological diversity among plants. The subject area includes functional studies of variation at the molecular level as well as analysis and interpretation of large-scale omics-data to understand biological function, evolution of diversity, and adaptation of plants to the abiotic and biotic environment.

The position is for four years and tenure-track: An associate senior lecturer (the Swedish term for Assistant Professor) has the right to apply for promotion to senior lecturer. If the associate senior lecturer is deemed suitable and fulfills the criteria for promotion established by the Faculty Board he/she shall be promoted and employed as senior lecturer (permanent position). At a subsequent step, an application for promotion to full professor can be made.

According to the Swedish Higher Education Ordinance those qualified for appointment as associate senior lec-

turer are persons who have obtained a doctoral degree or achieved the equivalent competence. Priority is given to those who obtained their degree no more than seven years prior to the end of the application period.

The Evolutionary Biology Centre (EBC) of Uppsala University offers a vibrant research environment. It bridges a broad range of disciplines in the biological sciences, and is an internationally very strong environment within the field of evolutionary biology. Information about EBC and the Department of Ecology and Genetics can be found at <http://www.ebc.uu.se/?languageId=1/> and <http://www.ieg.uu.se/?languageId=1> The position is part of the SciLifeLab Fellow program and comes with a core funding of three million SEK per year for four years, which includes substantial funds to cover running costs. SciLifeLab (www.scilifelab.se) is a national centre for large-scale hypothesis driven research within molecular bioscience.

More detailed information about the position and information about how to apply can be found at

“<http://www.uu.se/en/about-uu/join-us/details/?positionId=217586>” Closing date for application is September 17, 2018

For further information about the position, please contact Professor Jon Ågren jon.agren@ebc.uu.se or Professor Ulf Lagercrantz Ulf.Lagercrantz@ebc.uu.se

Jon Ågren Plant Ecology and Evolution Department of Ecology and Genetics Evolutionary Biology Centre Uppsala University Norbyvägen 18 D SE-753 36 Uppsala Sweden

När du har kontakt med oss på Uppsala universitet med e-post innebär det att vi behandlar dina personuppgifter. För att läsa mer om hur vi gör det kan du läsa här: <http://www.uu.se/om-uu/dataskydd-personuppgifter/> E-mailing Uppsala University means that we will process your personal data. For more information on how this is performed, please read here: <http://www.uu.se/om-uu/dataskydd-personuppgifter/> Jon Ågren <jon.agren@ebc.uu.se>

UQuebec AbitibiTemiscamingue ForestPopGenetics

“TENURE TRACK PROFESSOR IN MOLECULAR BIOLOGY OF SPECIES ASSOCIATED WITH FOREST ECOSYSTEMS

Competition no 2018-61

FUNCTION :

The candidate must be able to develop a research program in molecular biology, more especially in relation to species associated with forest ecosystems, which could include genetic improvement of trees. The candidate should be interested in the application of population genetics, functional genomics or environmental genomics to issues related to forest ecology and forestry. The candidate must demonstrate excellence in the proposed field of research in order to be eligible for the major granting agencies, including the John R Evans Leaders Fund. It should be noted that IRF has a state-of-the-art laboratory in molecular biology that allows the candidate to quickly start their research program. The candidate should also have an interest in doing research in partnership with companies and government agencies associated with forestry, wildlife management, as well as ecological restoration. The candidate must be able to work in a small university in a region whose mission is, among other things, to contribute to the socio-economic development of the community. The professor will supervise graduate students in the Master’s Degree in Ecology and the Doctoral Degree in Environmental Sciences, two of the graduate programs offered at UQAT.

REQUIREMENTS :

- . Ph. D. in Ecology, Environment, Genetics, Biology, Forestry or a related discipline with expertise in molecular biology;
- . Candidates who have submitted their doctoral thesis could be considered. The candidate will have to commit to all the steps leading to graduation;
- . A research file demonstrating significant scientific productivity;
- . Excellent knowledge of written and spoken French (language of teaching), or the intent to acquire it.

OTHER CRITERIA CONSIDERED AS AN ASSET:

- . A postdoctoral fellowship as well as experience in industry or government

PRIMARY WORK LOCATION: Rouyn-Noranda

START DATE: June 1st, 2019

DURATION OF CONTRACT: 2 years (tenure-track position)

SALARY: Salary is based on the qualifications and experience of each candidate according to the current collective agreement.

In compliance with Canada's immigration requirements, this competition gives priority to Canadian citizens and permanent residents of Canada. UQAT fully adheres to principles of equity, diversity and inclusion, and provides equal employment opportunities to women, persons with disabilities, Aboriginals and visible minorities

APPLICATION:

Please include a detailed curriculum vitae, a letter of motivation in which you will describe your teaching philosophy, a document summarizing the main orientations of your proposed research program (about two pages), two letters of recommendation, the doctorate diploma or a letter from the thesis director mentioning the date of submission of the thesis.

SPECIFIC CONDITION: For your application to be considered, you must enclose an equal access to employment form, duly completed. Please download and print the form from our website (www.uqat.ca/emplois).

All applications will be treated confidentially. Interested candidates must submit their complete application package together with a copy of their diploma, specifying the competition number, before November 30th, 2018 at 4:30 pm, to the attention of:

M. Louis Imbeau, codirector Institut de recherche sur les forêts Université du Québec en Abitibi-Témiscamingue 445, boulevard de l'Université Rouyn-Noranda (Québec) J9X 5E4 Phone : 1 819 762-0971, poste 8335 Fax : 1 819 797-4727 Email : louis.imbeau@uqat.ca

"Imbeau, Louis" <Louis.Imbeau@uqat.ca>

USDA Hilo Biological Technician 1

Permanent Full-time Biological Science Technician Position at USDA-ARS in Hilo, HI

Position: Biological Science Technician

Salary Range: \$42,462 to \$55,199 per year

The U.S. Department of Agriculture, Agricultural Research Service, Tropical Crop and Commodity Protec-

tion Research Unit in Hilo, Hawaii, invites applications for a Biological Science Technician position.

The incumbent will be expected to actively participate in one or more phases of the research process by performing a variety of complex technical duties in a laboratory, field, or insectary setting to satisfy the needs of an insect-related research project. Duties may include but are not limited to:

- * The preparation of samples for genetic analysis
- * Collection of insect genetic, behavioral or ecological data
- * Detailed data documentation and analysis
- * Laboratory resource management and maintenance
- * Insect colony maintenance, rearing, and husbandry
- * Mentoring undergraduate research assistants

This position requires one full year of progressively higher level graduate education leading to a masters or equivalent graduate degree, if directly related. Related degrees may include biology, entomology, molecular biology, ecology, evolution, or a related field of study that provided the knowledge, skills and abilities to perform the duties of the position. OR one year of specialized experience comparable to GS-06 which is directly related to the work of this position such as collecting, maintaining, and measuring biological samples, assisting with molecular biology techniques in a laboratory environment; and assisting in experiments by collecting biological samples, recording biological data and summarizing research results.

The applicant must be an U.S. citizen or a lawfully admitted permanent resident who will apply for citizenship when eligible. Applicants must clearly indicate their country of citizenship or legal status in their resume/CV.

The position is full time. A comprehensive benefits package is available.

Applicants should apply online at:

<https://www.usajobs.gov/GetJob/ViewDetails/-512114900> ***Multiple vacancies may be filled from this announcement***

The position is open immediately until October 12, 2018.

ARS is an Equal Opportunity Employer and Provider

"Sim, Sheina - ARS" <Sheina.Sim@ARS.USDA.GOV>

USDA Hilo Biological Technician 2

Permanent Full-time Biological Science Technician Position at USDA-ARS in Hilo, HI

Position: Biological Science Technician

Salary Range: \$42,462 to \$55,199 per year

The U.S. Department of Agriculture, Agricultural Research Service, Tropical Crop and Commodity Protection Research Unit in Hilo, Hawaii, invites applications for a Biological Science Technician position.

The incumbent will be expected to actively participate in one or more phases of the research process by performing a variety of complex technical duties in a laboratory, field, or insectary setting to satisfy the needs of an insect-related research project. Duties may include but are not limited to:

- * Collection of insect genetic, behavioral or ecological data
- * Detailed data documentation and analysis
- * Laboratory resource management and maintenance
- * Insect colony maintenance, rearing, and husbandry

This position requires one full year of progressively higher level graduate education leading to a masters or equivalent graduate degree, if directly related. Related degrees may include biology, entomology, agriculture, ecology, or a related field of study that provided the knowledge, skills and abilities to perform the duties of the position. OR one year of specialized experience comparable to GS-06 which is directly related to the work of this position such as collecting, maintaining, and measuring biological samples, assisting with rearing and insect husbandry in a field setting or insectary; and assisting in experiments by collecting biological samples, recording biological data and summarizing research results.

The applicant must be an U.S. citizen or a lawfully admitted permanent resident who will apply for citizenship when eligible. Applicants must clearly indicate their country of citizenship or legal status in their resume/CV.

The position is full time. A comprehensive benefits package is available.

Applicants should apply online at:

<https://www.usajobs.gov/GetJob/ViewDetails/>

512115600 ***Multiple vacancies may be filled from this announcement***

The position is open immediately until October 12, 2018.

ARS is an Equal Opportunity Employer and Provider
"Sim, Sheina - ARS" <Sheina.Sim@ARS.USDA.GOV>

USheffield BioinformaticDataAnalyst

We are seeking a Research Associate with relevant bioinformatic skills and experience in analysing DNA sequence datasets, including metabarcoding and population genetic analyses, who will join the NERC Biomolecular Analysis Facility (NBAF) node in Sheffield. You will assist Facility users with study design, data analysis and training, and contribute to the node's research and development activities. Applicants should have a PhD or equivalent experience in molecular ecology or evolutionary genetics, including genetic analyses (for example, diet analysis, studies of biodiversity, eDNA, population structure, mating systems, linkage mapping or phylogeny) and possess excellent analytical skills, preferably including experience of bioinformatic programming tools.

We're one of the best not-for-profit organisations to work for in the UK. The University's Total Reward Package includes a competitive salary, a generous Pension Scheme and annual leave entitlement, as well as access to a range of learning and development courses to support your personal and professional development.

We build teams of people from different heritages and lifestyles from across the world, whose talent and contributions complement each other to greatest effect. We believe diversity in all its forms delivers greater impact through research, teaching and student experience.

Deadline 1/10/18

More information and Apply: <https://www.jobs.ac.uk/-job/BMK063/research-associate> – Céline Pagnier

Secretary, NERC Biomolecular Analysis Facility (NBAF) & Personal Assistant to Professor Terry Burke
Dept of Animal & Plant Sciences University of Sheffield
Sheffield, S10 2TN UK

Tel +44 (0)114 222 4314

Voted number one for student experience Times Higher

Education Student Experience Survey 2014-2015

Please note that I do not work on Wednesdays.

Celine pagnier <c.pagnier@sheffield.ac.uk>

UTexas ElPaso ClimateAdaptation

ASSISTANT PROFESSOR - GLOBAL CHANGE BIOLOGIST

The University of Texas at El Paso College of Science
Department of Biological Sciences

POSITION DESCRIPTION: The Department of Biological Sciences at the University of Texas at El Paso (UTEP) invites applications for a tenure-track assistant professor position for a Global Change Biologist. In particular, we are seeking candidates with expertise in organismal biology and the use of state-of-the-art approaches to study adaptation, habitat shifts, and behavioral and/or other responses to global change. Prospective candidates working at higher ecological levels (e.g., populations, communities, ecosystems), particularly in the US Southwest, are also encouraged to apply. The anticipated appointment date is fall 2019 or earlier. The successful candidate is expected to establish an extramurally funded research program; to teach and mentor undergraduate, masters', and doctoral students; and to serve as a member of the Ecology and Evolutionary Biology (EEB) core faculty. Candidates' research should have a strong potential for collaboration with existing EEB faculty and be able to attract extramural funding.

ABOUT THE DEPARTMENT: The Department of Biological Sciences is among the most productive departments at UTEP and contributes to interdisciplinary graduate programs in Environmental Science, Environmental Science and Engineering, Bioinformatics, and Computational Science. An EEB doctoral program has recently been established. Existing faculty expertise includes ecological, evolutionary, biomedical, and education research fields. Core facilities include capacities for DNA Next-Gen sequencing, bioinformatics, and statistics; Biodiversity Collections; a green roof; and a greenhouse. The department also manages the 38,000-acre Indio Mountains Research Station. Current EEB faculty conduct research throughout the Chihuahuan Desert, Arctic, Congo, Southeast Asia, and Central and South America. More information is available at the Department of Biological Sciences website.

ABOUT UTEP: Located in one of the largest binational

communities in the world, The University of Texas at El Paso is unique among research institutions. UTEP enrolls more than 25,000 students, most of whom are Hispanic. The Brookings Institution in 2017 ranked UTEP as the No. 1 leader in equal access to higher education, based on a combination of research productivity and student social mobility. The University has annual externally funded research expenditures of \$95 million, maintains an operating budget of \$500 million and employs 4,000 people. With 172 bachelor's, master's and doctoral degree programs available in eight colleges and schools, UTEP is the first national research university serving a 21st century student demographic.

REQUIRED QUALIFICATIONS: Applicants must have a Ph.D. or equivalent degree, postdoctoral research experience, and a strong record of research accomplishments.

APPLICATION PROCEDURES: Review of applications will begin immediately and continue until the position is filled. Candidates must submit a letter of interest, curriculum vitae, statement of research interest, a brief description of teaching and service philosophy, and complete contact information for at least three references.

FOR QUESTIONS about the position, you may contact Prof. Craig Tweedie, Search Committee Chair at ctweedie@utep.edu.

TO APPLY: please visit www.utep.edu/employment

Hiring decisions are based on budget approval. In keeping with its Access and Excellence mission, the University of Texas at El Paso is committed to an open, diverse, and inclusive learning and working environment that honors the talents, respects the differences, and nurtures the growth and development of all. The University of Texas at El Paso does not discriminate on the basis of race, color, national origin, sex, religion, age, disability, genetic information, veteran's status, sexual orientation or gender identity in employment or in the provision of services.

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

UToronto 3 EvolutionaryBiol

Ecology and Evolutionary Biology, University of Toronto

The Department of Ecology and Evolutionary Biology < <http://www.eeb.utoronto.ca/> >—at the University

of Toronto invites applications for up to 3 tenure-stream appointments in Ecology and Evolution at the rank of Assistant Professor, with an expected start date of July 1, 2019.

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

The successful candidate must have a PhD in ecology, evolution or a related field by July 1, 2019 or soon thereafter. Candidates must have a demonstrated record of excellence in research with publications in top-ranked, field-relevant journals.— The successful candidate will be expected to mount an independent, innovative, active, externally funded and internationally recognized research program. The successful candidate will also demonstrate excellence in teaching and contributions to the education and training of undergraduate and graduate students. Evidence of demonstrated excellence in research and teaching should be documented through the applicant's CV, publications, research and teaching statements, strong letters of reference from referees of high standing and where appropriate, course evaluations.

Salary to be commensurate with qualifications and experience.

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

All qualified candidates are invited to apply—online at <https://utoronto.taleo.net/careersection/10050/jobdetail.ftl?job=1802289&tz=GMT-04%3A00> Applications must include a CV and statements of research and teaching interests combined into a single PDF file, plus three representative publications. Applicants should arrange to have three confidential letters

of recommendation (signed and on letterhead) sent directly to: Professor Donald Jackson, Chair, Department of Ecology and Evolutionary Biology, University of Toronto by email to: _chairsec.eeb@utoronto.ca <<mailto:chairsec.eeb@utoronto.ca>>—or mailed to 25 Willcocks Street, Toronto, Ontario, M5S 3B2 Canada. Deadline for receipt of applications, including reference letters, is September 19, 2018.

For further information on the Department of Ecology and Evolutionary Biology, please visit our website at <http://www.eeb.utoronto.ca/>. Questions regarding this position can be directed to Liz Rentzelos at: _chairsec.eeb@utoronto.ca <<mailto:chairsec.eeb@utoronto.ca>>—or—(416-946-3340).

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

As part of your application, you will be asked to complete a brief diversity Survey. This survey is voluntary. Any information directly related to you is confidential and cannot be assessed by the search committee or human resources staff. Results will be aggregated for institutional planning purposes. For more information, please see <http://uoft.me/UP>. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

Asher D. Cutter Professor and Associate Chair Undergraduate Department of Ecology and Evolutionary Biology University of Toronto 25 Willcocks St. Toronto, ON, M5S 3B2

tel: 416-978-4602 email: asher.cutter@utoronto.ca

— / —

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

UToronto Mississauga Mycology

Assistant Professor - Mycology - # 1803891 The Department of Biology at the University of Toronto Mississauga

(UTM) invites applications for a tenure-stream appointment in Mycology, at the rank of Assistant Professor, commencing July 1, 2019.—

We are searching for an outstanding scientist who addresses fundamental questions in fungal biology. The department is particularly interested in an individual who would bring complementary research, teaching and technical expertise. Topics of interest include but are not limited to:— - Ecology and Evolution - Systematics, speciation, biodiversity - Fungal metabolism and biochemistry - Population genetics

Applicants must have a Ph.D. in Biology or closely related field, post-doctoral experience, and demonstrated excellence in research and teaching.—

Evidence of excellence in research will be demonstrated by publications in top ranked, peer reviewed and field relevant academic journals, presentations at significant conferences, awards and accolades, and strong endorsements by referees of top international stature. The candidate must also demonstrate excellence in teaching. This can be accomplished through strong endorsements from referees and a teaching portfolio, including—a coherent statement of teaching philosophy, teaching accomplishments, and excellent course evaluations, or demonstrated excellent performance in other teaching related activities, including performance as a teaching assistant, student mentorship, experience leading successful workshops or seminars, or excellent conference posters or presentations.

The successful applicant is expected to develop and maintain an active, independent, innovative and externally funded program of research and to contribute to the education and training of undergraduate and graduate students in the Department of Biology, University of Toronto Mississauga. This individual will also be appointed to the tri-campus graduate Department of Ecology and Evolutionary Biology at the University of Toronto. For more information on the Department of Biology please visit our webpage at—<http://www.utm.utoronto.ca/biologyInformation> on the graduate unit can be found at—<http://www.eeb.utoronto.ca/>.— The University of Toronto Mississauga and its affiliated institutions offer a stimulating and supportive environment with a variety of facilities and a highly interactive community of researchers. We seek applications from individuals whose research program would complement existing departmental research strengths. Excellent opportunities exist for collaboration within the Department of Biology, with other departments at UTM, as well as with faculty at the St. George and Scarborough campuses of the University of Toronto.

Salary will be commensurate with qualifications and

experience.— All qualified applicants are invited to apply online by clicking the link below.— Applications must include a cover letter, curriculum vitae, a statement outlining current and future research interests, three representative publications, and the teaching portfolio to include a statement on teaching philosophy and experience, course evaluations, teaching accomplishments, or evidence of other teaching related activities. Submission guidelines can be found at:—<http://uoft.me/how-to-apply>. We recommend combining attached documents into one or two files in PDF/MS Word files in the following format:

- 1) Letter, CV, research statement, and teaching portfolio
- 2) Publications

Applicants should arrange for three signed letters of reference from individuals familiar with the candidate's research and teaching to be sent directly to: Dr. Joel Levine, Chair, Department of Biology, University of Toronto Mississauga, by email (on letterhead, signed and scanned) to:—<mailto:biology.utm@utoronto.ca><http://biology.utm@utoronto.ca/> If you have any questions regarding this position please contact Prof. Joel Levine at—<mailto:biology.utm@utoronto.ca>.

Closing date for submissions is November 12, 2018 11:59 pm EST.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

As part of your application, you will be asked to complete a brief Diversity Survey. This survey is voluntary. Any information directly related to you is confidential and cannot be accessed by search committees or human resources staff. Results will be aggregated for institutional planning purposes. For more information, please see—<http://uoft.me/UP> .

— / —

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>

UUtah Evolutionary Genetics Genomics

Tenure-track positions in Evolutionary Genetics and Genomics

<https://utah.peopleadmin.com/postings/68353> The new Cluster in Evolutionary Genetics and Genomics at the University of Utah (<http://www.ucegg.org>) invites applications for multiple open positions in Evolutionary Genetics and Genomics. Academic appointments may be in the School of Biological Sciences (College of Science) or Department of Human Genetics (School of Medicine). Successful applicants will join a vibrant intellectual community across the University of Utah working at the interface of genomics, computational biology, and molecular biology. The Cluster will build on substantial, ongoing investments in genome science and experimental basic science at the University of Utah, a unique and inclusive community at the foothills of the Wasatch Mountains with nearby world-class cultural and recreational opportunities.

Competitive candidates will demonstrate an ability to develop independent and vigorous research programs. Applications by investigators, both experimental and theoretical, in all areas of evolutionary genetics and genomics of any organism(s) are encouraged. Examples of areas that will be considered include (but are not limited to): microbial evolutionary genomics, vertebrate or plant population genomics, comparative evolutionary genetics and developmental biology, and human evolutionary genomics. Faculty hired through this initiative will participate in the development and teaching of innovative courses. We expect to make two faculty appointments in the 2018-2019 academic year. Openings are at the Assistant Professor level, but exceptional candidates at the Associate Professor and Professor level will be considered.

All applicants should submit: (1) a cover letter with contact information; (2) a CV, (3) description of current and proposed research (3 pages maximum); (4) a statement of teaching experience and interests (1 page maximum); (5) a description of past and/or potential contributions to advancing diversity, inclusion, and equitable access to education (1 page maximum); and (6) up to three reprints and/or preprints. Applicants at the Assistant Professor level should also arrange for three

letters of recommendation to be sent on their behalf before the deadline. Initial interview selections will begin on October 1, 2018, but applications submitted at a later date may be considered. Applicants to other searches at the University of Utah with appropriate experience may be considered in this applicant pool.

EEO/Diversity Information

The University of Utah is an Affirmative Action/Equal Opportunity employer and does not discriminate based upon race, national origin, color, religion, sex, age, sexual orientation, gender identity/expression, status as a person with a disability, genetic information, or Protected Veteran status. Individuals from historically underrepresented groups, such as minorities, women, qualified persons with disabilities and protected veterans are encouraged to apply. Veterans' preference is extended to qualified applicants, upon request and consistent with University policy and Utah state law. Upon request, reasonable accommodations in the application process will be provided to individuals with disabilities. To inquire about the University's nondiscrimination or affirmative action policies or to request disability accommodation, please contact: Director, Office of Equal Opportunity and Affirmative Action, 201 S. Presidents Circle, Rm 135, (801) 581-8365.

Mike Shapiro <shapiro@biology.utah.edu>

UVirginia ResTech Parasite Evolution

The Gibson lab in the Biology Department at the University of Virginia is hiring a research technician to help in lab management and research.

The lab studies parasites as drivers of evolutionary change in wild, artificial, and agricultural systems. To test evolutionary and ecological hypotheses, we synthesize data from field observations and experimental manipulations, with guidance from theoretical models and experimental evolution. Our current study organisms include the free-living nematode *Caenorhabditis elegans* and its natural parasites, plus plant-parasitic nematodes of the genus *Meloidogyne* and their bacterial parasite *Pasteuria penetrans*. The person in this position will be responsible for assisting with the lab's research projects by conducting experiments and field collections, coordinating team members, and collecting and analyzing data. This person will also manage the day-to-day operations of the lab by maintaining host populations,

training and managing undergraduate researchers, ensuring compliance with environmental safety standards, and maintaining protocols, lab supplies, and equipment. Start date: January 2019.

Visit the complete posting (#0623982) on Jobs@UVA at: jobs.virginia.edu/applicants/Central?quickFind=424

Contact Ashley Cochran at alc6dk@virginia.edu with questions

Amanda Kyle Gibson, Ph.D.

<https://amandakylegibson.wordpress.com/> Assistant Professor Department of Biology University of Virginia Charlottesville, VA, USA

akg5nq@virginia.edu

Wissenschaftskolleg zu Berlin Institute for Advanced Study Berlin, Germany

amanda.gibson@wiko-berlin.de

“Gibson, Amanda Kyle (akg5nq)”
<akg5nq@virginia.edu>

WellcomeSangerInst HeadTreeOfLife

Head of Programme - Tree of Life

Reporting to the Director of the Institute, the Programme Head will build and lead a scientific research team as part of a global consortium to deliver this visionary genome sequencing initiative and associated research programme. You will be a recognised authority in your field, who will take a lead in defining the strategy and scientific priorities for the Tree of Life programme in line with the Institute’s mission to undertake leading edge genome research and provide insight into evolution and genetic variation, underpinned by large-scale, high throughput DNA sequencing. The role includes programme oversight, the recruitment of additional faculty to the programme, and active involvement in the senior management team steering the scientific and corporate direction of the Institute.

You will be at the centre of the UK-wide Darwin Tree of Life Project, dedicated to sequencing all eukaryotic species in the UK (estimated at c66K), as well as representing the Institute within the International Earth Biogenome Project. This will include collaboration and active engagement with scientists at the Royal Botanic Gardens, Natural History Museum-London, Smithsonian Institution, Max Planck Institute, Earlham Institute,

and many others.

In addition to providing scientific leadership and contributing to the science delivered through the Tree of Life, the Programme Head will oversee the logistical aspects of programme such as sample collection and field-based protocols and will work closely with the Institute’s sequencing and computational platforms.

The Head will be required to balance the complex people and project needs with programme strategy and resource considerations, and ensure effective and synergistic alignment of the programme with the wider Darwin and Earth Biogenome initiatives.

This is an open role subject to a 6-year review process

Essential Skills a. Previous management or supervision of technical/professional individuals and groups b. A strong track record of scientific publication and impact in a relevant field, including the presentation and derivation of insight from genomic data c. Experience of managing complex projects involving internal and external stakeholders d. Experience of delivering best research practice, emphasising integrity, quality, efficiency and value for money e. Experience of engaging learners, stakeholders and decision makers f. Excellent communicator with an ability to develop and maintain relationships inside and outside own area of expertise g. Effective written and oral communication skills and the ability to engage a range of internal and external audiences h. Demonstrable ability to build and sustain strong interpersonal relationships i. Strong personal leadership skills including the ability to inspire, convey a passion and direction which motivates the team, instilling pride and a feeling of success j. Strong strategic leadership skills with the ability to formulate and articulate a clear vision for the programme and oversee its implementation k. An effective team player, promoting inclusive and collaborative behaviour with the ability to recognise and get the best from different personal styles l. Demonstrates and proactively advocates inclusivity and respect for all m. Flexibility and adaptability to changing circumstances

The Wellcome Sanger Institute is a charitably funded research centre and committed to training the next generation of genome scientists. Focused on understanding the role of genetics in health and disease and a world leader in the genomic revolution, our mission is to use genome sequences to advance understanding of human and pathogen biology in order to improve human health. We aim to provide results that can be translated into diagnostics, treatments or therapies that reduce global health burdens. Our science is large-scale and organised into Programmes, led by our Faculty who conceive and deliver our science, and supported by our Scientific Oper-

ations teams responsible for all data production pipelines at the Institute. Our Campus: Set over 125 acres, the stunning and dynamic Wellcome Genome Campus is the biggest aggregate concentration of people in the world working on the common theme of Genomes and BioData. It brings together a diverse and exceptional scientific community, committed to delivering life-changing science with the reach, scale and imagination to pursue some of humanity's greatest challenges. Our Benefits: Our employees have access to a comprehensive range of benefits and facilities.

The Wellcome Sanger Institute is an Equal Opportunity employer. As part of our commitment to equality, diversity and inclusion and promoting equality in careers in science, we hold an Athena SWAN Bronze Award and have an active Equality, Diversity and Inclusion programme of activity. We will consider all applicants without discrimination on

— / —

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>

Wiley editor

Wiley, the publishing company, is looking for a person with PhD in ecology/evolution to work on our journal Ecology & Evolution.

The job posting is here:

https://career4.successfactors.com/-career?career_ns=job_listing&company=Wiley&navBarLevel=JOB_SEARCH&rcm_site_locale=en_US&career_job_req_id=32147&selected_lang=en_US&jobAlertController.jobAlertId=&jobAlertController.jobAlertName=&_s.crb=VGb9%2bSKJM978Y04n1Tupkpk%2b9rU%3d
Location either Oxford UK or Hoboken, New Jersey.

“Chambers, Karen” <kchamber@wiley.com>

ZFMK Leibniz ComparativeGenomics Programmer

Scientific Programmer Position

The rapid increase in genomic/biodiversity datasets due to the advances in next generation sequencing techniques requires the development and maintenance of a sophisticated analytical infrastructure. The Center of Molecular Biodiversity Research (<https://www.zfmk.de/en/zmb>) at the Zoological Research Museum Alexander Koenig (ZFMK) seeks enthusiastic, creative, and productive applicants for a full time position in scientific programming.

Remit: Set up, test, document, and apply software pipelines for the analysis of NGS data; Benchmark bioinformatic tools; Engage in data management of large scale molecular data; Provide support in the analysis of NGS data.

Required qualifications: It is essential that the applicant has Bachelor or Master degree in Computational Biology or a closely related field, or equivalent experience, with strong emphasis on the combination of molecular biology and computer science; Team orientation with excellent organizational and collaboration skills and an eagerness to learn; Excellent communication skills in German and English; Good proficiency in at least one scripting language and the Linux command-line; Experience with analysing NGS data (computational skills); Experience with HPC computing.

We offer a highly motivating environment and ability to work in a great team. Salary and benefits are according to a public service position in Germany (TV-L E 11). The ZFMK advocates gender equality.

Women are therefore strongly encouraged to apply. Equally qualified severely disabled applicants will be given preference. The contract will start as soon as possible and will initially be restricted to two years. A tenured position will be subject to personal performance reviewed by a commission.

The ZFMK is a Zoological Research Museum of the Leibniz Association cooperating with the University of Bonn, funded by the Federal State of NRW and the federal government. The Center of Molecular Biodiversity Research (zmb) has been established to foster molecular research spanning from genomics and speciation genetic research to developing high-throughput bar-coding applications. Please send your application by e-mail attachment, including a detailed CV, until September 21st 2018 to Mrs. Heike Lenz (e-mail: h.lenz@leibniz-zfmk.de).

In case of questions concerning the position please contact Prof. Dr. Bernhard Misof, Head of the Center of Molecular Biodiversity Research (e-mail: b.misof@leibniz-zfmk.de). For more information about the museum see <http://www.leibniz-zfmk.de> Bernhard Misof <bmisof@uni-bonn.de>

Other

Bordeaux InferringDemographicHistoryOfSpeciation Internship	76	Smithsonian Internship ButterflyAdaptation	80
CostaRica FieldEcology Dec28-Jan16	77	Teaching Evolution	81
CurrentZoology	78	Teaching MathInBiology	81
EvolBiologyScience CyclingTour	78	Teaching PlantEvolution	82
EvolutionInChangingSeas	79	UtahStateU Smithsonian Intern LifeHistoryEvolution-Bees	82
EvolutionThemed Video ContributionsWanted	79		
Paris AppleDomestication Internship	79		

Bordeaux InferringDemographicHistoryOfSpeciation Internship

We are looking for a master 2 student for an internship project. The aim of the project is to find the best way to infer the demographic history of species complexes during speciation.

Ludovic Duvaux, Carole Smadja, Roger Butlin & Christophe Plomion

**

*Title: Using population genetics demographic methods to infer speciation history of species complexes with high gene flow: comparing pairwise and multi-species approaches. *

_ *General information * Supervisor: Dr. Ludovic Duvaux (INRA Pierroton, France) Co-supervisors: Dr. Carole Smadja (CNRS Montpellier, France), prof. Roger Butlin (University of Sheffield, UK), Dr. Christophe Plomion (INRA Pierroton, France) Host laboratory: UMR BioGeCo (UMR 1202), Cestas-Pierroton, France Contact: ——— Ludovic Duvaux (ludovic.duvaux@inra.fr) ——— ——— ——— Carole Smadja (carole.smadja@umontpellier.fr)

*Practical information * Lab location: the laboratory is situated on a small campus between Bordeaux (20 km) & Arcachon (40 km). Being dedicated to wood and forest management, it offers a nice working environment within a beautiful forest domain and gives prominence to wooden structures and furniture. Transport: The campus is connected to accommodation specifi-

cally dedicated to foreign students (<https://www.crous-bordeaux.fr/international-2/>) by straightforward public transport (train station plus 2 shuttles each direction every day). Salary: 568.5 euro /month

*Project summary * The large amount of genomic data available nowadays allows us to infer the demographic history of species. It is especially interesting to use these data and methods to infer the history of species differentiation, that is to understand the process of speciation. Methods of demographic inferences generally consider 2 populations/species at a time. Although straightforward, this can lead to spurious results where one considers complexes where several species present incomplete reproductive isolation to each others (aka species complexes). Methods do exist to analyse multiple species simultaneously, however they require to know the phylogeny of incipient species a priori. This prerequisite is really complicated to fulfil for some species complexes as high levels of gene flow can strongly blur the real phylogeny of incipient species. Therefore, there is no satisfying method currently in existence to infer simultaneously the order of incipient species separations (aka the phylogeny) and the speciation parameters (rate of gene flow between incipient species, divergence time, effective population sizes) for species complexes with high gene flow. Using an approximate Bayesian computation framework including machine learning, this project aims to determine the best way to infer the speciation history of species complexes with high gene flow by comparing pairwise and multi-species approaches of demographic inferences.

*Description * _Background:_ The large amount of genomic data available nowadays allows us to infer the demographic history of species (e.g. estimations of population size, gene flow rates and divergent time between species). This allows us to assess the impact of histori-

cal events on population evolution, a famous example being the impact of ice age cycles on patterns of genetic diversity of species. Inferring the demography of incipient species is also required to understand how they diverge, that is the speciation process. Speciation comes along with reproductive isolation (RI) and RI is driven by the accumulation of reproductive barriers during a period called the “grey zone of speciation” (Roux et al. 2016). During this period, incipient species are not totally reproductively isolated yet. Demographic inferences are ideal to study this period since speciation research has shown the key role of (i) divergence times and (ii) inter-species migration (aka gene flow), further to adaptation, in barrier accumulation (Abbot et al. 2013). For instance, this approach is able to test for gene flow during divergence while also characterising the evolution of effective population sizes and estimating divergence times (Roux et al. 2016).

Demographic inference methods usually consider 2 populations/species at a time, i.e. pairwise methods (Nielsen & Wakeley 2001). Although straightforward and robust (Beaumont 2008; Strasburg & Rieseberg 2010), this can lead to spurious results where one considers complexes where several incipient species present incomplete reproductive isolation to each other (aka species complexes). Methods do exist to analyse multiple species simultaneously, however they require to know the phylogeny of incipient species a priori (e.g. Hey 2010). This prerequisite may be very hard or even impossible to reach for some species complexes with

— / —

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

CostaRica FieldEcology Dec28-Jan16

The Organization for Tropical Studies and the University of Costa Rica are pleased to announce our upcoming course: Field Ecology: Skills for Science and Beyond 2019-1. Please circulate the information below on your campus to graduate students, colleagues, and other departments.

Course dates: December 28, 2018 - January 16, 2019

Application deadline: November 23, 2018 (followed by

rolling admissions until filled)

Field Ecology: Skills for Science and Beyond is an intensive, three-week course that will challenge you in every way. At its heart lie the highly regarded OTS “field-inspired research problems”, which engage students in the fast-paced formulation of research questions based on field observations, experimental design, data collection, analysis, and both oral and written presentations. Students will take away advanced skills in research design, data analysis, writing, science communication and collaborative research - all in the breath-taking tropical setting that is Costa Rica. The 2019 course will place emphasis on research and analysis tools as well as science communication. Key skills for research in fields as ecology, evolutionary biology, zoology, botany, among others; the same as jobs in conservation, management and education. We guarantee you will return to your home institution a better scientist.

Course participants are eligible for pilot and thesis research awards provided by the OTS research fellowship program, which supports research at OTS field stations. Students must complete the course successfully to be eligible, but may apply in advance (by November 23) following instructions on the OTS at

https://tropicalstudies.org/?option=com_content&task=view&id=170&Itemid=344

OTS Course Coordinator, Carissa Ganong (PhD University of Georgia; assistant professor of biology, Missouri Western State University) will be joined by Co-coordinator Darko D. Cotoras (PhD University of California, Berkeley; Research Associate at the California Academy Sciences, San Francisco) and invited professors from Latin America and the USA.

More information and online application instructions are available at

<https://education.tropicalstudies.org/en/education/graduate-opportunities/programs/field-ecology-skills-for-science-and-beyond.html> All OTS Education opportunities are showcased on our redesigned website at www.tropicalstudies.org or contact:

Graduate Education - Costa Rican Office graduate@tropicalstudies.org

Darko D. Cotoras Viedma, PhD Research Associate Entomology Department. California Academy of Sciences

<https://www.calacademy.org/staff/ibss/entomology/darko-cotoras>

Darko Cotoras

<darkocotoras@gmail.com>

Current Zoology

Special Issue of Current Zoology: Social behavior and evolution in the -omics era

We are soliciting titles and abstracts for a special issue of Current Zoology.

https://academic.oup.com/cz/pages/social_behavior

Deadline for abstract submission: 30 September 2018

Deadline for manuscript submission: 30 January 2019

Publication: Issue 4, 2019

Please contact Jaime Grace or Philip Johns with questions or submissions

Jaime Leigh Grace
Bradley University Biology Department
1501 W Bradley Ave Peoria IL 61625 USA
jgrace@bradley.edu

Philip Johns
Yale-NUS College Life Sciences 28 College Ave West #01-501 Singapore 138533
philip.johns@yale-nus.edu.sg

The genomics revolution of recent decades has given us tools to study the genetic influences on almost any kind of trait. The ease with which we can collect genomic, transcriptomic, and proteomic data opens up new avenues of research questions that were impractical or even unimaginable only a few years ago. For example, we can test hypotheses about the -omic basis of a range of behaviors of interest to evolutionary biologists and behavioral ecologists - in particular, the molecular basis of naturally occurring social behaviors. Furthermore, we are not limited to a few model organisms; we can collect genomic and transcriptomic data on non-model organisms. We can even collect large genomic datasets on non-model organisms in the field. The aim of this Special Column is to address genomic, transcriptomic, and proteomic research on naturally occurring social behaviors in animals, both model and non-model organisms, including: parent-offspring behaviors, cooperation, aggressive and agonistic behaviors, mating displays, and mate preference. We are also interested in studies that explore the possibilities and pitfalls of conducting genomic studies in the field and on non-model animals. We hope to include a broad body of research on different species and approaches in addressing this topic, but we are especially interested in naturally occurring behaviors and natural systems.

Researchers interested in contributing to this special

column should send a title and abstract to the guest editors. Manuscripts should be submitted before the deadline. Manuscripts received after the deadline will be considered as submissions for regular issues.

Submitted papers should not have been published previously, nor be under consideration for publication elsewhere. Submitted manuscripts are accepted with the understanding that they are subject to peer review and editorial revision. Publication is free of page charges. All articles are available for readers to find and read for free online complying with the Open Access policies of many research funding bodies.

philip.johns <philip.m.johns@gmail.com>

EvolBiology Science Cycling Tour

A new outreach announcement of interest to biologists.

We are starting a 5-day seminar of talks about Biodiversity, ecology and evolution next week. This initiative combines science and bikes to call attention right after the official Tour of Spain (Vuelta Ciclista a España). In particular, a small group of five Spanish scientists (A. Escudero, Luis Navarro, Jose Sanchez, F. Valladares and yours truly) are starting the first Science Cycling Tour next Monday. Every day we will join two universities at a bicycle distance to communicate science: new classification of living organisms, global change, invasive species and plant-animal networks.

You can see more details at: <https://sen.world/event/-science-cycling-tour-vcc-2018/> Pablo Prof. Pablo Vargas Royal Botanical Garden of Madrid Plaza de Murillo 2, 28014-Madrid, Spain phone no. 34914203017

Website <http://www.rjb.csic.es/jardinbotanico/jardin/-contenido.php?Pag=386&tipo=cientifico&cod=-96&len=es>

The Tree of Life (<http://www.sinauer.com/the-tree-of-life-638.html>) PABLO VARGAS GOMEZ <vargas@rjb.csic.es>

EvolutionInChangingSeas

We are happy to announce the Research Coordinated Network for Evolution in Changing Seas. We are funded by the National Science Foundation to bring together marine scientists with evolutionary biologists who have traditionally not worked in marine systems. Our goal is to develop integrated frameworks for studying adaptation to ocean change.

Membership in this network is open for any participants who would like to join. We will be developing some remote activities (e.g., coordinated readings), as well as funding workshops and working groups over the next three years.

For directions on how to join and more information on planned activities, please visit:

<https://rcn-ecs.github.io/> We welcome all people of diverse career stages (from student to principle investigators), races, ethnicities, religions, genders, sexual orientations, gender identifications, abilities, incomes, marital statuses, ages, geographic locations, philosophies, and veteran statuses to join the network.

Sincerely,

The Steering Committee for RCN-ECS

Katie Lotterhos <k.lotterhos@northeastern.edu>

EvolutionThemed Video ContributionsWanted

Dear Evoldir Readers,

Together with the Polish Ministry of Science and the Museum of Contemporary Art in Kraków we are now filming a series of 5 popular science movies, under a common idea of “art and science”. Three of them are almost ready - they cover chemistry and physics, and will be released shortly. We have now started filming for two more biology- themed movies. therefore we are looking for contributions from biologists worldwide that would make our film better and more compelling. What we look for are footages that show the beauty/structure/complexity of biology, e.g. things like: - flocks/herds of animals -

footages of animals/plants/fungi from under a microscope - time-lapse movies of plant/animal behaviour.

Any other topics that fit the theme of “energy” (energy flow through living systems - topic of the 1st episode) or “structures” (complexity and order in living structures - topic of the 2nd episode) are welcome.

Since it is a non-profit project we cannot offer any financial gratification - however we will provide full credits in the final production as to where and by whom the movies were filmed.

If you think you may have such videos and would like to share them with us - please contact Szymek Drobnia (szymek.drobnia.at.uj.edu.pl) with information of what you would like to share. Since the footages filmed by us in studio are shot in FullHD - this is the quality that we need in order to make the whole production look uniform.

Szymek Drobnia (Jagiellonian University in Krakow, Poland) Barbara Pietrzak (Warsaw University, Poland)

Szymek Drobnia <szymek.drobnia@uj.edu.pl>

Paris AppleDomestication Internship

Title: Reconstructing apple tree domestication: on the contribution of Caucasian and Central Asian wild species.

Summary

The role of gene flow during adaptation still remains little understood. Domestication is a relevant model for investigating such question because of the weak reproductive barriers that imply recurrent crop-wild gene flow. Our recent results showed an initial domestication of the cultivated apple from the Central Asian wild apple (*Malus sieversii*) followed by a substantial contribution of the European wild apple (*M. sylvestris*) to the cultivated apple genome (Cornille et al. 2012 Plos Genetics) by recent wild-to-crop introgressions. Yet, the contribution of other wild apple species (Caucasian and Central Asian) present along the Silk Roads has been suggested (Cornille et al. 2014 Trends in Genetics). The student will use a unique collection of 3,000 wild and cultivated apple samples genotyped for 26 microsatellite markers to quantify the contribution of additional wild species present along the Silk Routes and the extent of wild-to-crop gene flow in the apple system. This unique

collection of samples including additional wild species and local cultivars along the Silk Routes compared to our previous work (Cornille et al. 2012 PloS Genetics), that will make it possible to reconstruct the full domestication history of the apple and will bring new insights into domestication of perennials (Cornille et al. 2014 Trends in Genetics).

The Master 2 student will have the opportunity to pursue a PhD project starting in fall 2019 on the adaptive genomics of apple domestication, using whole genomes. This ambitious project will yield unprecedented insights into the genomic process of adaptation, introducing to the international research community the apple tree as a unique model, with a recent history of gene flow and selection triggered by humans, with fundamental and applied consequences of the findings.

Duration : 6 months, january/feb 2019 - june/july 2019 , starting dates are flexible, contact Amandine CORNILLE for further discussions. Monthly gratification: 500 euros/months.

Methodology: population genetic analyses (genetic diversity, population structure and demographic inferences using Approximate Bayesian Computation).

Profile preferred for the candidate: Ideally, the candidate will have skills in genetics/genomics and evolution and at least will show strong interest in these fields. He/she will not necessarily be familiar with apple models. The Master project will be proposed to the Doctoral School "Science du Végétal" (Paris-Sud Doctoral School) for a PhD project on the genomic basis of apple adaptation during domestication in June 2019.

Supervision:

Amandine CORNILLE - Chargée de Recherche CNRS CR2

Génétique Quantitative et Evolution - Le Moulon Ferme du Moulon

91190, Gif-sur-à, France

mail : amandine.cornille@gmail.com

Twitter: @CornilleAmand

Google Scholar profile : <https://scholar.google.com/citations?user=EqIE2h8AAAAJ&hl=fr> Personal page : <http://moulon.inra.fr/index.php/fr/equipes/dygap/355> References

- Cornille A, Gladieux P, Smulders MJ. et al. (2012) New insight into the history of domesticated apple: secondary contribution of the European wild apple to the genome of cultivated varieties. PLoS Genet, 8, e1002703.

- Cornille A., Giraud T., Marinus J. M. Smulders, Isabel

Roldàn-Ruiz, Gladieux P. The domestication and evolutionary ecology of apples (2014) Trends in Genetics doi:10.1016/j.tig.2013.10.002

- Csilléry K., Blum M.G.B., Gaggiotti O. E., François O. Approximate Bayesian Computation (ABC) in practice. Trends in Ecology & Evolution. (2010) Volume 25, Issue 7 Pages 410-418,

- Beaumont MA, Zhang W, Balding DJ (2002) Approximate Bayesian computation in population genetics. Genetics, 162, 2025-2035.

- Guillemaud T, Beaumont MA, Ciosi M, Cornuet JM, Estoup A (2009) Inferring introduction routes of invasive species using approximate Bayesian computation on microsatellite data. Heredity, 104, 88-99.

Chargée de Recherche CNRS Génétique Quantitative et Évolution - Le Moulon INRA - Université Paris-Sud - CNRS - AgroParisTech Ferme du Moulon 91190 Gif-sur-Yvette France phone : +33 6 72 44 85 55 phone : +33 1 69 33 23 52 Twitter: @CornilleAmand Google Scholar profile : <https://scholar.google.com/citations?user=EqIE2h8AAAAJ&hl=fr> Personal page : <http://moulon.inra.fr/index.php/fr/equipes/dygap/355> Amandine Cornille <amandine.cornille@gmail.com> Amandine Cornille <amandine.cornille@gmail.com>

Smithsonian Internship Butterfly Adaptation

Smithsonian Minority Internship/Award: A genomic view of habitat adaptation in Neotropical butterflies

We are seeking an intern for a 3 month paid internship applying genomics to understand ecological speciation in the Neotropics, based at the Smithsonian Tropical Research Institute (STRI) in Panama. The intern will apply bioinformatic algorithms to analyse high-throughput sequencing data against a curated genome and identify genes under natural selection in butterfly lineages inhabiting different habitats. The candidate will review biological literature to develop their own hypotheses; curate a massive re-sequencing dataset (250 whole genomes); deploy software on a supercomputer using UNIX and R; run scans for natural selection; and interpret the results. The internship will take in a vibrant and international community of scientists studying all aspects of tropical nature, located in the spectacular settings of native rainforests and the Panama Canal. Although the internship will be primarily computational, the student will have

direct access to the wilderness around Gamboa, and will be welcome to participate in occasional entomological fieldwork.

The intern will be supervised by dr Krzysztof Kozak and dr Owen McMillan, head of the Evolutionary and Ecological Genomics group.

Requirements: 1. fulfillment of the prerequisites <https://www.smithsonianofi.com/minority-internship-program/> Minority Awards Program - Internship | Smithsonian ... www.smithsonianofi.com Notifications will be made via SOLAA mid to late April for summer and fall 2018. Background & Purpose. The Smithsonian offers these internships to increase participation of groups who are underrepresented in the museum field.

<https://www.smithsonianofi.com/internship-opportunities/minority-awards-program/> Minority Awards Program - Visiting Student | Smithsonian ... www.smithsonianofi.com Background & Purpose. The Office of Fellowships and Internships offers visiting student awards to increase participation of U.S. minority groups who are underrepresented in Smithsonian scholarly programs, in the disciplines of research conducted at the Institution, and in the museum field.

2. Experience with bioinformatic and analysis of genomic data (along the lines of genome assembly and mapping, population genomics, selection scans, etc).

Deadline: October 1st 2018. Contact K. Kozak ASAP: kozakk at si.edu

Krzysztof “Chris” Kozak Biodiversity Genomics Fellow Smithsonian Tropical Research Institute Gamboa, Panama <https://www.researchgate.net/profile/Krzysztof.Kozak2> “Kozak, Krzysztof” <KozakK@si.edu>

Teaching Evolution

Science-Corps Providing an opportunity for recent PhD graduates, as Science-Corps Fellows, to teach science to underserved students and build science capacity in the developing world

Finished, or finishing your PhD in a science, technology, engineering, or math (STEM) field? Interested in spending 6 months in a different part of the world sharing your expertise where it is needed? Science-Corps provides STEM PhD graduates the opportunity to teach science,

design curriculum, and build scientific capacity abroad. Science-Corps is recruiting STEM PhD students near completion and up to four years post degree completion for placements December 2018, February 2019 and June of 2019.

Applications for the December 2018 placement in the Philippines open August 30th 2018 and are due October 14th, 2018.

Applications for a February 2019 and June 2019 placement open August 30th 2018 on a rolling deadline until April 15th 2019.

If interested, visit <http://www.science-corps.org/> Stephen E. Harris, Ph.D. Assistant Professor of Biology Purchase College - SUNY stephen.harris@purchase.edu

– Stephen E Harris, Ph.D. Assistant Professor of Biology Purchase College, SUNY Purchase, NY 10577 stephen.harris@purchase.edu

“stephen.harris@purchase.edu”
<stephen.harris@purchase.edu>

Teaching MathInBiology

Survey on Instructor Views on Mathematics taught in Biology

Quantitative skills are becoming increasingly important to both medical science and biological research. As biology researchers and educators, we need to develop an understanding of how to develop mathematical skills in undergraduates to prepare them for the future. It has been shown that the ability to make connections between mathematical expressions and scientific phenomena (sensemaking) increases quantitative problem-solving and conceptual understanding. However, it is not yet known what factors underlie the development of sensemaking or what types of instruction facilitates sensemaking.

If you are an instructor of an undergraduate biology course at a University/College in the United States of America, we are asking for your help in developing this understanding.

The lowest level of participation is to share your experience and attitudes on mathematics in biology by completing this survey (approximately 10 minutes).

https://umn.qualtrics.com/jfe/form/-SV_9Esb4P20Ipi9uLz This survey will be closed

on Monday, October 1 at 11:59 pm CST.

In addition to the survey, there are three additional ways to participate.

1. Distribute the BIMODALS survey to students of a biology course in which you are teaching mathematical expressions.
2. Send us an audio recording of you teaching a lesson or series of lessons on a mathematical expression in biology.
3. Participate in a 30 minute interview about your attitudes about mathematical expressions and teaching of those expressions.

At the end of the survey, we will ask if you would be willing to participate in these additional ways. If you are, we will collect your e-mail address so that we can contact you.

If you have any questions concerning the research, please contact Linh Chau (lchau@umn.edu) or Anita Schuchardt (aschucha@umn.edu).

Thank you for supporting this research and please share this e-mail with your colleagues!

Linh Chau <lchau@umn.edu>

Teaching PlantEvolution

The Botanical Society of America (BSA) is teaming up with QUBES (Quantitative Undergraduate Biology Education and Synthesis) to host a Faculty Mentoring Network in Fall 2018! Participants will implement materials on a range of botanical topics to enhance quantitative skills in life science classrooms.

Plants by the Numbers: Growing Quantitative Literacy Using Botany A BSA/QUBES Faculty Mentoring Network opportunity! Application deadline: September 7th, 2018

Are you interested in adopting plant-focused modules that address quantitative reasoning skills? Apply now to join us for the Fall 2018 BSA/QUBES Faculty Mentoring Network (FMN).

Participants in this FMN will focus on how to use data-driven modules in undergraduate biology courses. Accepted applicants will customize and implement newly designed educational modules from a wide range of botanical topics, from ecological interactions to evolutionary relationships. While doing this, they will participate in biweekly virtual sessions to collaborate with and

support others in the network and receive mentoring.

Applications are due September 7, 2018. Please visit <https://qubeshub.org/groups/BSA2> for additional information and instructions on how to apply.

Deb Rook <deb.rook@bioquest.org>

UtahStateU Smithsonian Intern LifeHistoryEvolutionBees

I am seeking a field assistant to help with PhD research on the neotropical facultatively social sweat bee *Megalopta genalis* *at the Smithsonian Tropical Research Institute (STRI) on Barro Colorado Island from Feb-Jun 2019 (four months).

This project will be looking at the relationships between life history traits important to the evolution of sociality while focusing on the facultatively social sweat bee *M. genalis**. Work will be conducted on the Barro Colorado Island (BCI), a research station situated in the Panama Canal, Panama operated by the Smithsonian Tropical Research Institute. The combination of tropical fieldwork and an internationally-known research station makes this an excellent opportunity to get experience and exposure to research.

Main field duties include finding nests of *Megalopta genalis** and husbandry of bees. This requires hiking through the tropical forest on BCI both on and off trail system. Duties will also include setting up new adults in artificial nests for the purposes of tracking colony development. It's also expected that the intern will develop an independent research project curtailed to their own interests over the course of the 4 months, ideally having to do with the study organism. The candidate will work 5-6 days per week in the field depending upon the available bees. The candidate must be both able to work in a team while also being self-motivated when working alone. Further, an ideal candidate will be excited about field research and be able to live in a relatively secluded area for the four months, although there are frequent and available trips to the city as well.

Volunteers/Interns will have food and housing at the field site paid for in addition to transportation to field site (up to \$1000) and be given \$200/month stipend over the four months.

Previous experience in field work or research is helpful but not essential.

Panama is a mainly Spanish-speaking country so Spanish language skills will be helpful, though they are not essential.

To apply send a CV and a brief cover letter explaining why you would be interested in the job to frances.hunter@aggiemail.usu.edu with the subject head-

ing 'Field Intern Job'.

Feel free to email me if you would like more information.

Frances (Kate) Hunter PhD Graduate Student
Ecology(Biology) Utah State University BNR 301
7202332791

Kate Hunter <franceskhunter@gmail.com>

PostDocs

AarhusU StatisticalGenetics	84	UCalifornia Davis Evolution	106
AMNH NewYork Bioinformatics	85	UCalifornia Davis PopGeneticsSeagrass	107
ArizonaStateU EvolutionaryBioinformatics	85	UCalifornia Davis PopulationGenomics	108
BoiseStateU EcoEvolutionaryModels	86	UCBerkeley Genomics	108
Budapest BirdEvolutionaryBehaviour	87	UCopenhagen ComputationalBiol	109
ChicagoZoologicalSociety ConservationScience	88	UEdinburgh EvolutionaryGenetics	110
ClemsonU DrosophilaVariation	89	UGeorgia EvolutionaryGenomicsAbioticStress	111
ColumbiaU Endosymbiosis	90	UGlasgow Bioinformatics	111
Cornell DrosophilaGermlineStemCellEvolution	90	UIllinois ComparativeMicrobiome	112
EMBL Heidelberg PopulationGenomics	91	UJyvaskyla Finland HostParasiteEvol	112
GeorgeWashingtonU SalamanderSpeciesDelimitation	92	ULausanne EvolutionaryBioinformatics	113
HarvardU BacterialPopGenomics	93	ULB Brussels 21 Eco-EvolutionaryGenomics	113
INRA SophiaAntipolis EvolPopulationDynamics	94	ULiverpool TEEffectOnFitness	114
IowaStateU EvolutionaryGenomics	95	UMassAmherst PlantEvoDevo	114
JohnsHopkinsU HumanGenomics	95	UMinnesota PhyloComparativeMethods	115
Lisbon FishClimateAdaptation	96	UNewHampshire EvolutionaryGenomics Physiology	116
NewJerseyInstTech SocialInsectEvolution	97	UOulu Finland PopulationEvolutionaryGenomics	116
NHM Oslo SpeciationGenetics	97	UOulu UrbanEvolution	117
NorthDakotaStateU Evolution	98	UOxford CoevoSymbiosis	117
OxfordU 2 ViralEvolution	99	UOxford PigAncientDNA	118
Paris IslandBiodiversityTheory	100	UppsalaU EvolutionaryGenomics	118
PennsylvaniaStateU MarineSymbiosis	100	USDA Maryland FungalDiversification	119
PurdueU EvolutionaryBiology	101	USDA Sidney Pollination	119
SGN Frankfurt SoilInvertebratePhylogenomics	102	USouthFlorida Genomics	120
Smithsonian MasonSchoolConservation ConservationGenomics	103	UTexas Arlington EvolutionaryGenomics	120
UAlabama DimensionsBiodivMussels	103	UToronto EvolGen	121
UCalifornia Berkeley HumanEvolutionaryGenetics	104	UToronto EvolutionaryGenomics	122
UCalifornia Davis AvianConservationGenomics	105	UVirginia EvolutionSexBiasedGenes	123
UCalifornia Davis ConvergentEvolution	106	UWashington MarineBiodiversityMetabarcoding	124

AarhusU StatisticalGenetics

Hi all, I'm advertising for a 2-year postdoc to work on developing and applying methods for analysis of genome-wide association study data. Applications by 5th October. A summary below, or for more details see this link

<http://www.au.dk/en/about/vacant-positions/-scientific-positions/stillinger/Vacancy/show/1001254/-5283/> —

Aarhus University is recruiting a 2-year postdoc in statistical genetics based at the Bioinformatics Research Centre (BiRC). The provisional starting date is 1st November 2018.

The postdoc will be jointly supervised by Drs Doug Speed, Manuel Matthiesen and Søren Dinesen Åstergaard. There are two broad aims, however the specific projects will be decided according to the interests and experience of the successful applicant.

1 - Application of recently developed methods to genome-wide association study (GWAS) data. Dr Speed has created the software package LDAK which contains a variety of methods for analysing GWAS data. These include the prediction tool MultiBLUP. A possible project of the postdoc will be applying MultiBLUP to GWAS data for a large number of traits (e.g., from dbGAP, the Wellcome Trust Case Control Consortium or UK Biobank), to compare its performance to that of rival methods such as polygenic risk scores and LDpred, then investigate ways MultiBLUP can be improved.

2 - Development of new methods for analysing GWAS data. Central to LDAK is a method for estimating the SNP heritability of a trait, the proportion of phenotypic variation explained by all SNPs. To date, SNP heritability has been estimated only for common SNPs (MAF>0.01), but it is currently unknown how best to estimate the contribution of rare SNPs. Therefore, a potential project is investigating how best to estimate the rare SNP heritability of a trait. First the postdoc will test methods using simulated data, then apply the most successful to GWAS data for traits such as schizophrenia, alzheimer's disease and heart failure.

Requirements A PhD degree and strong expertise in statistical genetics is essential. The position will involve analysis of large-scale genetic datasets, so the ideal candidate would be familiar with popular genetic software (e.g, PLINK) and at least one coding languages (e.g. R).

Supervisors Assistant Professor Doug Speed specializes in developing statistical methods for analyzing large scale GWAS data. He has released the software LDAK (www.ldak.org) which contains tools for detecting causal variants, constructing prediction models and better understanding genetic architecture, using both individual-level data and summary statistics.

Professor Matthiesen specializes in the analysis of large scale GWAS data and its clinical interpretation. He is a physician by training with a specialization in medical genetics, and has a strong background in genetic epidemiology, biostatistics and molecular genetics.

Professor Søren Dinesen Åstergaard is a medical doctor who focuses on psychiatric research. He is particularly interested in translational psychiatry, and the idea that studies should cover the full pathway from discovery in the lab, bench to bedside, bedside to clinical applications, and from clinical applications to healthcare and global health.

Place of work and associated departments The position will be primarily based at the Bioinformatics Research Centre, a department with approximately 50 members focused on the development of statistical models and computational algorithms to analyse genetic data (www.birc.au.dk). The position will also be linked to the Lundbeck Foundation Initiative for Integrative Psychiatric Research (iPSYCH), a consortium in charge of 50,000 cases for autism, ADHD, schizophrenia, bipolar disorder and depression (www.ipsych.au.dk) and to the Department of Clinical Medicine, Denmark's largest health science institute (www.clin.au.dk/en).

The place of work is C.F. Møllers Allé 8, 8000 Aarhus, and the area of employment is Aarhus University with related departments.

If you have any questions about the position or application procedure, please contact doug@aias.au.dk.

Doug Speed <doug.speed@ucl.ac.uk>

AMNH NewYork Bioinformatics

American Museum of Natural History

Postdoctoral Fellowships in Bioinformatics and Computational Biology

The American Museum of Natural History seeks highly qualified applicants for its Gerstner Postdoctoral Scholars program in Bioinformatics and Computational

Biology. Successful applicants will pursue independent and collaborative computational research in integrative studies of genomics, spatial bioinformatics or biodiversity informatics, alongside faculty and other researchers interested in phylogenetics, phylogeography, evolutionary, and high-throughput phenomic/phenotypic studies. Gerstner Scholars in Bioinformatics & Computational Biology (GSB&CB) also will contribute to the design, development and implementation of new algorithms and other bioinformatics tools that are customized for Museum research and address emerging big data issues in phylogenetic and comparative biology analyses. In association with their professional development and contributions to the Museum, a portion of each Scholars' efforts will include teaching and workshops (with the Richard Gilder Graduate School < <https://www.amnh.org/our-research/richard-gilder-graduate-school/academics-and-research/fellowship-and-grant-opportunities/gerstner-scholars-program/gerstner-scholars-in-bioinformatics-computational-biology> > and Sackler Institute for Comparative Genomics < <https://www.amnh.org/our-research/sackler-institute-for-comparative-genomics> >) and assistance to Museum scientists and students with their bioinformatics and computational biology research.

The initial appointment will be for one year, potentially renewable for one to two additional years based on performance, and includes a highly competitive salary and generous benefits.

Requirements: Applicants must have a PhD in Biological Sciences, Bioinformatics, Computational Biology, Computer Science, Molecular Biology, Genomics, or a related discipline, with experience in the bioinformatics of large biological data sets. Proficiency in Python, Perl, and/or R is required, and familiarity with those and other languages, such as C++/C, or Java, is desirable. Candidates should have documented skills in genome informatics, such as sequence processing, de novo and reference guided assembly, read mapping, gene annotation and discovery, and/or processing phenomic, transcriptomic, or phylogenomic datasets. Candidates should have extensive research experience with a solid publication record, ideally with some experience in phylogenetic methods, and excellent interpersonal, writing and problem-solving skills.

Applicants are encouraged to contact potential research mentors/collaborators in advance to develop a research statement (see: < <https://www.amnh.org/our-research/richard-gilder-graduate-school/faculty-search> > RGGGS Faculty List < <https://www.amnh.org/our-research/richard-gilder-graduate-school/faculty-search> > or RGGGS Faculty Search < [https://www.amnh.org/our-research/richard-gilder-graduate-school/faculty-](https://www.amnh.org/our-research/richard-gilder-graduate-school/faculty-search)

[search](#) >). This program encourages applications from scholars with research interests that may have broad implications for such themes as advancing our understanding of the evolution and diversity of species and the “tree of life,” genomics, and/or human and medical research. Further information on the Gerstner Scholars program and prior Scholars are at GSB&CB Program < <https://www.amnh.org/our-research/richard-gilder-graduate-school/academics-and-research/fellowship-and-grant-opportunities/gerstner-scholars-program/gerstner-scholars-in-bioinformatics-computational-biology> > and Prior GSB&CB < <https://www.amnh.org/our-research/richard-gilder-graduate-school/academics-and-research/fellowship-and-grant-opportunities/gerstner-scholars-program/gerstner-bioinformatics-and-computational-biology-scholar-profiles> >.

— / —

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>

ArizonaStateU EvolutionaryBioinformatics

Postdoctoral Position in Evolutionary Bioinformatics/Population Genetics

The Pfeifer lab invites applications for an evolutionary bioinformatics/population genetics postdoctoral position at the School of Life Sciences, Arizona State University. Research in the lab focuses on analyzing genomic variation to quantify evolutionary—processes, utilizing a combination of large-scale data analysis and modeling. Research topics are open to discussion and mutual interest, though specific interests include the causes and consequences of mutation and recombination rate variation within the primate clade, as well as the study of adaptation during rapid environmental change (more detailed information may be found on the lab website: <http://spfeiferlab.org/>). Opportunities to gain mentoring experience (e.g., via student project supervision) are available.

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: computational biology, genomics, bioinformatics, computer science, statistics, biostatistics, and/or population genetics, as well as a genuine interest in genetics and biology. Proficiency in programming and scripting (i.e., C/C++, Java, R, Perl, or Python) is essential. Experience with analyzing high throughput sequencing data in a high-performance cluster computing environment is highly desired. Preference will be given to candidates with a strong publication record, evidence of research productivity, and ability to successfully communicate scientific information.

The Pfeifer Lab offers a vibrant work environment with excellent opportunities for independent accomplishments as well as collaborative efforts (the lab has close ties to several labs at the interface of bioinformatics, evolution, and population genetics, including the Jensen, Lynch, Stone, and Wilson Sayres labs; please refer to ASUpopgen.org for additional information). The lab is part of both the Center for Evolution and Medicine (evmed.asu.edu) and the Center for Mechanisms of Evolution (biodesign.asu.edu/mechanisms-evolution). The Centers support research, teaching, and outreach initiatives.

Interested applicants should send a short summary of research interests, CV, and contact information for two references to susanne.pfeifer@asu.edu by October 31st 2018. Informal inquiries are welcome. The start date is flexible.

Susanne P. Pfeifer Assistant Professor Arizona State University School of Life Sciences <http://spfeiferlab.org> spfeife1@asu.edu

BoiseStateU EcoEvolutionaryModels

Post-doctoral position: Eco-evolutionary models

*Position **Overview: *The Department of Biological Sciences invites applications for a post-doctoral researcher to develop a modeling framework for linking genome to phenome to demography processes with the goal of forecasting the adaptive capacity and vulnerability of species under different climate change scenarios. The post-doc will work with collaborative teams of ecologists, modelers, and geneticists across different institutions. The position will provide a unique opportunity to develop a transdisciplinary research program that addresses the National Science Foundation's re-

search priority of predicting phenotypes from genetic and environmental factors.

Key Responsibilities: The successful candidate will leverage genomic/genetic, phenotype, and vital rate data from the full cycle phenology project (fullcyclephenology.com) to create an integrated framework for address questions about genetic processes underlying species resilience. In addition, the post-doc will lead and contribute to peer-reviewed publications, present findings at national meetings, and work with partners to extend modeling framework to other systems. Finally, the candidate will participate in professional development activities that may include workshops associated with leadership, developing Course-based Undergraduate Research Experiences to recruit and retain a diverse undergraduate workforce, and expanding effective communication skills to engage with diverse stakeholders.

*Minimum **Qualifications:*

- Candidates must have obtained their PhD by the appointment start date: in mid-late September.
- Experience generating, analyzing, and/or integrating large datasets - whole genome sequencing, RAD sequencing, or transcriptome sequencing - Strong expertise in genomics and its applications to evolutionary questions - Previous experience with any of these quantitative areas: population genetics, landscape genetics, agent-based models, integrated population models, size-structured population models, hierarchical Bayesian models.
- Written and verbal communication skills.
- The selected candidate must be able to meet eligibility requirements for work in the United States at the time appointment is scheduled to begin and to continue working legally for the proposed term of the appointment.

Preferred Qualifications:

- Evidence of creative problem solving - The ability to work well on teams and independently - Interest and understanding of ecological genomics, population dynamics, and evolutionary concepts.
- Interest, experience, and/or ability to promote a climate of inclusion and equity

The position is based at Boise, Idaho and the post-doc will opportunities to interact with collaborators at Idaho State University, University of Idaho, University of California at Los Angeles, the Department of Defense, USGS, US Forest Service, and the Bureau of Land Management. The position is available for one year, with potential for renewal for subsequent years dependent on performance.

*Salary and benefits: *Salary \$54,000-\$58,000 and includes a benefits package including medical/dental/vision/life/LTD insurance, retirement plan,

tuition benefits, sick leave, paid holidays, as well as other benefits.

*To apply for this position: *Submit a single PDF by email that includes a cover letter that specifically address the qualifications listed above and a description of work experience, curriculum vitae, date of availability, and contact information for 3 references to the following email address: julieheath@boisestate.edu. Please put "evo postdoc" in the subject line. Applications will be reviewed as they are submitted with final deadline of October 25.

About Boise and our University

The City of Boise: Boise is a mid-size city, located on the Boise River near the foothills of the Rocky Mountains. In national polls, Boise has been repeatedly named one of the best places to live because of surrounding natural beauty, access to outdoors, low cost of living, and low crime rates. Our region boasts numerous outdoor activities that include rivers, hot springs, skiing, and hiking. Boise provides residents with access to local wineries, a distillery, craft breweries, diverse dining that features ingredients from local farms and ranches as well as an active local and regional music scene and clubs for live entertainment. Boise also offers a thriving art scene that includes Ballet Idaho, the Basque Center, the Boise Art Museum, Idaho Anne Frank Human Rights Memorial, nationally-renowned theater and performing arts companies, and cultural hotspots within a few blocks of downtown. To learn more about Boise: <http://www.cityofboise.org/> and <http://www.boise.org/> *Boise State University*: Boise State University, powered by creativity and

— / —

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

Budapest BirdEvolutionaryBehaviour

3 year post-doc position Life history consequences of nest site selection in shorebirds University of Veterinary Medicine Budapest, Hungary

Background

Choosing nest sites is a major life history decision, since

the vegetation around the nest influences both the risk of predation and the thermal properties of eggs and the incubating parent. In this project we aim to investigate nest site selection in a ground nesting shorebird with biparental incubation, the Kentish plover. Because of the different daily incubation schedule of the sexes, nest cover can be a sexually antagonistic trait, furthermore individuals may have consistent preferences for nest sites. In the project we aim to understand the costs and benefits of this important life history decision, and its relation to sexual conflict and personality of parents. The project is led by Dr Andras Kosztolanyi (Univ Vet Med Budapest, Hungary), Prof Zoltan Barta (Univ Debrecen, Hungary) and Prof Tamas Szekely (Univ Bath, UK), and will be run in close collaboration with the 'ELVONAL (cutting edge) - Breeding system evolution in shorebirds' project of the University of Debrecen, Hungary. The research group uses English as communication language.

The job

This job offers an opportunity for an early-stage post-doc who wants to combine fieldwork with cutting-edge evolutionary and behavioural science. The main tasks of the post-doc are to carry out and supervise field studies in Kazakhstan, Russia and/or China (possibly in other countries). We seek candidates with experience in behavioural ecology and field biology preferable with birds, shorebirds. Publications in high-quality peer-reviewed journals, excellent communication skills, and solid skills in data handling are essential.

This is a full-time position and the salary will be above the normal Hungarian level (up to 1200 EUR, depending on experience). Note that the cost of living in Hungary is substantially less than in Western Europe. The position is for 36 months (subject to probation period). See further specifications below.

How to apply

Application deadline is 30 September 2018. The application should include (1) a max two pages cover letter, (2) a CV with list of publications, and (3) the name and contact details of four referee preferably from research, academia or conservation. The applications should be emailed to Ms Fanni Takacs (fancsi.t@hotmail.com). Interviews will be in early October and the position is available from 1 November 2018.

For further information please contact Ms Fanni Takacs (fancsi.t@hotmail.com).

Selected publications

AlRashidi, M. et al. 2011. Parental cooperation in an extreme hot environment: natural behaviour and

experimental evidence. *Animal Behaviour* 82: 235-243.

Bulla, M. et al. 2016. Unexpected diversity in socially synchronized rhythms of shorebirds. *Nature* 540: 109-1013.

Eberhart-Phillips, L. J. et al. 2018. Demographic causes of adult sex ratio variation and their consequences for parental cooperation. *Nature Communications* 9: 1651

Vincze, O. et al. 2016. Parental cooperation in a changing climate: fluctuating environments predict shifts in care division. *Global Ecology and Biogeography* 26: 347-358.

Job description

* The post-doc will carry out field observations and experiments in plover populations in Kazakhstan, Russia and/or China * supervise PhD students and research assistants, and coordinate research with external collaborators * coordinate sampling, behavioural recording, data analyses, and preparations of manuscripts for publication * present the results at conferences and research seminars, and promote the results of the project * assist administration associated with the project * carry out other scientific and/or academic activities that are deemed necessary for the success of the project

Requirements

* PhD in evolutionary biology, behavioural ecology, zoology, or relevant field of life sciences * solid knowledge of evolutionary biology, behavioural ecology, and/or ornithology * experience carrying out or supervising large-scale research projects * at least 2 years experience in avian field ecology, behavioural ecology or a relevant field * good skills in statistical modelling, and advanced knowledge of R programming and database management * at least 5 published (or accepted) research papers in peer-reviewed journals * international field experience studying wild populations (preferably birds) * experience in bird ringing and preferably ringing licence * valid driving licence

Andras Kosztolanyi <andras.kosztolanyi@gmail.com>

ChicagoZoologicalSociety ConservationScience

Post-doctoral Fellow - Species Conservation Methods

The Chicago Zoological Society is seeking a Post-doctoral Fellow - Species Conservation Methods who will work with a small team of conservation scientists to design, build, and support software that is used globally by wildlife managers, researchers, and students as part of the Species Conservation Toolkit Initiative (SCTI). SCTI is a multi-institutional, international partnership to ensure that the new innovations and tools needed for species conservation are developed, are globally available, and are used effectively. A focus of SCTI is on creating user-friendly interfaces that allow conservation scientists and managers of species conservation programs to access population analyses for risk assessments, conservation planning, and population management. The initiative leverages expertise in population biology, computer programming, and species conservation planning to: build and support modeling tools that are essential to guiding conservation actions for thousands of threatened species in the wild; facilitate the intensive management of hundreds of species that are being protected within ex situ programs; and integrate conservation efforts across the spectrum of management approaches. Information about the current SCTI tools is available at www.vortex10.org. Primary duties and responsibilities:

- Participates in the design of computer modeling tools for conservation assessments and planning for wildlife populations in the wild and in captivity.
- Implements new methodologies for species conservation through extending existing software tools (Vortex, PMx, Outbreak, and MetaModel Manager) or developing new tools.
- Provides technical support and helps to provide training to conservation professionals and graduate students using modeling methods and tools.
- Prepares reports for scientific publication and presentation.
- Other related duties as assigned.

The requirements for this position include:

- Ph.D. degree in biology or related field required or Ph.D. in information science with considerable training also in biology.

- One year experience in conservation biology research or species management required.
- Experience in computer programming for Windows applications required, including prior experience with or ability to learn C#.NET programming or related object-oriented languages.
- Excellent verbal and written communication skills, including proven ability in writing of reports and scientific papers, grant proposal preparation, and oral presentations. English fluency at a full professional proficiency required.
- Ability to work independently and collaboratively and prioritize tasks as necessary.
- Ability to maintain the confidentiality of privileged information is essential.
- Experience and/or ability to work and interact effectively with a diverse, multicultural audience.
- A valid driver's license is required.

The preferred qualifications include:

- Broad research and conservation interests preferred.
- Experience with software program VORTEX or other PVA models, and PMx or other pedigree analysis tools desirable.
- Experience with software development for multiple platforms (web, tablet, etc.) a plus.
- Experience with user interface design highly desirable.
- Multilingual ability, Spanish fluency a plus.

Additional Information: This position description summarizes the primary duties and functions of this position, but should not be considered a complete listing of every duty the incumbent may ever be called upon to perform. Must represent the Society in a professional manner at all times. The Chicago Zoological Society is an Equal Opportunity Employer.

If interested in being considered for this opportunity, please visit the CZS Career site to create a profile, apply, or obtain more details about the position. Please visit our website at www.czs.org/careers and look for requisition number 1684BR.

Robert C Lacy, PhD

Senior Conservation Scientist

Chicago Zoological Society

rlacy@ix.netcom.com

Species Conservation Toolkit Initiative

www.vortex10.org

Bob Lacy <rlacy@ix.netcom.com>

ClemsonU DrosophilaVariation

The laboratories of Trudy Mackay and Robert Anholt at the new Clemson University Center for Human Genetics invite applications for a postdoctoral fellow to support a newly awarded NIH grant. A major challenge of modern biology is to determine how DNA sequence variants give rise to phenotypic variation for complex organismal traits through modulation of regulatory gene networks. This research project seeks to reverse engineer natural genetic variation in *Drosophila* using CRISPR/Cas9 precise allelic replacement to functionally validate genetic associations of common and rare molecular variants and long non-coding RNAs with organismal phenotypes and transcriptional networks. The successful applicant will have expertise in CRISPR/Cas9 gene editing, next generation sequencing methods and analysis, *Drosophila* genetics and quantitative genetics. Applicants should have a strong record of research productivity, excellent oral and written communication skills, and the ability to perform independent as well as collaborative research. A Ph.D. in genetics or related field is required.

Enquiries should be addressed to Dr. Trudy F. C. Mackay, Self Family Endowed Professor and Director of the Center for Human Genetics, Clemson University, Self Regional Hall, 114 Gregor Mendel Circle, Greenwood, SC 29646 (tmackay@clemson.edu).

Applications must include a cover letter explaining the qualifications for this position, a curriculum vitae with list of publications, and the names of three references. The position is available immediately. Clemson University is an equal opportunity employer.

Applications should be submitted electronically at:

<https://apply.interfolio.com/53001> – Trudy F. C. Mackay, PhD, FRS Self Family Endowed Chair of Human Genetics Clemson Center for Human Genetics Department of Genetics and Biochemistry Clemson University Self Regional Hall 114 Gregor Mendel Circle Greenwood, SC 29646 Email: tmackay@clemson.edu Tel: 864-889-0522

Trudy Mackay <trudy_mackay@ncsu.edu>

ColumbiaU Endosymbiosis

Associate Research Scientist position, Lamont-Doherty Earth Observatory of Columbia University

The Associate Research Scientist will join the team of Dr. Duhamel at the Lamont-Doherty Earth Observatory of Columbia University to mainly support research activities related to a project funded by the Moore Foundation. The Associate Research Scientist will be responsible for the day to day oversight of a scientific project researching an endosymbiosis between embryos of the spotted salamander (*Ambystoma maculatum*) and an algal symbiont that lives inside its egg capsules (*Oophila amblystomatis*). The Associate Research Scientist will design and conduct experiments to improve our understanding of the potential transfer of metabolites between the symbiont and its host. The Associate Research Scientist will work independently and will coordinate research activities, including data analyses and scientific paper writing with Duhamel and other collaborators involved in this project at other institutions.

Candidates should have a PhD in molecular biology or related field and at least three years of science experience and demonstrated expertise in using tracers such as radio- and/or stable isotopes, and molecular tools such as qPCR, genomic, transcriptomics, and bioinformatics. Experience with symbiotic systems, field collection of materials, and work in non-model systems preferred. A strong record of publications in the scientific literature required. Success in mentoring and supervising students and technical staff. And organizational, managerial, editorial or public outreach skills, preferred.

Appointments are made on a fiscal year basis and are eligible for renewal each July 1, contingent upon performance and funding.

Search will remain open for at least 30 days after the ad appears and will continue until the position is filled.

Please visit our online application site at

<https://academicjobs.columbia.edu/applicants/-Central?quickFind=67091> for further information about this position and to submit your application, curriculum vitae, cover letter and references.

Columbia University benefits offered with this Officer of Research appointment.

Columbia University is an Equal Op-

portunity/Affirmative Action employer – Race/Gender/Disability/Veteran.

We accept online applications only.

Helen Olivette Human Resources Coordinator

Lamont-Doherty Earth Observatory of Columbia University 61 Route 9W, Palisades, NY 10964 Phone: 845-365-8357 / Fax: 845-365-8142

Helen Olivette <olivette@ldeo.columbia.edu>

Cornell Drosophila Germline Stem-Cell Evolution

Post-Doctoral Associate Position Open in Aquadro lab at Cornell

A successful candidate will help design and carry out research aimed at testing evolutionary and functional hypotheses to explain the episodic positive selection on the Germline Stem Cell regulatory gene bag of marbles (*bam*) in different species of the fruit fly genus *Drosophila*. An ability to integrate population genetic and functional genomic approaches is key. Work will focus on experimental studies including CRISPR/Cas9 genome editing and the analysis of fertility, cytological and gene expression for edited variants in multiple species of *Drosophila*. Good 'hands' in the lab are critical as is attention to detail and accuracy. The main responsibilities include conducting research, attending 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.

Minimum/Basic Qualifications (required by start date):

- PhD or equivalent degree in genetics, developmental biology, population genetics functional genomics, or a related field.
- Demonstrated record of research productivity and publications.
- Strong molecular biology skills

Preferred Qualifications: - Research experience with *Drosophila* genetics and/or developmental biology. - Experience with CRISPR/Cas9 genome editing or a strong desire to learn. - Knowledge of or willingness to earn at least basic population genetics theory. - Experience with fluorescent microscopy - Experience with genomic data analysis. - Programming/scripting experience or a willingness to learn (e.g. Python/ Perl, R)

Our lab's current research is on the population genetics

and functional evolution of genes that regulate germ line stem cells in *Drosophila*. Our focus is the evolutionary and functional analysis of bag of marbles (bam), the key regulatory 'switch' gene for germ line stem cell renewal or differentiation in *Drosophila*. Our work involves the use of CRISPR/Cas9 genome editing to functionally test hypotheses of protein function and evolutionary drivers of strong positive natural selection we discovered acting on bag of marbles in multiple species and lineages of *Drosophila*. Central to our studies are tests of functional and evolutionary interactions of the intracellular bacteria *Wolbachia* and germ line stem cell genes, particularly bag of marbles, across the genus *Drosophila*. We are also carrying out computational analyses of the evolutionary history of *Wolbachia* infections in *Drosophila* species.

The Aquadro laboratory is part of the Department of Molecular Biology and Genetics on the Ithaca campus of Cornell University, and is also part of the larger campus-wide Cornell Center for Comparative and Population Genomics (<http://3cpg.cornell.edu>) whose mission includes fostering research, education, and outreach in comparative and population genetics, and which brings together a vibrant and interactive group of over 350 faculty, postdocs, graduate students and staff who share a commitment to comparative and evolutionary genomic approach to the study of living systems.

Salary: This is a full-time position. Salary is commensurate with qualifications and experience and consistent with the current NIH postdoc salary scale and your level of experience.

How to apply:

Email Chip directly of your interest at CFA1@CORNELL.EDU

Formally apply through Academic Jobs Online for position #11553 <https://academicjobsonline.org/ajo?action=joblist&id553&send=Go&.cgifields=all> Applicants should submit the following materials: - A cover letter - A curriculum vitae - One-page statement of your research accomplishments - One-page statement of your specific interests and qualifications for this position and why you feel you are an excellent fit. - Contact information for 3 references. Letters of reference are not required at this time.

This position will be open until filled. The appointment is for a duration of one year with the possibility of annual renewal up to three years. Please address inquiries to Chip Aquadro cfa1@cornell.edu

Diversity and Inclusion are a part of Cornell University's heritage. We are an employer and educator recognized for valuing AA/AED, Protected Veterans, and Individuals with disabilities. We actively encourage applications

from women, persons of color, and persons with disabilities.

Charles F. ('Chip') Aquadro Professor of Population Genetics The Charles A. Alexander Professor of Biological Sciences Stephen H. Weiss Presidential Fellow Director, Cornell Center for Comparative and Population Genomics <http://mbg.cornell.edu/people/charles-aquadro> <http://3cpg.cornell.edu> cfa1@cornell.edu

— / —

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>

EMBL Heidelberg Population Genomics

The Project

The Furlong lab, at EMBL Heidelberg, has a funded post-doctoral position to use natural sequence variation as a perturbation tool to functionally link enhancers to their target genes, and uncover new mechanisms in genome regulation. In our two recent expression QTL (eQTL) studies (Cannavo et al, Nature 2017, Schor et al, Nature Genetics 2017)], we demonstrated the power of *Drosophila* population genetics to get to causal variants: the very short blocks of linkage disequilibrium (LD) provides near base-pair resolution. These studies provide a proof-of-principle to scale up and perform a comprehensive large-scale cis and trans embryonic eQTL study, in a genetically tractable system. Expanding to more genotypes will include rare variants, and also dramatically increase statistical power to analyze trans effects. Given the extensive prior knowledge about gene regulatory networks during *Drosophila* embryogenesis, this is a perfect test system for a large scale trans analysis. The results should provide new insights into how the effect of genetic variation propagates through a developmental network, while in other cases is buffered. The project is at the interface of population genetics, genome regulation and developmental biology, and is a collaboration between the groups of Oliver Stegle (computational modelling) and Trudy MacKay. EMBL is a very international, interdisciplinary institute with a very open, collaborative and vibrant culture. Working language is English. See <http://furlonglab.embl.de/> for more info about the lab.

Your Role

Your role is to lead and drive this exciting project. Initially this will involve the sample collection, in collaboration with the MacKay lab, and then the sequencing at EMBL, with the help of our Genomics Core facility. You would then work in collaboration with the Stegle group to perform the QTL analysis using new computational models. In the second phase of the project, you would perform cutting edge genome engineering (or collaborate with someone in the Furlong group) to experimentally test model predictions.

You Should Have

You should have an excellent track record from your Ph.D., with strong expertise in population genetics. You need to be very organised, and be able to lead and drive big ambitious projects, while at the same time being very collaborative and open.

Why Join us

The Furlong group is a mixture of experimental and computational biologists at the interface of Transcription/Chromatin Biology and Developmental Biology. We have a great working atmosphere with lots of collaborations and friends within the group. The Furlong lab also has an excellent track record for post-docs within the lab obtaining faculty positions (>70% - see the Alumni on the lab's web site). EMBL is a unique place with a very friendly, collaborative, open door policy. The excellent colleagues and core facilities make your research interesting, productive and fun. We also have an excellent day care on campus.

Heidelberg is a lovely international town, located in a central position to explore Europe.

Eileen E. Furlong Head: Genome Biology Unit/Dept Group Leader & Senior Scientist European Molecular Biology Laboratory - EMBL Meyerhofstr. 1 D-69117 Heidelberg Germany

Telephone +49 6221 387-8416 Fax +49 6221 387-8518
E-mail Eileen.Furlong@embl.de http://www.embl.de/-research/units/genome_biology/index.html <http://furlonglab.embl.de/> Eileen Furlong <furlong@embl.de>

GeorgeWashingtonU SalamanderSpeciesDelimitation

Job Description Summary:

The George Washington University Columbian College of Arts and Sciences is the oldest and largest of the University's academic units, providing the foundation for GW's commitment to the liberal arts and a broad education for all students. The College encompasses 42 academic departments and programs for undergraduate, graduate and professional studies, and 28 Research Center's and Institutes. An internationally recognized faculty and active partnerships with prestigious research institutions place Columbian College at the forefront in advancing policy, enhancing culture and transforming lives through research and discovery. Degree programs in the Department of Biological Sciences are offered at the BA, BS, MS, and PhD levels. Courses and ongoing research programs are focused in:

- Cellular and Molecular Biology - Systematics, Evolution and Ecology

In addition, to research facilities in Bell Hall and the Science and Engineering Hall, many of our faculty and students conduct research in conjunction with the Smithsonian Institution.

The George Washington University Biological Sciences department is looking to hire a Post Doctoral Scientist under the direction of Dr. Pyron. The Post-doctoral Scientist will spearhead the species delimitation of *Desmognathus* salamanders (DEB-1655737) in the Pyron Lab. Work is associated with his Genome-Scale Phylogeographic Analysis of *Desmognathus* Salamanders, DEB-1655737.

Duties Include: - Process genomic sequence data for *Desmognathus* salamanders. - Construct phylogenies and gather trait data (morphometrics) for species delimitation and validation for taxa sampled in the phylogeny. - Lead first authored publications. - Present research at conferences. - Mentor PhD students and undergraduate researchers in the Pyron Lab. - Performs other work duties as assigned. The omission of specific duties does not preclude the supervisor from assigning tasks logically related to the position.

Minimum Qualifications:

Qualified candidates will hold a PhD in a related dis-

cipline. Degree must be conferred by the start date of the position.

Additional Required Licenses/Certifications/Posting Specific Minimum Qualifications: Preferred Qualifications:

A PhD in Biology or a related field, experience with DNA sequencing, natural-history data collection, phylogenetic systematics, and the biogeography and ecology of reptiles and amphibians. Experience in a research lab is desirable, as are first-authored peer-reviewed publications. Skills at computer programming (R language) and the bioinformatics assembly of large-scale phylogenies are needed.

Typical Hiring Range \$51,238 - \$64,150 How is pay for new employees determined at GW? II. POSITION INFORMATION

Campus Location: Foggy Bottom, Washington, D.C. College/School/Department: Columbian College of Arts & Sciences (CCAS) Family Research and Labs Sub-Family Laboratory Research Stream Individual Contributor Level Level 3 Full-Time/Part-Time: Full-Time Hours Per Week: 40 Work Schedule: M-F 8:30am-5:30pm Position Designation: Essential: Employees who perform functions that have been deemed essential to maintaining business or academic operations. Employees are generally expected to work from home during an event and may be asked to physically report to work. Telework: Required Background Check Criminal History Screening, Education/Degree/Certifications Verification, Social Security Number Trace, and Sex Offender Registry Search Special Instructions to Applicants:

Two letters of recommendation should be emailed directly to Dr. Alexander Pyron at rpyron@gwu.edu by the individuals writing the recommendation letters.

Internal Applicants Only? No Posting Number: R000653 Job Open Date: 09/24/2018 Job Close Date: If temporary, grant funded or limited term appointment, position funded until: 10/31/2019 Background Screening Successful Completion of a Background Screening will be required as a condition of hire. EEO Statement:

The university is an Equal Employment Opportunity/Affirmative Action employer that does not unlawfully discriminate in any of its programs or activities on the basis of race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity or expression, or on any other basis prohibited by applicable law.

<https://www.gwu.jobs/postings/56365> Alex Pyron <rpyron@colubroid.org>

HarvardU BacterialPopGenomics

Postdoctoral Fellowship in Bacterial Population Genomics/Bioinformatics

Marc Lipsitch and Bill Hanage, co-supervisors

A postdoctoral fellow is sought for a position working with Marc Lipsitch and Bill Hanage at the Center for Communicable Disease Dynamics (CCDD), within the Department of Epidemiology at Harvard T.H. Chan School of Public Health. The successful applicant will have responsibility for a set of studies to analyze the factors maintaining genomic diversity in *Streptococcus pneumoniae* (pneumococcus) and the response of *Streptococcus pneumoniae* populations to vaccination. This will be an extension of recent work including cross-sectional and longitudinal population comparisons (references below) and will focus on defining the selective forces underlying observed population dynamics. The work will involve collaboration with other fellows and potentially students within the research group, to combine theoretical insights with detailed analysis of populations of genome sequences.

Applicants should have a PhD and some publications in bioinformatics, evolutionary biology, population genomics or related fields. As the position will involve large amounts of sequence data, the successful candidate will ideally have experience with bioinformatic analyses on large genomic data sets and should be proficient at programming in R, Python, or equivalent. Enthusiasm for collaborative work is essential. The post will be at CCDD (at the Harvard Chan School in Boston, MA, USA), which offers opportunities for interaction and collaboration with a wide range of colleagues working on diverse topics in quantitative infectious diseases. The post is for two years in the first instance, with the possibility of extension.

To apply, please send a letter, a CV and names of references to Marc Lipsitch mlipsitc@hsph.harvard.edu.

Azarian T, Grant LR, Arnold BJ, Hammitt LL, Reid R, Santosham M, Weatherholtz R, Goklish N, Thompson CM, Bentley SD, O'Brien KL, Hanage WP, Lipsitch M. The impact of serotype-specific vaccination on phylodynamic parameters of *Streptococcus pneumoniae* and the pneumococcal pan-genome. *PLoS Pathog.* 2018 Apr 4;14(4):e1006966.

Corander J, Fraser C, Gutmann MU, Arnold B, Hanage

WP, Bentley SD, Lipsitch M, Croucher NJ. Frequency-dependent selection in vaccine-associated pneumococcal population dynamics. *Nat Ecol Evol.* 2017 Dec;1(12):1950-1960.

Azarian T, Martinez PP, Arnold BJ, Grant LR, Corander J, Fraser C, Croucher NJ, Hammitt LL, Reid R, Santosham M, Weatherholtz RC, Bentley SD, O'Brien KL, Lipsitch M*, Hanage WP*. Prediction of post-vaccine population structure of *Streptococcus pneumoniae* using accessory gene frequencies <https://www.biorxiv.org/content/early/2018/09/18/420315> Thank you! Marc

Marc Lipsitch, DPhil Professor of Epidemiology Director, Center for Communicable Disease Dynamics Harvard T.H. Chan School of Public Health <http://www.hsph.harvard.edu/faculty/marc-lipsitch/> <http://ccdd.hsph.harvard.edu> (617) 432-4559 <mlipsitc@hsph.harvard.edu> Office hours: <http://mlipsitch.wikispaces.com> Twitter and Skype: mlipsitch

Marc Lipsitch <mlipsitc@hsph.harvard.edu>

INRA SophiaAntipolis EvolPopulationDynamics

Eco-evolutionary dynamics of pushed propagation waves - INRA Sophia Antipolis, France Propagation waves are classically described as “pulled”, their expansion being driven by the reproduction and dispersal of few individuals on the edge of the propagation front. However, recent work in theoretical ecology highlighted the existence of “pushed” waves, in which individuals from the core of the population are involved in its expansion. Allee effects were the first mechanism associated with the emergence of pushed waves, and recent results from our team demonstrated that mechanisms like positive density-dependent dispersal or dispersal stochasticity could also induce pushed expansions. However, the frequency of pushed expansions in nature and their consequences on invasion dynamics are still unknown.

This project aims at understanding better the spread and evolutionary dynamics of pushed propagation waves, with complimentary theoretical and experimental approaches. Several datasets on experimental invasions of *Trichogramma* (minute hymenopteran wasp) in laboratory microcosms are available in our team, as well as individual-based modelling frameworks. The post-doctoral project would consist mainly in analyzing these

datasets and adjusting the numerical simulations accordingly, with the potential for at least 4 publications. In addition, theoretical developments (ABC analyses) focused on the definition of empirical indicators of the pulled/pushed nature of propagation waves could be included in the project. Alternatively, depending on the post-doctoral fellow’s own interests, new experiments could be carried out with the support of our technical staff.

Required profile:

- PhD in ecology or equivalent field
- general background in population dynamics or genetics
- statistical analyses (R)
- solid writing/publication experience
- interest for invasion biology and theoretical ecology

Experience in individual-based modelling would be appreciated but is not required.

Location: INRA is an applied research institute specialized in agronomical and crop protection issues. The team “Biology of Introduced Populations” uses population dynamics and genetics approaches to address theoretical predictions regarding biological invasions and biological control. The research environment is stimulating, with several teams on-site working in ecology and evolution, and frequent collaborations with other labs in France and abroad.

Sophia-Antipolis is the largest high-tech R&D hub in France, ideally located on the French Riviera. The area is famous for its mild climate, and its year-round outdoor activities: swimming, diving, mountain hiking, or skiing are all available close by. Nice, Antibes or Cannes are the main cities around and are easily reached by public transportation.

Organization: The post-doctoral fellowship is supported by funding from the main French funding agency (ANR), which will also cover for project expenses (experiments, interns, conferences;). Funding is available for 2 years (2 periods of 1 year), and includes health benefits from the French social security system. Starting date negotiable, from January 1st 2019. Net salary will be between 2200-2800euro depending on experience.

Applications (CV, motivation letter, 2 recommendation letters) should be addressed before October 15th at elodie.vercken@inra.fr

Elodie Vercken Chargee de Recherches Biologie des Populations Introduites UMR ISA 1355 - INRA Sophia Antipolis 400 route des Chappes, BP 167 06903 Sophia Antipolis 04 92 38 65 53 new website: <http://elodie.vercken.free.fr> Elodie Vercken

<elodie.vercken@inra.fr>

IowaStateU EvolutionaryGenomics

A postdoctoral position in comparative, evolutionary genomics is available in the Hufford Lab at Iowa State University with remote advising from the Hirsch Lab at the University of Minnesota. This is a multi-year position with support from two recently awarded NSF Plant Genome Research Program grants. Projects will include:

- 1) Generation and comparison of maize landrace genome assemblies from high and low elevation regions in Mexico and South America. The lines that will be assembled have served as parents of two mapping populations currently under evaluation to assess the genetic architecture of highland adaptation traits. Assembly of these parental lines will inform our understanding of the role of structural, presence-absence, and copy-number variation in determining highland phenotypes.
- 2) Use of 25 whole genome de novo assemblies in a comparative genomics framework to determine the structural variation underlying tropical and temperate adaptation in maize. We are currently completing de novo assemblies for these lines, which collectively comprise the founders of the maize Nested Association Mapping (NAM) population.

The chosen applicant will lead a team of scientists in generating peer-reviewed publications on both projects described above. Ideally, we seek applicants with experience working with next generation sequencing data (particularly, long-read PacBio and/or Nanopore data) and in large-scale computational biology (proficient in UNIX, R, Python). A strong background in evolutionary biology is also required. Documented ability to coordinate collaborative research is highly desirable.

Applicants should send a curriculum vitae, contact information for three references, and a cover letter to Matthew Hufford (mhufford@iastate.edu). Review of applications will begin immediately and continue until the position is filled. Start date is flexible, but January, 2019 is preferred.

For additional information please contact Matt Hufford (mhufford@iastate.edu) and/or Candy Hirsch (c-hirsch@umn.edu).

Hufford Lab website: <http://www.public.iastate.edu/~mhufford/HuffordLab/home.html> Hirsch Lab website:

<http://hirschlab.cfans.umn.edu/> Iowa State University is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, or protected Veteran status and will not be discriminated against.

Matthew Hufford <mhufford@iastate.edu>

JohnsHopkinsU HumanGenomics

Applications are invited for a postdoctoral fellow position studying the genomic basis of variation in human complex traits.

The postdoc will join a research group led by Rajiv McCoy in the Department of Biology at Johns Hopkins University. Our lab develops computational and statistical methods to investigate the functional and fitness effects of human genetic variation. We are also interested in the evolutionary mechanisms by which such variation persists in nature. Within this scope, specific research topics include the study of aneuploidy, the leading cause of pregnancy loss. This includes research into the origins and phenotypic consequences of mosaic aneuploidy and structural variation. A potential hidden source of human phenotypic diversity. A second research direction focuses on the functional genomic basis of phenotypic divergence. Past and ongoing work uses introgression among archaic (Neandertal and Denisovan) and modern humans as a model to study this evolutionary process.

The postdoc will be supported in developing new research directions broadly consistent with these themes. In addition to research, opportunities are available to gain experience in teaching and mentoring. The postdoc will also receive guidance and support for career development, tailored to long-term goals.

Johns Hopkins offers an exceptional environment for research and training in computational and statistical genomics, with strong interaction among genomics research groups across departments, academic divisions, and nearby institutions. The Department of Biology further hosts cutting-edge research in molecular biology, cell biology, developmental biology, and biophysics, providing many opportunities for collaboration.

Qualifications: - Ph.D. in genomics, computer science, or a related quantitative field - Experience in computational and statistical analysis of large datasets - Strong record of research productivity, including publication -

Demonstrated proficiency in scientific writing and communication

Application materials: - CV, which may list preprints - Description of past and future research interests - Contact information for three references, upon request

Johns Hopkins University is committed to active recruitment of a diverse faculty and student body. The University is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans and individuals with disabilities and encourages applications from these and other protected group members. Consistent with the University's goals of achieving excellence in all areas, we will assess the comprehensive qualifications of each applicant.

The position is open immediately until filled, though the start date is flexible. Applications, questions, and informal inquiries are welcome and should be directed to Rajiv McCoy <rajiv.mccoy@jhu.edu>.

Rajiv McCoy Assistant Professor Department of Biology Johns Hopkins University (410) 516-0942 <http://mccoy-lab.org> Rajiv McCoy <rajiv.mccoy@jhu.edu>

Lisbon FishClimateAdaptation

<pre> Title: Postdoctoral researcher in Ecological Niche Modelling of marine organisms

Start: January 2019

Location: ISPA - University Institute, Lisbon, Portugal

MARE - Marine and Environmental Sciences Centre

Responsible Investigator: Goncalo Silva - <http://www.ispa.pt/pessoa/goncalo-silva> Job URL: <http://www.eracareers.pt/opportunities/index.aspx?task=showAnuncioOpportunities&jobId4145&idc=1>

Contract length: 30 months

Contract terms: 2.128,34euro/ month gross salary (14 salaries/ year)

Application deadline 19th of November

Starting date: January 2019

MARE-ISPA Ecology Lab seeks to hire a full time post-doctoral researcher for ecological niche modelling on marine organisms, particularly on small pelagic fish, under the project SardiTemp - The impact of climate change on the ecology and dynamics of small pelagic fish“

reference LISBOA-01-0145-FEDER-032209, funded by Investment and Structural European Funds (FEEI) - through Programa Operacional Regional de Lisboa and by National Funds through FCT.

Our lab investigates the consequences of climate change on marine organisms, with focus on marine fish, some aspects of biology and ecology of a variety of taxa, marine protected areas, and patterns and processes that shape marine species distributions. The candidate must be capable of developing Ecological Niche Modelling of marine species, relating biological data with oceanographic and satellite data. The candidate must hold a doctoral degree (mandatory) preferably in biological sciences, computation sciences or related areas (optional) and must have previous experience in ecological niches modelling in marine environment through mechanistic and/or correlative methods. Candidates who hold a doctoral degree in a different scientific field than the ones mentioned before, but hold experience in the required areas will also be considered. The candidate must have a record of publications of merit in one of the areas mentioned above, in particular, on ecological niche modelling in marine environment and as a first author. The candidate must have advanced knowledge of programming in R and/Python.

Please consult the full announcement <http://www.eracareers.pt/opportunities/index.aspx?task=showAnuncioOpportunities&jobId4145&idc=1> and send your application to ci-candidaturas@ispa.pt and to concursos-ci@ispa.pt.

Goncalo Silva

Investigador / Researcher

ISPA, CRL.

Rua Jardim do Tabaco, no 34 - 1149-041 Lisboa - Portugal

Tel.: (+351) 966647732

Fax: (+351) 218860954

e-mail: gsilva@ispa.pt

website: www.ispa.pt Descricao:

ISPA_CRL_SIMPLES Descricao: Description:

C:\Users\Pedro_Fonseca\AppData\Roaming\Microsoft\Signatures\IS - Instituto Universitario_files\image001.jpg

Gon??alo Jorge Franco Silva <gsilva@ispa.pt> </pre>

NewJerseyInstTech SocialInsectEvolution

The Barden Lab (bardenlab.org) at the New Jersey Institute of Technology (NJIT) is soliciting applications for a one- to two-year salaried Postdoctoral Research Associate position focused on the evolution of social insects and comparative genomics. The position is linked to (1) understanding convergent trends in genome evolution across phylogenetically distant lineages and (2) integrating paleontological and molecular datasets to uncover evolutionary processes. In addition, there will be opportunities to develop independent projects as well as participate in ongoing lab initiatives including aspects of functional morphology, molecular evolution, phylogenetics, and ecology with respect to extant and fossil insects. Research in the lab is fundamentally comparative and incorporates data from multiple species simultaneously to answer broad evolutionary questions. Potential candidates are strongly encouraged to contact Phil Barden to discuss potential projects and learn more (barden@njit.edu). Essential Functions: 1. Generate, curate, and analyze genomic data from a variety of insect taxa. 2. Contribute to or lead lab publications, conference submissions, as well as grant proposals. 3. Act as a mentor to diverse and ambitious students in the lab, as well as collaborate effectively with colleagues and support staff. 4. Through mentorship and strategic planning with the PI, develop additional skills and experience valuable to long-term career goals.

Prerequisite Qualifications: PhD in Biology or related field. Preferred Qualifications: Experience in wet lab protocols, bioinformatics, and genome assembly with non-model organisms.

To apply, visit <https://njit.csod.com/ats/careersite/-search.aspx> and search for "622". Applicants should submit the following: Cover letter, CV including contact information for three references, and writing sample (limited to one page, upload as "other document"). Applications will be reviewed as they are received. The application period will be open until filled.

Dr. Phil Barden Assistant Professor Federated Department of Biological Sciences New Jersey Institute of Technology Newark, NJ 07102 USA twitter: @haidomyrmex
Phillip Barden <barden@njit.edu>

NHM Oslo SpeciationGenetics

Job description The Natural History Museum at the University of Oslo announces three fellowships connected to a project funded under the 'Toppforsk Program', jointly financed by the Research Council of Norway and the Natural History Museum: 'SpeciationClock: How fast does the 'speciation clock' tick in selfing versus outcrossing lineages?' The project addresses how and how long it takes for new, reproductively isolated plant species to arise and what factors influence the rate of speciation.

More about the project and positions The project is organized in four work packages (WPs) which will 1) establish a theoretical framework to understand and predict the effects of mating system on the speciation process, 2) measure the rate of accumulation of intraspecific postzygotic reproductive isolation (RI) in a large set of species representing the selfing-outcrossing spectrum and divergence times spanning the last ~1 million years, 3) test if the rate at which RI loci accumulate is higher in selfers, and 4) quantify the role that selection has played on RI loci using population genomic analyses in one selfing and one outcrossing species. We have selected the tropical African 'sky archipelago' as a study system because the populations in these isolated high mountains represent a wide range of divergence times and levels of intermountain gene flow. Field experiments and collection of material for the SpeciationClock project will be conducted during two long field seasons, starting in the Ethiopian mountains in October 2018. The project also includes extensive cultivation and crossing experiments, genomic analyses, and niche modeling through time.

One of the postdoctoral fellowships (Postdoc no. 1) announced here is a two-year fellowship connected to WP1. The selected candidate for this position will be based at the NHM in Oslo, but will spend considerable parts of the time in France working with the WP1 Leader, Dr. Sylvain Glémin at the ECOBIO lab at the University of Rennes.

The other postdoctoral fellowship (Postdoc no. 2) is a three-year fellowship primarily connected to WP2, but will also contribute to WP3 and WP4.

The PhD fellowship is a four-year fellowship, of which 75% of the time will be devoted to the PhD programme, mainly connected to WP3 and WP4, and 25% of the time will be devoted to duty work for the museum

(teaching, public outreach, collection work).

Principal investigator (PI): Christian Brochmann, Natural History Museum. Co-PI: Anne K. Brysting, Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biosciences.

Who are we looking for? We seek highly motivated, enthusiastic persons with good social skills and with the ambition to gain new insights and to publish papers in leading international journals.

You will be part of a team with two researchers, three postdocs, one PhD fellow, and several international collaborators, and be offered a unique opportunity for cutting-edge research in a multidisciplinary environment with a focus on academic and personal development. You will carry out research both independently and as part of the team.

To apply for the postdoctoral positions, you must have a completed PhD degree (or education equivalent to a Norwegian doctoral degree) within relevant fields of botany/evolutionary biology, or biomathematics (Postdoc no. 1). Applicants for the Postdoc no. 1 position need to have a solid background in evolutionary biology and population genetics with mathematical or programming skills. Experience in population genetics modeling will be favored. Good knowledge of mating system evolution and/or speciation processes will also be a plus. Applicants for the Postdoc no. 2 position need to have extensive experience with and strong motivation to carry out long and demanding field work under primitive conditions, and applicants with experience with niche modeling through time, plant cultures, and crossing experiments will be preferred. Applicants for the PhD fellowship must have a Master degree or equivalent in evolutionary biology, preferably with experience with high-throughput sequencing approaches and relevant bioinformatics analyses.

We offer Postdoctoral fellowships: A salary of NOK 515 200 - 597 400 per year, depending on qualifications and seniority (position code 1352). PhD fellowship: A salary of NOK 449 400 - 505 800 per year, depending on qualifications and seniority (position code 1017). A professionally stimulating working environment. Pension agreement with Norwegian Public Service Pension Fund (SPK). Attractive welfare benefits.

How to apply Please provide an application letter specifying which fellowship you apply for, and including a statement of interest, a brief summary of your scientific work and interests, and a personal assessment focusing on how you fit the description of the person that we seek. In particular, please provide a numbered list to explain whether and how your qualifications

— / —

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>

NorthDakotaStateU Evolution

The Department of Microbiological Sciences at North Dakota State University seeks a postdoctoral research associate to work on an NSF funded project on the evolutionary ecology of microbes, including foodborne pathogens. We seek an innovative and collaborative individual who wants to work on population genomic analysis of > 900 genomes to determine the mechanisms of adaptive divergence in non-host habitats and development of new research projects in these areas. The successful candidate will join a team analyzing a landscape-scale georeferenced collection of microbial genomes from soil isolates and will be expected to analyze and interpret data and to publish in peer-reviewed journals. The researcher will also be a resource and collaborator for other researchers on similar projects examining the evolution of virulence and the evolutionary underpinnings of phenotypic plasticity in microbes. The position is available with a one-year appointment upon the identification of a suitable candidate and may be renewed contingent upon good job performance and available funding.—

Minimum Qualifications: - Ph.D. degree in microbiology, evolutionary genomics or a related field. - Proficient in computational biology and bioinformatics. - A basic knowledge of microbial biochemistry and/or physiology. - Ability to work independently and on a team to accomplish research goals. - Excellent oral and written communication skills.

Preferred Qualifications: - Prior experience with phylogenetic analysis, spatial ecology and/or molecular microbiology. - Practical experience with software programming, including: R, Java, and/or GIS.— - A good record of publications in peer-reviewed journals.

You can apply to the position at—<https://jobs.ndsu.edu/postings/9479>— . Direct questions about this position to:

Peter Bergholz Dept. Microbiological Sciences
North Dakota State University Fargo,
ND 58108 peter.bergholz@ndsu.edu <https://>

www.ndsu.edu/pubweb/~pberghol
Peter" <peter.bergholz@ndsu.edu>

"Bergholz, The closing date for this post will be 12.00 noon on Wednesday 19 September 2018.

For any further questions, don't hesitate to contact me.

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

OxfordU 2 ViralEvolution

Dear all,

We are recruiting a postdoctoral researcher in statistical genetics and pathogen dynamics in the group of Christophe Fraser at the Big Data Institute at Oxford University. Grade 7: 31,604 - 38,833 with a discretionary range to 42,418 per year.

This is an exciting opportunity for a postdoctoral researcher in statistical genetics and pathogen dynamics to join a team dedicated to developing a system for processing samples from viral outbreaks all the way from taking samples to real time epidemiological analysis that can be used for decision making by public health bodies.

The successful candidate 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.

This work involves developing new algorithms for phylodynamic analysis, analysis of complex data, and communication with a wide variety of stakeholders involved in the project. You will develop new and adapt existing analysis methods, simulation methods and computer code for phylodynamic analysis and perform analyses, including active management of programs on high performance cluster. In addition, you will test hypotheses and analyse data from a variety of sources, reviewing and refining working hypotheses and contribute to bioinformatics pipelines.

You must have a PhD in quantitative biology, applied mathematics, statistical genetics, theoretical physics, or another relevant and related subject and have the ability to manage own academic research and associated activities, and to work to deadlines

This full-time position is fixed-term for 5 years.

Further particulars, including details of how to apply, can be obtained at https://www.recruit.ox.ac.uk/pls/-hrisliverecruit/erq_jobspec_details_form.jobspec?p_id=-136632 Applications for this vacancy should be made online and you will be required to upload a CV and supporting statement as part of your application.

Dear all,

We are recruiting a senior researcher in statistical genetics and pathogen dynamics in the group of Christophe Fraser at the Big Data Institute at Oxford University. Grade 8: 39,992 - 47,722 per year.

This is an exciting opportunity for a senior postdoctoral researcher in statistical genetics and pathogen dynamics to join a team dedicated to discovering the causes of variation in virulence in HIV-1 infected patients. The postholder will report to Professor Christophe Fraser, and be based in the Pathogen Dynamics group at the new Oxford Big Data Institute.

You will develop innovative methods, combining statistical genetics, phylogenetics and/or phylodynamics, and mathematical modelling. You will be driven by biological and epidemiological aims. HIV-1 genomic data are unusual, with short genomes that are highly variable, both at the population level, but also within each patient; there is thus substantial scope for you to learn new biology and develop novel methods of public health utility.

This work involves developing new algorithms for simulation and inference, analysis of complex data, and communication with a wide variety of stakeholders involved in the project.

You will have a PhD in statistical genetics, applied computing, statistics, infectious disease epidemiology, applied mathematics, data sciences, or relevant quantitative science, together with relevant experience in genetics or statistics. You will also possess sufficient specialist knowledge in genetics or pathogen dynamics, epidemiology or simulation science to work within established research programmes.

An appointment for a Postdoctoral Researcher at Grade 7 (31,604 - 38,833 p.a.) with appropriate adjustment in the duties, will be considered based on the applicant's skills and experience.

This full-time position is fixed-term for 2 years in the first instance.

Further particulars, including details of how to apply, can be obtained here: https://www.recruit.ox.ac.uk/pls/hrsliverecruit/-erq_jobspec_details_form_jobspec?p_id=136621

Applications for this vacancy should be made online and you will be required to upload a CV and supporting statement as part of your application.

— / —

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>

develops research in a wide range of disciplines, including evolutionary biology, ecology, computational biology, genetics, and comparative genomics.

Review of applications begins immediately and will continue until Oct 31. A starting date at the beginning of January 2019 would be ideal. The contract would be for 1 year, renewable at least once. The salary will depend on experience. To apply, please submit: i) a cover letter summarizing research interests and expertise ii) a Curriculum Vitae (including publications), and iii) the names and contact information for at least two references. Questions and application should be sent to Hélène Morlon (morlon@biologie.ens.fr).

Hélène MORLON <morlon@biologie.ens.fr>

Paris IslandBiodiversityTheory

Postdoctoral position. Island Biodiversity Theory for Community Genetic Data. Ecole Normale Supérieure, Paris

A postdoctoral position is available to work in Hélène Morlon's group at the Ecole Normale Supérieure < <http://www.biologie.ens.fr/phyloeco/index.html> > on a project < https://cordis.europa.eu/project/rcn/216368_en.html > supported by a three-year Twinning grant from the European Research Council, in collaboration with Anna Papadopoulou (University of Cyprus), Brent Emerson (CSIC, Tenerife) and Alfred Vogler (NHM, London). The postdoc will develop island biodiversity models with the specific goal to generate theoretical predictions that are testable from community genetic data (e.g. metabarcoding, RAD-seq data).

Applicants should have solid quantitative, programming, and/or bioinformatics skills, as well as good writing skills. Previous experience with modeling in ecology and/or evolution will be highly appreciated, ideally in one or several of the following fields: population genetics, phylogenetics, community ecology, macroecology, and macroevolution. Previous experience with analyzing population genetic and/or metabarcoding data will be a plus. Speaking French is not mandatory.

The researcher will be based at the Institute of Biology of the Ecole Normale Supérieure < <http://www.ibens.ens.fr/bens.ens.fr/> > and will be involved in the networking activities linked to the project. The IBENS is a multidisciplinary research center in Biology with more than 300 staff members, conveniently located in the Latin Quarter in downtown Paris. The center

PennsylvaniaStateU MarineSymbiosis

The Baums (<http://baumslab.org/>, @ilianabaums) and Fisher (<http://www.personal.psu.edu/crf2/>) labs at Pennsylvania State University are looking for a postdoctoral researcher to work on coral symbiosis and molecular ecology as part of our research focus on the effects of natural and anthropogenic oil and gas inputs on the Gulf of Mexico deep coral ecosystem (<http://www.ecogig.org>). The successful candidate will combine ecological and genomics approaches to study how coral interact with microbes and their environment. A background in bioinformatics with experience in microbiome sequencing and analysis and/or ecological modeling is desirable. Programming skills including UNIX/LINUX and R are a plus as is experience in ocean-going research. The candidate must have a PhD in bioinformatics, evolution, marine biology, molecular ecology or related fields. The candidate will join an internationally renowned bioinformatics program (<http://www.huck.psu.edu/content/graduate-programs/bioinformatics-and-genomics/faculty>) and a vibrant and growing coral research group (<http://www.bio.psu.edu/>). Position initially for 12 months with possibility of continuation. Review of applications will begin October 1, 2018 and continue until the position is filled. The desired start date is on or before January 1, 2019.

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.

Job URL: <https://psu.jobs/job/83230> Thank you,

Vicki Stevens Carpenter

Department Head Administrative Assistant Department of Biology

Eberly College of Science The Pennsylvania State University 208 Mueller Lab University Park, PA 16802 Direct Line: 814-865-4562 Main Line: 814-863-0278

Fax Number: 814-865-9131

VICKI M STEVENS CARPENTER <vms19@psu.edu>

PurdueU EvolutionaryBiology

Purdue Post-doctoral Scholars in Natural Resources

Purdue University's Department of Forestry and Natural Resources seeks candidates for 1-2 post-doctoral positions for its annual recurring competition for post-doctoral scholars. The department has a broad environmental scope with nationally ranked doctoral programs, emphasizing interdisciplinary approaches across a spectrum of research areas including ecology, genetics, forest biology, forest measurement and assessment/GIS, wood products, wildlife, fisheries and aquatic sciences, and natural resources social science (www.ag.purdue.edu/fnr). Departmental faculty members actively participate in interdisciplinary initiatives including the Center for Advanced Manufacturing, Center for the Environment, Purdue Water Community, Purdue Interdisciplinary Center for Ecological Sustainability, Hardwood Tree Improvement and Regeneration Center, Tropical Hardwood Tree Improvement and Regeneration Center, Center for Global Soundscapes, Center for Regional Development, Purdue Climate Change Research Center, Illinois-Indiana Sea Grant, and the Natural Resources Development Institute.

Requirements for the position(s) include a Ph.D. in natural resources or related discipline, evidence of initiative, independence, and productivity, and a commitment to

conservation of natural resources. The program is open to U.S. and non-U.S. citizens.

Positions will be 2-year appointments at a salary of \$47,500, plus benefits and a discretionary fund of \$5,000/year in addition to any research funds that are provided by mentors.

Application Process: Before applying, interested individuals should contact prospective postdoctoral mentors in the department to discuss project ideas. A list of faculty mentors is available at <https://ag.purdue.edu/fnr/Pages/dirpostdocprgrm.aspx>. Mentoring may be sought from individual faculty or by faculty teams, whichever is more appropriate to successfully conduct the proposed work.

To apply to the Natural Resources Scholars program candidates must submit a) names of one or more faculty who have agreed to serve as mentors for the proposed project, b) a curriculum vitae, c) a proposal describing the work to be undertaken, d) two letters of reference, and e) a 1-page statement of support from the proposed mentor(s). Materials should be submitted as PDF files via email to mmann@purdue.edu with the subject line "Application: Postdoc Scholars in Natural Resources". Letter writers should submit their recommendations directly using the email address above. The deadline for receiving completed applications is October 31, 2018.

Applicants may propose projects that complement, extend, or synthesize existing efforts and interests of the faculty. The proposal should identify the issue to be addressed, summarize the current level of knowledge as it relates to the issue, describe the objective(s) of the proposed work, provide the study design and methods used to meet the objective(s), explain expected results and deliverables, and highlight their scientific and broader significance. The proposal is limited to a 300-word summary page and three (3) single-spaced pages, not including references, using one-inch margins and a minimum 11-point standard font.

Applications will be judged on overall quality including prior performance, support letters, and the scientific and technical merit and feasibility of the proposal. For additional information, please contact Maria S. Sepúlveda, Professor and Associate Department Head of Research (mssepulv@purdue.edu).

Purdue University is an equal opportunity/equal access/affirmative action employer fully committed to achieving a diverse workforce.

Prof. J. Andrew DeWoody Depts. of Forestry & Natural Resources and Biological Sciences Purdue University West Lafayette IN USA 765 496 6109

“DeWoody, James Andrew” <dewoody@purdue.edu>

SGN Frankfurt

SoilInvertebratePhylogenomics

Job offer ref. #12-18017

The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. LOEWE Centre for Translational Biodiversity Genomics (LOEWE-TBG), <https://tbg.senckenberg.de>, is a joint venture of the Senckenberg Gesellschaft für Naturforschung (SGN), Goethe-University Frankfurt, Justus-Liebig-University Giessen and Fraunhofer Institute for Molecular Biology and Applied Ecology IME aiming to intensify biodiversity genomics in basic and applied research. We will establish a new and taxonomically broad genome collection to study genomic and functional diversity across the tree of life and make genomic resources accessible for societal-demand driven applied research. The Senckenberg Gesellschaft für Naturforschung and the LOEWE-TBG invite applications for a PostDoc (m/f) - Soil Invertebrate Phylogenomics - Metagenomics (100%)

Your tasks in Phylogenomic inferences from shallow genome sequencing data of soil nematodes, mites, earthworms, etc. in Inference of phylogenetic conservatism of traits in Taxonomic / functional assignment of invertebrate metagenomes

Your profile in PhD in bioinformatics, evolutionary studies or related areas in Experience in phylogenomics / phylogenetics in Experience in de novo mitogenome (and other high-copy gene) assembly in Ability to assemble / troubleshoot bioinformatic pipelines and to deal with large amount of data (i.e. ability for shell and script programming). in Excellent communication skills in written and oral English in Team player who successfully interacts with graduate students and colleagues in Interdisciplinary training and background is welcome

What is awaiting you? in A dynamic team of scientists at the new LOEWE Centre Translational Biodiversity Genomics (including ecologists, evolutionary biologists, bioinformaticians, applied scientists, etc.) in Close collaboration with scientists working on a similar project at the Laboratoire d'Écologie Alpine (LECA Grenoble, France) in Interdisciplinary networking with biodiversity and climate scientists at the Senckenberg Research Institute in Possibility to co-supervise undergraduate and

graduate students and to gain teaching experience in Flexible working hours - annual special payment - company pension scheme - Senckenberg ID card for free entry in museums in Frankfurt - a holiday of 30 days/year

Place of employment: Frankfurt am Main Working hours: Full time (40 hours/week) Type of contract: Initially limited for 3 years Salary: According to the German collective agreement TV-H (pay grade E 13) Salary and benefits are according to a full time public service position in Germany (TV-H E13). The position is available as of January 1st, 2019.

The Senckenberg Gesellschaft für Naturforschung supports 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 für Naturforschung. Please send your application, mentioning the reference of this job offer (ref.#12-18017) by e-mail (attachment in a single pdf document) until October 11th, 2018 and include a cover letter detailing your research interests and experience, a detailed CV, copies of your certificates (transcripts and grades), a list of publications, contact details of two referees to:

Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt am Main E-Mail: recruiting@senckenberg.de

For more scientific information, please contact Dr. Miklós Balint, Miklos.Balint@senckenberg.de

– PD Dr. Miklós Balint Senckenberg Gesellschaft für Naturforschung Biodiversity and Climate Research Centre Senckenberganlage 25 60325 Frankfurt Germany

Tel. +49 (0)69 7542 1856 web: http://www.bik-f.de/root/index.php?page_id=238 <http://scholar.gooSenckenberg> Gesellschaft für Naturforschung (Rechtsfähiger Verein gemäß §22 BGB) Senckenberganlage 25 60325 Frankfurt www.senckenberg.de
Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Andreas Mulch, Stephanie Schwedhelm, Prof. Dr. Katrin Böhning-Gaese, Prof. Dr. Uwe Fritz, PD Dr. Ingrid Kröncke; Präsidentin: Dr. h.c. Beate Heraeus; Aufsichtsbehörde: Magistrat der Stadt Frankfurt am Main (Ordnungsamt)

Die Welt baut ihr Museum - bauen Sie mit! www.die-welt-baut-ihr-museum.de Miklos Balint <Miklos.Balint@senckenberg.de> Miklos Balint <Miklos.Balint@senckenberg.de>

Smithsonian MasonSchoolConservation ConservationGenomics

The Smithsonian-Mason School of Conservation (SMSC) is accepting applications for a Postdoctoral Research Fellow in the field of conservation genomics. The position is a 12-month appointment, renewable up to three years, and will be based at the National Zoological Park-Smithsonian Conservation Biology Institute in Front Royal, Virginia, USA. George Mason University has a strong institutional commitment to the achievement of excellence and diversity among its faculty and staff, and strongly encourages candidates to apply who will enrich Mason's academic and culturally inclusive environment.

We are seeking a postdoctoral researcher with expertise in conservation or population genomics. The successful candidate will contribute to ongoing, cutting-edge research on the conservation genomics of critically endangered African antelopes such as the scimitar-horned oryx (*Oryx dammah*). The research will include assembly and annotation of the genomes, generation of whole genome sequences from additional individuals, and/or analyses related to patterns of genome-wide diversity, inference of historical demography, and comparative analyses of closely related species. The position involves focused research on developing novel approaches to establishing self-sustaining populations of endangered ungulates *ex situ*, developing genomic tools for managing small populations, and creating and facilitating networks of people across sectors taking action for conservation. In addition to the research effort, this position will provide oversight of three SMSC laboratory spaces and ensure compliance with applicable safety regulations, and ensure appropriate safety equipment is available and training is completed.

We seek a creative and highly motivated individual with excellent interpersonal and English language skills who will work closely with a multi-disciplinary team that includes genomicists, reproductive physiologists, and animal managers to help establish new approaches for conserving endangered species in both *ex situ* and *in situ* environments.

The postdoctoral researcher will have office space, access to the Smithsonian Institution's Hydra computing cluster, and access to the George Mason University supercomputing cluster.

Required Qualifications: 1. Ph.D. in conservation biology, evolution, ecology, or closely related field; 2. Demonstrated experience analyzing whole genome and population genomic data using bioinformatic pipelines; 3. Strong programming skills and proficiency with Python or other computer languages; 4. Demonstrated laboratory expertise in molecular genetic techniques related to the preparation of genomic libraries, target enrichment capture, and SNP array analyses; and 5. Demonstrated ability to complete projects in a timely manner, prepare manuscripts, and communicate findings in peer-reviewed journals.

Salary: A salary in the range of \$48,000 - \$52,000 for a first-year postdoctoral researcher is provided along with excellent state employee benefits (health, dental, vision).

Information about the SMSC may be obtained at <http://smconservation.gmu.edu> or by contacting Anastasia Triplett atriple2@gmu.edu.

For full consideration, applicants must apply for position number F272Az at <https://jobs.gmu.edu/>; complete and submit the online application; and upload a cover letter, resume, and a list of three professional references with contact information.

Klaus-Peter Koepfli, Ph.D.

Smithsonian Conservation Biology Institute Center for Species Survival National Zoological Park 3001 Connecticut Avenue NW Washington, DC 20008 USA Mobile (USA): +1 310 903 0197 E-mail: KoepfliK@si.edu OR klauspeter.koepfli527@gmail.com

Klaus-Peter Koepfli <klauspeter.koepfli527@gmail.com>

UAlabama DimensionsBiodivMussels

The Atkinson Lab at the University of Alabama (<http://atkinsonlab.ua.edu/>) is recruiting a postdoctoral research fellow to work on a NSF Dimensions of Biodiversity funded postdoc position examining the linkages among phylogenetic, genetic, and functional diversity in southeastern USA streams. Up to 3 years of funding is available with a flexible start date, but ideally the start will be by June 2019 or earlier.

The position will involve the study of biodiversity within freshwater mussels (Family: Unionidae) across multiple dimensions of biodiversity within streams in the

Mobile and Tennessee River Basins. This project will address basic ecological principles related to niche vs neutral based models across levels of biodiversity in both freshwater mussels and their associated gut microbial community. This is a highly interdisciplinary project to understand ecological and evolutionary associations among the environment, genetic diversity, functional traits, and community assembly across both host (i.e. mussels) and microbiome phylogenies. In addition to being housed within the Atkinson lab, the selected applicant will work closely with Jeff Lozier at the University of Alabama and will collaborate with researchers at the University of Mississippi. More information about the project can be found at <http://mussels.ua.edu/>. The position is for a highly motivated postdoctoral research associate whose primary objective will be to oversee fieldwork and conducting functional trait analyses, but will also be involved in integrating phylogenetic, genetic, and functional trait data. Responsibilities will include leading fieldwork, setting up a field experiment, laboratory work, statistical analysis, and interfacing with a postdoc based at University of Mississippi. The ideal candidate should have experience conducting fieldwork in streams in difficult conditions, a background in basic ecological principles including ecological stoichiometry, familiar with conducting basic water chemistry analyses, excellent computational skills, SCUBA certified (or willingness to get certified), and the ability to effectively manage large data sets. Additional sought-after skill sets include familiarity with methods for high throughput genomic analyses and laboratory genetics skills. The applicant should be creative and independent, have excellent organizational, communication, and writing skills, an exemplary publication record in ecology or other related fields, and an interest in working as part of a large collaborative team. A general interest in freshwater mussel biology and related field experience would be advantageous, but applicants with diverse research backgrounds are encouraged to apply.

Required qualifications: Candidates must have received a Ph.D. in a relevant field by the start date.

Applicants interested in the position should contact Carla Atkinson (clatkinson@ua.edu) and include their CV and letter of interest with potential start dates.

Applicants must apply by submitting an application to the Biological Sciences Departmental postdoctoral pool at facultyjobs.ua.edu (requisition number 0811250 for Fall 2018 or search for Keyword 'Biology' for most recent posting): <https://facultyjobs.ua.edu/postings/search>. Materials uploaded to this website should include: 1. Cover letter mentioning the 'Linking scales of biodiversity in freshwater mussels' position, a description of past research accomplishments and future research goals,

and the names and contact information for 3 references (maximum of two pages). 2. Curriculum vitae

Review of applications will begin October 5, 2018, applications submitted afterwards will be reviewed until the position is filled. The University of Alabama is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

"Lozier, Jeffrey" <jlozier@ua.edu>

UCalifornia Berkeley HumanEvolutionaryGenetics

Post-doctoral position ??? University of California, Berkeley ??? Human Evolutionary Genetics.

Description: The Moorjani Lab (<https://moorjanilab.org/>) at University of California, Berkeley has a post-doctoral position available for motivated candidates with background in statistical population genetics and/or data science.

Our lab focuses on using statistical and computational approaches to study questions in human genetics and evolutionary biology. 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 biology. 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.

Minimum/Basic Qualifications required at the time of application: Completion of all doctoral degree requirements except the dissertation in genetics, computational

biology, biostatistics, population genetics or related fields. Programming experience (e.g. C/C++, Python/Perl, R or other programming languages)

Additional Qualifications: PhD or equivalent foreign degree in genetics, computational biology, biostatistics, population genetics or a related field. Knowledge of statistics and population genetics theory. Well established track record of research productivity and publications.

Preferred Qualifications: Experience with large-scale genomic data analysis.

Salary: This is a full-time position. Salary is commensurate with qualifications and experience.

How to apply:

Applicants should submit the following materials: A cover letter A curriculum vitae Statement of Research (One-page summary of research interests) Contact information for 3 references

Letters of reference are not required at this time. We will seek your permission before contacting your references. All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e., dossier service or career center), to the UC Berkeley statement of confidentiality: <http://apo.berkeley.edu/evalltr.html> . This position will be open until filled. Please address inquiries to Maria Ruiz, maruiz@berkeley.edu.

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, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see: <http://policy.ucop.edu/doc/4000376/-NondiscrimAffirmAct.??> ??

Priya Moorjani <moorjani@berkeley.edu>

UCalifornia Davis AvianConservationGenomics

POSTDOCTORAL RESEARCHER IN AVIAN CONSERVATION GENOMICS:

We are seeking a postdoctoral researcher with expertise in conservation genomics, population genetics, avian physiology, and/or evolutionary ecology. The successful candidate will be part of an NSF funded project that combines genomic data with physiological experiments and morphological measurements to understand climate adaptation in birds. We seek a creative and highly motivated individual to work closely with a multidisciplinary team of technical staff, graduate students, senior researchers, post-docs, and faculty to carry out field experiments, develop bioinformatic pipelines, and analyze population genomic data. The postdoc will be encouraged to develop his/her own research project that furthers our understanding of the potential for adaptation to climate change in birds.

The postdoc will be based in Rachael Bay's lab (www.rachaelbay.wordpress.com) in the Department of Evolution and Ecology at UC Davis. This project is a collaboration with Kristen Ruegg (Colorado State University), and Blair Wolf (University of New Mexico) and part of the Bird Genoscape Project (www.birdgenoscape.org).

QUALIFICATIONS: - A Ph.D. in Evolution, Ecology, or a closely related field - Experience using bioinformatic pipelines to analyze genetic or genomic data - Preferred field experience in avian ecology and/or physiology - Demonstrated ability to follow through on project deliverables and communicate findings in high quality peer-reviewed journals. - Strong statistical skills and demonstrated proficiency with R or another statistical program. - Strong attention to detail, evidenced by prior research.

SALARY: Salary and benefits are consistent with UC Davis policy and applicant experience. Current salary for a 1st year Postdoc is \$49,188.

TO APPLY: Interested candidates should submit a CV, the names and contact information for three potential references, and a cover letter explaining the candidate's interest in the position and how their past research and future research goals fit within the position. All materials should be submitted in PDF format by email

to rbay@ucdavis.edu, with the subject header 'Avian Conservation Genomics Postdoc'. Applications received by October 15 will receive full consideration, but the position is open until filled and applications will be reviewed as they arrive. The position is available immediately, with a preferred start date sometime during the fall or winter 2018/19, although some flexibility in this start date is possible for the ideal candidate. Questions about the position should be directed to Rachael Bay <rbay@ucdavis.edu>. The University of California is an affirmative action/equal opportunity employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences.

Rachael Bay <rachaelbay@gmail.com>

UCalifornia Davis Convergent Evolution

The Ross-Ibarra lab at the University of California Davis is hiring a postdoctoral scholar to work on the evolutionary genetics of convergent evolution across multiple populations of eight species of Andropogoneae grasses. The candidate will be responsible for population genetic analysis (but not collection) of whole genome sequence data to quantify convergent evolution across populations and species. The project is an NSF-funded collaboration with Ed Buckler, Matthew Hufford, Toby Kellogg, Adam Siepel, and Qi Sun to use evidence of convergence across deep evolutionary time to identify functional sites and inform machine learning models to predict gene expression and phenotype.

The Ross-Ibarra lab is part of a vibrant community of plant and evolutionary biology at UC Davis, including faculty from the Center for Population Biology, the Genome Center, and the Dept. of Plant Sciences. We are proud of the continued career success of past postdocs in industry, academia, and government.

Applicants should have a background in evolutionary biology, with experience in population genetic analysis of genome-scale data. The successful candidate should be able to communicate and interact effectively as part of a team of researchers. Please see our lab expectations for details. Interested applicants should email a cover letter describing their research interests, a current CV, and contact information for three references.

The Ross-Ibarra lab is committed to ensuring a safe,

friendly, and inclusive workplace for all its members, regardless of nationality, race or ethnicity, gender, religion, sexual orientation, age, or medical conditions. We especially encourage applications from persons traditionally underrepresented in the sciences. Please check the UC Davis website for information about salaries and work/life in Davis as a postdoc. The start date is flexible, with preference for early-mid 2019. The position is for one year, with possibility of renewal up to four years contingent on successful performance.

Jeffrey Ross-Ibarra

Dept. of Plant Sciences 262 Robbins Hall, Mail Stop 4 University of California One Shields Ave Davis, CA 95616

Tel: 530-752-1152 @[rossibarra](mailto:rossibarra@ucdavis.edu) www.rilab.org Jeffrey Ross-Ibarra <rossibarra@ucdavis.edu>

UCalifornia Davis Evolution

EFFECTIVE: September 10, 2018

DEADLINE: November 1, 2018

POSTDOCTORAL FELLOW IN POPULATION BIOLOGY – The Center for Population Biology at UC Davis invites applications for a Postdoctoral Fellowship in Population Biology, broadly defined to include ecology, phylogenetics, comparative biology, population genetics, and evolution. We particularly encourage applications from candidates that have recently completed, or will soon complete, their PhD.

The position is for TWO YEARS, subject to review after one year, and can begin as early as July 1, 2019. This position is covered by a collective bargaining unit. It has a starting annual starting salary of \$49,188 plus benefits, and \$6,000 per annum in research support. The Fellow will be a fully participating member in the Center for Population Biology and will be expected to have an independent research program that bridges the interests of two or more CPB faculty research groups. We strongly encourage candidates to contact appropriate faculty sponsors before applying. We also ask that each Fellow propose a workshop, discussion or lecture series that they could offer to the community of population biologists at UC Davis; faculty sponsors or the Director of CPB, Artyom Kopp, can provide additional input on this aspect of the fellowship. For samples of past workshop abstracts and more information about UC Davis programs in population biology, see

<https://cpb.ucdavis.edu/cpb-postdoc-fellowship> . ONLINE APPLICATION: Interested candidates should submit a cover letter, a CV, a short description of research accomplishments (1-2 pages), a short description of proposed research including potential faculty mentors (1-2 pages), a brief description of their proposed workshop (1 page or less), and copies of two publications, all in PDF format at: <https://recruit.ucdavis.edu/apply/-JPF02384> (this job number and application link will be open and available for application input on or around September 10, 2018). Applicants should also provide the information requested for three referees. Once entered, applicants will electronically request letters from referees who will then be prompted by email with upload instructions. Refer to the on-line instructions for further information. For full consideration, applications (including letters of reference) must be received by November 1, 2018. The University of California is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for diversity. E-mail questions to smmann@ucdavis.edu. More information is available at this link: <https://cpb.sf.ucdavis.edu/cpb-postdoc-fellowship> – Artyom Kopp Professor, Department of Ecology and Evolution Director, Center for Population Biology University of California - Davis One Shields Ave Davis CA 95616 office (530) 752-8657 lab (530) 752-8328 fax (530) 752-9014 akopp@ucdavis.edu <http://kopplab.ucdavis.edu/> Artyom Kopp <akopp@ucdavis.edu>

UCalifornia Davis PopGeneticsSeagrass

Please consider posting the following postdoc position on EVOLDIR:

Postdoctoral researcher in ecological genomics - UC Davis

We are seeking a postdoctoral researcher with expertise in ecological genomics, population genetics, and/or marine ecology for a collaborative project with Jay Stachowicz, Rick Grosberg, and Rachael Bay in the Department of Evolution and Ecology at UC Davis.

In seagrass co functioning in communities of eelgrass (*Zostera marina*). This project will include analysis of a global genome resequencing and environmental sampling dataset, with potential for integrating further experi-

ments. Our previous work focused on describing phenotypic variation among individuals and how this phenotypic variation affects assemblage productivity and response to a changing environment. You can see a review of that work here: <https://stachlab.wordpress.com/-ecological-consequences-of-genetic-diversity/>

The postdoc would be based on the UC Davis campus but the position could also involve field and/or laboratory work at the Bodega Marine Lab. The postdoc will be encouraged to develop his/her own research project that furthers our understanding of ecological genomics in marine systems.

QUALIFICATIONS: - A Ph.D. in Evolution, Ecology, or a closely related field - Experience using bioinformatic pipelines to analyze genetic or genomic data - Demonstrated ability to follow through on project deliverables and communicate findings in high quality peer-reviewed journals. - Strong statistical skills and demonstrated proficiency with R or another statistical program. - Strong attention to detail, evidenced by prior research.

SALARY: Salary and benefits are consistent with UC Davis policy and applicant experience. Salary for a 1st year Postdoc is \$49,188

TO APPLY: Interested candidates should submit a CV, the names and contact information for three potential references, and a cover letter explaining the candidate's interest in the position and how their past research and future research goals fit within the position. All materials should be submitted in PDF format by email to both jjstachowicz@ucdavis.edu and rbay@ucdavis.edu, with the subject header 'Ecological Genomics Postdoc'. Applications received by October 1 will receive full consideration, but the position is open until filled and applications will be reviewed as they arrive. The position is available immediately, with a preferred start date sometime during the fall 2018, although some flexibility in this start date is possible for the ideal candidate. Questions about the position should be directed to Jay Stachowicz <jjstachowicz@ucdavis.edu> or Rachael Bay <rbay@ucdavis.edu>. The University of California is an affirmative action/equal opportunity employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences.

Jay Stachowicz <jjstachowicz@ucdavis.edu>

UCalifornia Davis Population Genomics

Postdoctoral Research Fellow Position in Population Genomics at the University of California, Davis

Description: The Vector Genetics Lab (VGL) at the University of California, Davis has a post-doctoral position available for a highly motivated candidate with a background in theoretical/statistical population genomics. The VGL is dedicated to research and training in the areas of population & molecular genetics, genomics and bioinformatics of insect vectors of human and animal disease. We have developed a program aimed at expanding knowledge that may be applied to improving control of disease vectors and that also addresses problems of interest in the field of evolutionary genetics. See details at: <https://vectorgeneticslab.ucdavis.edu/>

Ongoing projects include work on the following systems: - Invasive *Aedes aegypti* populations in California - Island populations of *Anopheles* mosquitoes in islands off the coast of Africa - Urban and island populations of *Anopheles* mosquitoes in India

Ongoing research topics include: - Interspecific hybridization and introgression as a mechanism for adaptation - The evolution of populations on isolated islands - Defining populations in urban centers as ecological islands - Development of new wgs-based methods to estimate population size and dispersal - Evaluating the behavior of gene drive systems via field trials

Responsibilities: The successful candidate will work on whole-genome sequencing data sets to decipher recent population history and evolution in mosquitoes that are vectors of human diseases. Further major responsibilities include extending and customizing state of the art methodologies in this field to implement bioinformatical pipelines tailored towards the specific needs of the various projects.

Required Qualifications: - PhD in Bioinformatics, Computational Biology, Population Genomics or related discipline (theoretical and/or applied) - Strong background in statistics - In-depth knowledge of population genetics theory - Experience working in Linux environment - Demonstrated record of research productivity and publications

Preferred Qualifications: - Experience with coalescence/IBD methods - Programming experience (e.g.

C/C++, Python/Perl, R) - Strong mathematical skills - Experience with genomic data analysis

Salary: This is a full-time position. Salary is commensurate with qualifications and experience.

How to apply: Applicants should submit the following materials: - A cover letter - A curriculum vitae - One-page statement of research interests and future goals - List of relevant publications - Contact information for 3 referees

Send the above combined into a single PDF to Gregory Lanzaro (gclanzaro@ucdavis.edu).

Review of applications will start immediately. This position will be open until filled. The anticipated start date for this position is late 2018 or early 2019. The appointment is for a duration of two years.

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, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see: <http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct/> "hschmidt@ucdavis.edu" <hschmidt@ucdavis.edu>

UCBerkeley Genomics

Postdoctoral position(s) on the genomics and evolution of cellular and organismal diversity, aging, and stress available.

The Sudmant Lab at UC Berkeley uses computational, statistical, and experimental methods to interrogate genetic and molecular phenotypic diversity at both the organismal and cellular level. We are particularly interested in studying the causes and consequences of stress and aging in organisms with a focus on post-transcriptional gene regulation, somatic mutation, and genetic adaptation in long (and short) lived species. Other topics of interest include population genetics and human diversity of copy number variation.

A multi-year postdoctoral position is available (initial 12-month appointment renewable up to four more years). Start date is flexible.

We are seeking both experimental and computation postdoctoral applicants with a wide range of interests and

expertise, however, specific/ongoing questions/projects include:

- 1) Quantify the impact of aging on the fidelity of post-transcriptional gene regulatory processes in different cellular and tissue contexts using vertebrate models including the mouse and killifish and high-throughput genomic profiling techniques such as ribosome profiling, RNAseq and single cell technologies.
- 2) Determine how age-associated somatic mutations accumulate in a cell-type specific fashion using single cell genome sequencing technologies in vertebrate models with a focus on structural variant formation.
- 3) High-quality Pac-Bio genome assembly of long-lived rockfish species genomes and dissection of structural genomic features, population genetics, and selective signatures.
- 4) Cellular engineering and CRISPR based QTL-mapping/screening of mutational mechanisms in different genetic backgrounds, cell types, and cell lines derived from individuals of different ages.
- 5) Development of novel computational methods to identify and quantify somatic mutations and signatures of DNA damage
- 6) Computational population genetics assessment of selective signatures of antagonistic pleiotropy in human and non-human populations

Required qualifications:

Ph.D. or equivalent in genetics, genomics, biology, computer science or related fields and demonstrated record of productivity and publications. Experience with either generating or analyzing large-scale genomic data.

Please contact Peter with your CV and a brief overview of the research program / questions you are interested in pursuing in our lab as well as PDFs of recent relevant publications. Please be prepared to provide scientific references (e.g. advisor / thesis committee members). The position is open until filled with an anticipated start date late 2018 or early 2019.

Peter Sudmant Assistant Professor Department of Integrative Biology University of California, Berkeley <https://www.sudmantlab.org> Peter Sudmant <psudmant@berkeley.edu>

Peter Sudmant <psudmant@berkeley.edu>

UCopenhagen ComputationalBiol

Postdoctoral Fellowship in Population Genomics

A two-year postdoctoral fellowship is available at the Section for Computational and RNA Biology, Department of Biology, University of Copenhagen. The position will be available from January 1st, 2019 or as soon as possible thereafter. The specific project involves analyzing population genomic samples of the musk ox (focus species) and the African buffalo. However, the applicant is expected to collaborate on other projects as well as teaching.

The project is a central part of “How species manage to persist on the edge of extinction”, which is a project funded by the Independent Research Fund Denmark. The project focuses on genomic dynamics and genetic load in species that have been through extreme bottlenecks and lost a significant part of their genetic diversity. This has happened to the muskox in East Greenland, without any signs of inbreeding depression. In the project, we will use comparative population genomics to assess loss of genetic diversity, accumulation of harmful genetic variants and inbreeding in species that experience extreme genetic drift. For comparison, we use a non-bottlenecked species, the African buffalo as a reference.

Key publications relevant for the project Moodley et al. 2017, Extinctions, genetic erosion and conservation options for the black rhinoceros (*Diceros bicornis*). *Sci Rep*: 2017, 7; 41417 Pedersen et al. 2017, The effect of an extreme and prolonged population bottleneck on patterns of deleterious variation: Insights from the Greenlandic Inuit. *Genetics*: 2017, 205(2); 787-801 Der Sarkissian et al. 2015 Evolutionary genomics and conservation of the endangered Przewalski's horse. *Curr. Biol.*: 2015, 25(19);2577-83. Xue et al. 2015, Mountain gorilla genomes reveal the impact of long-term population decline and inbreeding. *Science*: 2015, 348(6231);242-245. Moltke et al 2015. Uncovering the genetic history of the present-day Greenlandic population. *Am. J. Hum. Genet.*: 2015, 96(1);54-69 Allentoft et al. 2014 Extinct New Zealand megafauna were not in decline before human colonization. *Proc. Natl. Acad. Sci. U.S.A.*: 2014, 111(13); 4922-7

Research environments The position is in the Population and Statistical Genetics Group at the Section for Computational and RNA Biology. The project is run by

Hans R. Siegismund. However, associate professors Anders Albrechtsen and assistant professor Rasmus Heller from the same group will participate in the project.

The Population and Statistical Genetics group is working in population genomics, applied statistical and computational approaches for analysis of large scale genomic data. For more information, see www.popgen.dk. PSGG is a highly dynamic research environment with a world-leading record in scientific publication, an international scope and an informal working environment. The group is divided into independent research groups focusing on wildlife genomics and human and medical genomics.

Qualifications The postdoc will be expected to take a leading role in the project, participating both in the population genomic analysis of sequencing data as well as in the interpretation and communication of the project outcome. Some flexibility in the tasks is possible depending on the skills and interests of the candidate.

To be considered, applicants must: * Have a PhD in population genetics/genomics, bioinformatics or a similar field * Have experience in working with next generation DNA sequencing data * Be experienced with handling of large genetic data * Have published high-quality international peer-reviewed articles * The working language is English, thus good English speaking, reading and writing skills are required. For further information please contact Hans R. Siegismund (HSiegismund@bio.ku.dk)

Salary and terms of employment The successful applicant will be hired as postdoctoral fellow for a 2-year period.

The position is covered by the Memorandum on Job Structure for Academic Staff.

Terms of appointment and payment accord to the agreement between the Ministry of Finance and The Danish Confederation of Professional Associations on Academics in the State.

The starting salary is currently up to DKK 424,526 including annual supplement (+ pension up to DKK 72,594). Negotiation for salary supplement is possible.

The deadline for applications is 21 October 2018, 23:59 GMT +2.

The application, in English, must be submitted electronically on the website

<https://employment.ku.dk/faculty/?show=148062>

Please include * Cover letter (half to one page) * Curriculum vita * Diplomas (Master and PhD degree or equivalent) * Description of current research * Complete publication list * Contact details of two people for references

— / —

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>

UEdinburgh EvolutionaryGenetics

Two Postdoctoral Positions in Evolutionary Genetics

Highly motivated candidates are invited to join the group of Peter Keightley to work on the evolutionary impact of spontaneous mutations. As the ultimate source of genetic variation, new mutations play a central role in evolutionary biology. The nature of variation from mutations is key to many unresolved questions, including the fate of small populations, the evolution of ageing and the genetic basis of quantitative trait variation.

We aim to study two unique resources developed in our lab, in which mutations are expected to accumulate at radically different rates. The first is a highly replicated set of spontaneous mutation accumulation (MA) lines in mice, the first such set of lines in any mammalian species. Each MA line is bred for many generations in the near-absence of natural selection, leading to molecular and phenotypic divergence among lines. The second is a set of replicated MA lines (maintained for ~1,000 generations) in different strains and species of the single-celled green alga *Chlamydomonas*. We will address questions concerning the nature of the new mutational variation affecting the genome, gene expression and quantitative traits, and particularly the distribution of fitness effects of mutations. The project is flexible and can be tailored to the interests of successful applicants.

Applicants should have or shortly obtain a PhD in a relevant subject, e.g., evolutionary or quantitative genetics. Experience in bioinformatics will be an advantage. Candidates should have an outstanding academic track record commensurate with their career stage and experience. She/he is expected to be active in developing the project and to contribute to an enthusiastic working atmosphere. Candidates will benefit from training in a vibrant intellectual and collaborative environment in the UK's largest evolutionary biology institute. The project is funded by an ERC Advanced Grant to Peter Keightley and Diethard Tautz (MPI Ploen, Germany) and has substantial funds for computing, sequencing and travel. The positions are for 3 years with expected start dates of 1st Jan 2019.

To apply, go to <http://www.ed.ac.uk/human-resources/jobs> and search for vacancy 045486. Closing date for applications 25th October 2018.

Prospective applicants should contact peter.keightley@ed.ac.uk to discuss the project and include their CV and letter of interest.

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

“peter.keightley@ed.ac.uk” <peter.keightley@ed.ac.uk>

UGeorgia **Evolutionary Genomics Abiotic Stress**

A postdoctoral position studying the evolutionary genomics of abiotic stress resistance in sunflower and related, stress-adapted species is available in the Burke lab at the University of Georgia.

This position is part of a collaborative project that seeks to understand the genomic and physiological basis of adaptation to drought, salt, and low nutrient stress in a fascinating study system. The ideal candidate will have a strong background in evolutionary genetics with experience handling and analyzing large genomic datasets.

Funds are available to support this position over multiple years. The position is available immediately, but the start date can be somewhat flexible for the right candidate. Applications will be reviewed as they are received, continuing until the position is filled.

To apply, please send your CV, a brief statement of research interests, and the names and contact information for three references to: jmburke@uga.edu

Informal inquiries are also encouraged. Additional project details are available upon request.

Information about the UGA Dept of Plant Biology can be found at: <http://www.plantbio.uga.edu/> Information about the Burke lab can be found at: <http://www.theburkelab.org/> –

John M. Burke, Ph.D. Tel: 706.583.5511 Fax: 706.542.1805 <http://www.theburkelab.org/> University of Georgia Department of Plant Biology Miller Plant Sciences Athens, GA 30602

UGlasgow Bioinformatics

University of Glasgow, Bioinformatician

A bioinformatician post-doc position is available with Dr Poppy Lamberton in the Institute of Biodiversity, Animal Health and Comparative Medicine at the University of Glasgow to investigate the genetic composition of *Onchocerca* worms pre- and post- drug treatment. The project will use ddRAD-Seq, targeted resequencing and whole genome sequencing data to undertake sibship analysis of larval stages and adult worms. We aim to develop methods that can be used to differentiate between reinfection and repopulation post-treatment in *O. volvulus* infected humans with the long-term goal of improving the ability to test macrofilaricidal drug efficacy.

The project is funded for 18 months in the first instance with the potential for a further two years funding. In the first instance, the project is fundamentally bioinformatics based, but there is the potential for laboratory work and fieldwork in countries such as Ghana and Cameroon, project and post holder dependent.

Candidates should have a PhD in Biological Sciences, Bioinformatics, Computational Biology, Computer Science, Molecular Biology, Genomics, or a related discipline, and experience of population genetic approaches (e.g. ddRAD-Seq, WGS etc); knowledge of appropriate programming languages (e.g. Linux, R, Python or equivalent); excellent interpersonal, communication and problem-solving skills.

Appointment at level 6 or 7 depending upon experience (level 6/7 £28,660-£39,610 per annum). Enquiries to Dr Poppy Lamberton, poppy.lamberton@glasgow.ac.uk. Closing date 8 October 2018 (please see <https://www.jobs.ac.uk/job/BMZ556/research-assistant-associate> or University of Glasgow M00807 vacancy for full job description).

Many thanks indeed

Kind regards

Poppy

Dr Poppy Lamberton | Senior Lecturer

Lord Kelvin Adam Smith Fellow | ERC starting grant SCHISTO_PERSIST Institute of Biodiversity, Animal Health & Comparative Medicine Wellcome Centre for Molecular Parasitology Graham Kerr Building | Uni-

University of Glasgow | Glasgow | Scotland | UK | G12 8QQ

E-mail: Poppy.Lamberton@glasgow.ac.uk Telephone: +44 141 330 5571

Twitter: @poppylamberton

Web: www.poppylamberton.com The University of Glasgow, charity number SC004401

University of Glasgow: The Times Scottish University of the Year 2018

Poppy Lamberton <Poppy.Lamberton@glasgow.ac.uk>

U Illinois Comparative Microbiome

A Postdoctoral Position on comparative microbial ecology and metagenomics at the University of Illinois CR Woese Institute for Genomic Biology. 1-2 years with an option for renewal depending on funding.

Minimum Requirements: Candidates must have received a PhD in microbiology, molecular/cellular biology, biological anthropology or a closely related discipline within the past 5 years from an accredited university.

Qualifications:

- * Strong publication record in related field
- * Experience generating and interpreting microbial analyses
- * Grounded in theories of evolutionary biology
- * Comfortable with a range of molecular microbiology techniques
- * Excellent communication and writing skills

Desirable Qualities:

- * Programming and statistical skills a plus
- * Ability to collaborate and synthesize across disciplines

Please email CV, a brief statement of research interests and contact information for three references to rspostdoc@igb.illinois.edu at the University of Illinois at Urbana-Champaign by October 15, 2018. Position is available for immediate appointment and is open until filled.

Thank you.

Susan Flanegin Office Manager Carl R. Woese Institute for Genomic Biology 1206 W. Gregory Drive, MC195 Urbana, IL 61801 217.300.4484

“Flanegin, S” <flanegin@illinois.edu>

UJyvaskyla Finland HostParasiteEvol

Postdoctoral researcher position at University of Jyväskylä, Department of Biological and Environmental Science, Finland

EVOLUTIONARY ECOLOGY OF HOST-PARASITE RELATIONSHIPS

We are looking for candidates to fill a postdoctoral position for 2.5 years in a project “Environmental effects on complex parasite interactions”. The position is funded by the Academy of Finland.

The main aim of the project is to explore how co-infections of unrelated parasites are shaped by different conditions of environmental variation at within-host, among-host and host-external levels. Study organisms include bacterial pathogens and trematode parasites of salmonid fishes. Specific questions will look into effects of factors such as temporal variation in host exposure, natural and human-induced genetic variation of hosts, and chemical and physical changes in the environment surrounding the host-parasite interaction. The project will present novel results for basic research on evolutionary ecology of multiple parasite infections and has applied implications for management of key disease-issues in aquaculture.

We are looking for a highly motivated and enthusiastic member to our research group. Candidates should have a PhD or be about to obtain a PhD in ecology, evolutionary biology, molecular biology, microbiology, or another relevant discipline. A successful candidate will have good problem solving and communication skills, and ability to supervise bachelor and master’s level students. Previous experience of microbiology/molecular biology and experimental research is considered beneficial.

We offer stimulating working environment in an international Department that houses several internationally recognized research groups.

- Application deadline: 30 September 2018

- Starting date: 1.1.2019 or as agreed

- Duration of the position: 2.5 years

- Salary: The job-specific salary component of a postdoctoral researcher is based on the job demands level

5-6 (2893,95 euro/Month - 3374,18 euro/Month) according to the salary system concerning teaching and research staff at universities. In addition, a personal performance-based salary component amounting to the maximum of 46,3% of the job-specific salary component is also paid.

For more information and how to apply visit: https://rekry.saima.fi/certiahome/open_job_view.html?did=-5600&jc=12&id=00006025&lang=fi Applications should be submitted using the online application form accessible through the above link.

Dr. Anssi Karvonen

anssi.t.karvonen@jyu.fi

<http://users.jyu.fi/~anskarv/> “Karvonen, Anssi” <anssi.t.karvonen@jyu.fi>

ULausanne EvolutionaryBioinformatics

Postdoctoral position in evolutionary bioinformatics

at the University of Lausanne & Swiss Institute of Bioinformatics

Start date: 01.11.2018 (or as soon as possible thereafter)
Contract: 1 year, renewable 2 x 2 years, maximum 5 years
Activity rate: 100%

The research group of Prof. Christophe Dessimoz at the University of Lausanne Department of Computational Biology and Center for Integrative Genomics is recruiting a postdoctoral associate in evolutionary bioinformatics. For more details on the lab, please consult the website of the group: <http://lab.dessimoz.org> The ideal candidate will demonstrate enthusiasm for interdisciplinary research, keen to productively interact with evolutionary biologists, genome biologists and computer scientists, and read the corresponding range of scientific literature. There will also be opportunities to gain teaching experience (e.g. via student project supervision and contribution to undergraduate or graduate teaching).

Working conditions in Lausanne are extremely competitive, and include access to state-of-the-art computing and sequencing facilities. The environment is highly international, and all activities are conducted in English.

We are committed to promoting gender equality and strongly encourages applications from female candidates.

Requirements

Essential: - Doctorate degree - Solid programming experience (min. 3 years) - High level of motivation - Ability to collaborate in an interdisciplinary environment - Excellent spoken and written English proficiency

Desirable: - Publications in peer-reviewed journals - Past contribution to open source software packages - Experience in phylogenetic methods - Experience in high performance computing

How to apply

Via this URL <https://tinyurl.com/y9hx8sgt> About the University of Lausanne

The University of Lausanne is a higher teaching and research institution composed of seven faculties where approximately 15,000 students and nearly 5,000 collaborators, professors, and researchers work and study. Ideally situated along the lake of Geneva, near Lausanne's city center, its campus brings together over 120 nationalities. <http://unil.ch> About SIB Swiss Institute of Bioinformatics

The SIB Swiss Institute of Bioinformatics is an academic not-for-profit organization. Its mission is to lead and coordinate the field of bioinformatics in Switzerland. Its data science experts join forces to advance biological and medical research and enhance health. SIB (i) provides the national and international life science community with a state-of-the-art bioinformatics infrastructure, including services, resources, expertise; and (ii) federates world-class researchers and delivers training in bioinformatics. It includes some 65 world-class research and service groups including some 800 scientists in the fields of genomics, proteomics, phylogeny, systems biology, structural biology, and personalized health. <http://www.sib.swiss> Christophe Dessimoz <Christophe.Dessimoz@unil.ch>

ULB Brussels 21 Eco-EvolutionaryGenomics

POSTDOCTORAL OPPORTUNITIES AT THE UNIVERSITE LIBRE DE BRUXELLES

As part of a new EU-funded scheme (COFUND) within the framework of MARIE SKODOWSKA-CURIE actions, the Université libre de Bruxelles (ULB) will be recruiting 63 international postdoctoral researchers between 2018 and 2023, in three calls of 21 positions each. Applicants of any age and of any nationality are eligible. To be eligible, applicants should not have more than 7

years of postdoctoral experience at the date of the call deadline. Eligible applicants must not have resided or carried out their main activity (work, studies, etc.) in Belgium for more than 12 months during the 3 years preceding the call deadline. They also should not have benefited from another postdoctoral fellowship in Belgium for more than 6 months before the call deadline. For more information: <https://if-at-ulb.ulb.be> The first call is now open and will close on October 15. Highly motivated, curiosity-driven candidates with a strong publication record and interest in evolutionary genomics, genome assembly, molecular systematics and/or experimental evolution are welcome to contact me to discuss possible projects. Current research focuses in my group “Ecological & Evolutionary Genomics” include symbioses in sulfide-rich environments (notably caves), species delimitation in tropical reef corals, the development of a novel genome assembler dedicated to heterozygous genome assembly, comparative genomics of sexual vs. asexual organisms, and the application of chromosome conformation capture to assemble genomes to perfection. For more information: <http://ebe.ulb.ac.be/ebe/Flot.html> <https://scholar.google.com/citations?user=a71fYzcAAAAJ> Jean-François Flot Associate Professor Evolutionary Biology & Ecology - C.P. 160/12 Université Libre de Bruxelles Avenue F.D. Roosevelt 50 B-1050 Brussels - Belgium

Jean-François Flot <jflot@ulb.ac.be>

ULiverpool TEEffectOnFitness

The Betancourt lab is seeking a postdoctoral researcher to work on a BBSRC-funded project investigating the impact of transposable elements on fitness, using *Drosophila* as a model. The project will use a variety of methods, including deep sequencing, population genomics, laboratory assays, and genetics.

The ideal applicant will have a PhD in a relevant field, experience with bioinformatics and/or population genetics. The PDRA will work as part of a team that includes a full-time research technician, and will also be encouraged to develop his/her own research interests. Dr. Betancourt’s group has tackled a wide variety of questions in evolutionary genetics, addressing the role of recombination and sex-linkage in evolution, and the spread of selfish elements in *Drosophila* (more information here: <http://www.flyevolution.net/>).

The Institute of Integrative Biology (IIB) at the

University of Liverpool houses a large and active research faculty (see: <https://www.liverpool.ac.uk/integrative-biology/about/>), and includes several active groups in evolutionary biology (see <https://www.liverpool.ac.uk/integrative-biology/staff/-evolution-ecology-and-behaviour/>). IIB also houses several excellent core facilities, including a genomics centre (more here: <https://www.liverpool.ac.uk/integrative-biology/facilities-and-services/>).

The post is available for 1.5 years from the time of appointment. The official closing date for applications is October 11, 2018. To apply, search for job reference 009969 at <https://recruit.liverpool.ac.uk>; please include a cover letter, CV, and details for three references.

Informal enquires to A.Betancourt@liverpool.ac.uk very welcome.

Cheers,

Andrea

Institute of Integrative Biology University of Liverpool
Crown Street Liverpool L69 7ZB UK

“Betancourt, Andrea” <A.Betancourt@liverpool.ac.uk>

UMassAmherst PlantEvoDevo

A postdoctoral position is available in the Bartlett lab <<http://www.bartlettlab.org/>> at the University of Massachusetts Amherst. Research in our lab is focused on plant development and evolution, and on the evolution of developmental genes. We primarily use the grasses maize and *Brachypodium distachyon* as our model systems. Current projects in the lab include studying the development and evolution of flowers and floral sexuality in the grasses, the evolution of meristem homeostasis genes, and the evolution of homeotic transcription factors. Depending on the successful applicant’s interest and expertise, there is the potential to work on any of these projects, and to develop an independent research direction in collaboration with Dr. Bartlett.

This is a benefited, full-time Postdoctoral Research Associate position. Initial appointment is for one year, reappointment beyond the first year (up to two additional years) is contingent upon job performance and availability of funding. Postdoctoral Research Associates at the University of Massachusetts are unionized and receive standard salary and benefits, depending on years of experience. Salary is subject to bargaining unit

contract. The position is available immediately, but the start date is negotiable.

Qualified candidates are required to have a Ph.D. in plant biology, molecular biology, or a similar field of study. Molecular lab experience working with DNA, RNA, and/or protein is required. A keen interest in plant development and evo-devo is also essential. Experience working with maize, *Brachypodium*, or other grasses is preferred, as is expertise in the analysis of genomic data in an evolutionary context.

UMass Amherst is home to a vibrant research community, with particular strengths in plant biology, evolutionary biology, molecular biology, and genomics. Opportunities exist both to learn a range of cutting edge experimental and analytical methods (especially through the UMass Institute for Applied Life Sciences < <https://www.umass.edu/ials/> >), and to develop new research collaborations. The Pioneer Valley, where the town of Amherst is located, is a great place to live and work. The area is naturally beautiful, and UMass Amherst is part of a consortium of five local colleges < <http://www.fivecolleges.edu/> >, making for an intellectually rich environment.

Candidates must apply online by submitting a cover letter, CV, and the contact details of three references willing to provide letters of recommendation to Dr. Madelaine Bartlett at mbartlett@umass.edu. Review of applications will begin on September 30, 2018 and continue until the position is filled.

The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members.

Madelaine Bartlett, PhD Assistant Professor, Biology Department Curator of Living Plant Collections, UMass Natural History Collections University of Massachusetts Amherst | 374 Morrill IV South, 611 North Pleasant Street, Amherst, MA 01003 | Phone: 413-545-2235 Lab website: <http://www.bartlettlab.org/> | UMass Natural History Collections: *<http://bcrc.bio.umass.edu/nhc/> Madelaine Bartlett <madelaine.bartlett@gmail.com>

UMinnesota PhyloComparativeMethods

Postdoctoral Position at the University of Minnesota, Twin Cities

A postdoctoral researcher is sought to develop phylogenetic comparative methods and apply them to studies of plant macroevolution. This project is a collaboration between the labs of Emma Goldberg at the University of Minnesota (where the position will be based), Itay Mayrose at Tel Aviv University, Tracy Heath at Iowa State University, and Heath Blackmon at Texas A&M University. More information about our labs is available at < <http://www.umn.edu/~eeg> >, < <http://www.tau.ac.il/~itaymay> >, < <http://www.phyloworks.org> >, and < <http://coleoguy.github.io> >.

The work will focus on improving and applying methods for testing the influence of traits on lineage diversification. One line of attack is developing new model-based phylogenetic comparative methods, targeting known weaknesses in existing approaches. The other is creating tools for more robust use of existing and future methods, including designing benchmark test suites and tests of model adequacy. Empirical work will make use of extensive datasets on plant reproductive systems and chromosome counts, and it has the potential to make one of the strongest cases yet for the importance of species selection. The postdoc will also contribute to new workshops teaching phylogenetic comparative methods, to be held in the Midwest US and in Israel.

Relevant skills and knowledge include: macroevolution of reproductive systems and genome structure; phylogenetic comparative methods use and development; mathematics of stochastic processes; computational statistics; database and user interface design; programming in R, RevBayes, and C++; software for testing macroevolutionary hypotheses; software tools for reproducible research workflows; writing clearly for both technical and general readers; teaching in a computer lab setting. Expertise is not required in all these areas, however! We are generally looking for a biologist with macroevolutionary interests and good technical problem-solving skills.

Initial appointment will be for one year with competitive salary and benefits. Renewal for another year is possible, pending excellent performance and mutual agreement.

The start date is flexible. To apply, please assemble (i) a 1-3 page cover letter that highlights how your research interests and skills fit with this project, (ii) a CV, and (iii) names and contact information for three professional references. Materials should be submitted online at < <http://www1.umn.edu/ohr/employment/> > (Job Id #326772). Review of completed applications will begin on November 15, but candidates will be considered until the position is filled. Informal inquiries are welcome, directed to Emma Goldberg <eeg@umn.edu>.

The Twin Cities campus of the Univ Minnesota is home to a diverse set of local collaborators, expertise, and resources, particularly within the departments of Ecology, Evolution & Behavior <cbs.umn.edu/eeb> and Plant and Microbial Biology <cbs.umn.edu/plantbio>, the Bell Museum <bellmuseum.umn.edu>, and the Minnesota Supercomputing Institute <msi.umn.edu>. The campus is located in the heart of the Minneapolis-Saint Paul metropolitan area, which is rich in cultural and natural attractions (and ice skating rinks).

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

Emma E. Goldberg Assistant Professor Dept. of Ecology, Evolution and Behavior University of Minnesota – Twin Cities eeg@umn.edu <http://www.umn.edu/~eeg> “eeg@umn.edu” <eeg@umn.edu>

UNewHampshire EvolutionaryGenomics Physiology

The MacManes Lab (<https://genomebio.org>) at the University of New Hampshire is interested in recruiting a postdoctoral fellow to work on a project recently funded by the NIH, starting ASAP. Specifically, the project aims to understand how mammals survive in harsh desert conditions, and includes training in function & population genomics, physiology, molecular evolution, and field research.

The ideal candidate has a demonstrated interest in evolutionary biology, a strong publication record, and previous experience working in the Unix environment. I am particularly interested in someone with expertise in mammalian physiology. The MacManes lab is highly

supportive of people that come from non-traditional or under-represented groups, and we particularly encourage your application.

The University of New Hampshire is located in Durham, NH, which is only 10 miles from the Ocean, 1 hour drive to Boston or Portland ME, and a few hours from the White Mountains. Southern New England is known for its outdoor activities, sports, and craft-beer scene.

To begin the application process, contact me at Matthew.MacManes@unh.edu, including a brief description of your research interests and experience, as well as a current CV.

Matthew MacManes University of New Hampshire Durham, NH 03824

“MacManes, Matthew” <Matthew.Macmanes@unh.edu>

UOulu Finland PopulationEvolutionaryGenomics

https://rekry.saima.fi/certiahome/-open_job_view.html?did=5600&jc=1&id=-00006171&lang=en Postdoctoral position, the Department of Ecology and Genetics

Postdoctoral position to study evolutionary and quantitative trait genomics in forest trees at University of Oulu

A postdoctoral position for 24 months is available in the Department of Ecology and Genetics, University of Oulu, Finland (<http://www.oulu.fi/english/>) to work with Dr Tanja Pyhäjärvi (<http://www.oulu.fi/pyhajarvilab>) and Professor Outi Savolainen :<https://wiki.oulu.fi/display/PGG/-Genetic+basis+of+plant+adaptation+and+speciation> . Environment The Department of Ecology and Genetics has strong expertise and tradition in plant population genetics. Current research topics include genetics of local adaptation both in trees and Arabidopsis, quantitative genetics, conservation genetics and molecular evolution of insects. We offer a scientific environment that is enthusiastic about plant evolutionary genetics, a possibility to develop your genomics and bioinformatics skills and initiate international collaboration. Pyhäjärvi and Savolainen research groups are part of Biocenter Oulu and of the Population and Statistical Genomics Research Consortium which combines different population genomics research groups within the university.

Within Europe, we collaborate closely with other forest geneticists via the Horizon 2020 projects GenTree and B4EST.

Finland is one of the most livable countries, with a high quality of life, safety and excellent education system. The successful candidate will receive the benefits provided by the University of Oulu to university employees, including free occupational health care services, and obtain access to high-quality public affordable childcare services.

The project The postdoctoral fellow will be part of a group working in various aspects of Scots pine genetics, evolutionary genomics of haploid and diploid life cycle states, comparison of genetic diversity among natural and breeding populations, potential applications of genomic selection, patterns of gene expression etc.

Qualifications The applicant should have a doctoral degree, recorded scientific expertise and interest in population, evolutionary and quantitative genomics. Experience in bioinformatics, gene expression analysis and/or targeted sequencing is an advantage. The successful applicant will contribute to population genetic analysis of targeted sequencing data and research questions can be adjusted according to her/his interests and skills. The duties also include a small amount of teaching and supervising students. The work will be conducted in collaboration with Natural Resources Institute Finland (LUKE) and as a part of an international team who are experts in plant physiology, quantitative genetics and theoretical plant evolutionary genetics.

Details Starting time for the position is November 1st 2018 (negotiable). The salary depends on the competence of the applicant, but likely will be level 5 of the national salary scale for teaching and research staff of Finnish universities. In addition, a supplementary remuneration will be given for personal achievement and performance, at most 46.3 % of the salary scale. (The total salary is expected to be around 3,300 euro /month). A six months trial period is applied in the beginning of employment.

Applications should consist of (1) a letter of motivation (maximum 1 page) and (2) a CV (according to the guidelines of Finnish National Board on Research Integrity: <http://www.tenk.fi/en/template-researchers-curriculum-vitae>) that includes a list of publications and the contact details of at least two referees. Applications should be submitted in English using the electronic application form by October 5th, 2018.

For further information please contact Tanja Pyhäjärvi ([tanja.pyhajarvi\[at\]oulu.fi](mailto:tanja.pyhajarvi[at]oulu.fi)) or Outi Savolainen ([outi.savolainen\[at\]oulu.fi](mailto:outi.savolainen[at]oulu.fi)).

Apply for the job < https://rekry.saima.fi/certiahome/-application_edit_welcome.html?field_id=0&job_name=-Postdoctoral+position%2C+the+Department+of+Ecology+and+Genetics+6171&jc=1&lang=en&place_id=44&did=5600 >

Tanja Pyhäjärvi <tanja.pyhajarvi@oulu.fi>

UOulu UrbanEvolution

Dear colleagues,

A 29-month post-doc position is available in my project about the evolutionary consequences of urbanization. The post-doc will be located at Department of Ecology and Genetics, University of Oulu, Finland. More information is here:

https://rekry.saima.fi/certiahome/-open_job_view.html?did=5600&jc=1&id=-00006213&lang=fi Application deadline is November 15.

Please forward the announcement to anyone who might be interested.

Thanks and best wishes,

Sami Kivelä

Sami Kivelä <sami.kivela@oulu.fi>

UOxford CoevoSymbiosis

Two Postdoctoral Researchers in Host-Microbe Coevolution and Symbiosis

Salary: Grade 7.1 32,236

The King Lab in the Department of Zoology, Oxford is seeking two Post-doctoral Researchers for an ERC Starting Grant (COEVOPRO) to work on symbiosis, infection, and coevolution.

The postholders will experimentally coevolve *C. elegans* with colonising bacteria that kill or protect the host. Phenotypic assays of coevolution, as well as bioinformatics and gene-editing, will be used to fully elucidate the patterns and processes of coevolving protective symbioses, and assess impacts on parasite infection outcomes.

The successful candidates should hold a PhD/DPhil with expertise in evolutionary biology, experimental evolution, molecular microbiology, or bioinformatics. The positions will ideally start February 2019 for 3 years.

Only applications made online before 12.00 midday (UK time) on 17 October 2018 will be considered. You will be required to upload your CV and supporting statement. See https://www.zoo.ox.ac.uk/job-vacancies#vacancy_137096 Please send inquiries to kayla.king@zoo.ox.ac.uk

Dr. Kayla King Associate Professor, Department of Zoology Tutorial Fellow, Christ Church University of Oxford

<https://www.zoo.ox.ac.uk/people/dr-kayla-king> <https://sites.google.com/site/kkingevolution/> Kayla King <kayla.king@zoo.ox.ac.uk>

UOxford PigAncientDNA

Post-doctoral Research Assistant in Evolutionary Genomics of Wild and Domestic Pigs

The School of Archaeology, South Parks Road, Oxford
Grade 7: Salary in the range 32,236 - 38,460 p.a.

Applications are invited for a Postdoctoral Research Assistant position as part of a Natural Environment Research Council (NERC) grant entitled: 'The Consequences of Gene Flow between Wild and Domestic Populations during Livestock Evolution'. By directly characterising the genetic variation in wild and domestic pigs over the past 10,000 years, this project will reveal not only the genomic basis for domestication, but also how domestic pigs adapt to novel environments as they were introduced to regions outside of the areas where they were initially domesticated.

This project will assess the DNA preservation of more than 1,000 ancient pigs and wild boar from Eastern and Western Eurasia over the past 10,000 years, and then sequence the entire genomes of the best-preserved specimens. Armed with this data, we will establish the spatial and temporal differences in the proportion, and genomic location of the incorporation of wild boar genes into domestic stocks. The results will allow not only an unprecedented understanding of the origins of domestic animals, they will also have important ramifications for the conservation of endangered wild boar populations and for pig breeders and pork consumers for whom the

authenticity of domestic and wild meat is crucial.

The successful candidate will be based in Oxford at the Palaeogenomics and Bio-Archaeology Research Network (Palaeo-BARN) and will join a multi-disciplinary team of archaeologist and geneticists under the supervision of Professor Greger Larson. Working alongside Professor Keith Dobney (Liverpool), Dr Laurent Frantz (Queen Mary), and a PDRA specialising in bioinformatics, the successful candidate will take a leading role in the sampling strategy and will also be expected to use their initiative and creativity to identify areas for research development and extend their research portfolio.

The post is a full-time appointment for a fixed-term of 3 years.

Applicants must have a PhD in evolutionary genetics, animal genomics, population genomics, or related discipline. A demonstrated track record of wet lab experience and publications is desirable, as is experience working with ancient or degraded DNA.

The closing date for applications is 12.00 noon on Friday 26 October 2018.

For informal enquiries, please contact Greger Larson, greger.larson@arch.ox.ac.uk.

Applications for this vacancy can be made online using this link:

https://www.recruit.ox.ac.uk/pls/hrsliverecruit/-erq.jobspec.version_4.jobspec?p_id6982 Greger Larson <greger.larson@arch.ox.ac.uk>

UppsalaU EvolutionaryGenomics

Dear colleagues,

A 2-year postdoc position is available in my group to work on evolutionary genomics of birds. More information here: <https://www.uu.se/en/about-uu/join-us/details/?positionId=226140> Please forward this ad to anyone who might be interested. Application deadline is October 15.

Thanks and cheers, Alex

Dr. Alexander Suh Dept. of Evolutionary Biology (EBC) Uppsala University Norbyvägen 18D SE-752 36 Uppsala, Sweden Alexander.Suh@ebc.uu.se https://twitter.com/alexander_suh (Twitter) <http://genomicocosm.wordpress.com> (Blog) <http://www.ieg.uu.se/evolutionary-biology/suh/> (Lab website)

Alexander Suh <alexander.suh@ebc.uu.se>

USDA Maryland FungalDiversification

POST-DOCTORAL RESEARCH FELLOW POSITION:

Diversification of downy mildew pathogens of cereals & grasses

Foreign downy mildew diseases that affect corn, sorghum, sugarcane, and other cereals and grasses represent one of the most significant potential threats against U.S. production of staple cereal crops. We welcome applications for a post-graduate researcher to study these gramminicolous downy mildew pathogens. Research objectives are focused on the global diversity, systematics and molecular evolution of these organisms using next-generation sequencing approaches.

The position is located within the Mycology & Nematology Genetic Diversity & Biology unit of the USDA-ARS in Beltsville, Maryland, 16 miles from Washington, D.C. Excellent in-house next-generation sequencing and computational resources are available to support robust studies of these destructive pathogens, along with extensive, global collections of dried specimens and outstanding instrumentation for microscopic work.

Required Qualifications.

- * Ph.D. degree in mycology, microbiology, plant pathology, evolutionary biology or related field.
- * Proficient in computational biology/bioinformatics
- * Experience and in-depth knowledge of molecular phylogenetic/evolutionary analyses
- * Demonstrated ability to achieve project goals and communicate findings in peer reviewed journals

Preferred Qualifications

- * Experience generating and analyzing data from markers using next-generation sequencing tools and bioinformatics approaches
- * Proficient using microscopic tools
- * Experience/knowledge of fungal/botanical nomenclature
- * Experience with plant pathogenic microorganisms, especially oomycetes, is desired but not required.

How to apply

Please provide (1) application letter including a statement of interest and a brief summary of your scientific work and interests; (2) curriculum vitae; and (3) names & contact info of three references. Send applications to Jo Anne Crouch, joanne.crouch@ars.usda.gov.

Applications will be reviewed as they arrive, and those received by October 1 will receive full consideration, but the position is open until filled. The position is available immediately, with a preferred start date during the fall/winter of 2018/19. Some flexibility in this start date is possible for the ideal candidate. Salary is commensurate with experience, with initial appointment made for one year, and renewable based on successful performance and continued availability of funds.

Jo Anne Crouch, Ph.D.

Research Molecular Biologist, USDA-ARS Mycology & Nematology Genetic Diversity & Biology Laboratory
10300 Baltimore Avenue, Bldg 10A, Room 227 Beltsville, MD 20705

Phone: (301) 504-6922

Cell: (609) 933-5496 joanne.crouch@ars.usda.gov

“Crouch, JoAnne” <JoAnne.Crouch@ARS.USDA.GOV>

USDA Sidney Pollination

Many thanks if you can post this. There is an element of coevolution involved!

Pollination Ecology Postdoc position at USDA ARS The USDA Agricultural Research Service is advertising for a Research Associate (Postdoc) Ecologist, Entomologist or Botanist to perform research and provide expertise in habitat management approaches that promote pollinator resources while limiting weed invasion and spread. The position is at the USDA ARS Pest Management Research Unit, Northern Plains Agricultural Research Laboratory, Sidney MT. The mission of the laboratory is to develop and implement ecologically based strategies, technologies, and products for the sustainable management of insects, pests, and weeds in crops and rangeland. Emphasis is on biological and cultural management strategies that enhance profitability and environmental quality. Our location houses a team of highly collaborative scientists and support staff working

in the fields of ecology, botany, entomology, pathology and agronomy. The position is advertised at the GS-11 level (starting at \$61,218/yr), is for one year, and can be extended to 4 years, and is open to all U.S. Citizens and Permanent Residents seeking U.S. Citizenship. Major duties include: 1) Plans and conducts pollinator and weed research, individually and as part of a team, in the field and laboratory, 2) Provides expertise in habitat management or restoration approaches that promote pollinator resources while limiting weed invasion and spread, 3) Develops methods to restore and improve low agricultural-input plant communities to provide high quality pollinator habitat, 4) Prepares written work products based on research to be reviewed and published in professional articles. Please send a C.V. to John Gaskin (john.gaskin@ars.usda.gov). We have a provisional application closure date of Oct. 15, 2018.

“Gaskin, John” <John.Gaskin@ARS.USDA.GOV>

USouthFlorida Genomics

Postdoctoral Fellow in Genomics University of South Florida

The University of South Florida is seeking a highly motivated, enthusiastic Postdoctoral Fellow to work on multiple interrelated projects focused on genomic analyses of stress-related mental disorders in humans, including post-traumatic stress disorder (PTSD) and depression. The successful candidate will work as part of a multidisciplinary research team to maintain uninterrupted and consistent progress toward the goals of several NIH funded research projects involving genomic analysis of social adversity and traumatic stress in the Genomics Program within the College of Public Health. Projects will involve computational analysis, integration and modeling of large-scale data genetic, transcriptomic and epigenomic datasets. The Fellow will also have considerable latitude to develop and carry forward new, independent projects.

USF is one of the 10 largest academic institutions in the United States and offers unique opportunities for collaboration with research institutions in Africa, Asia, Latin America and the Caribbean. USF Genomics represents a consortium of active research programs from different colleges and campuses of USF. Our projects are naturally interdisciplinary and integrate modern genomic approaches to understand and help develop solutions for some of the major challenges affecting global health and

especially our Florida community. The University is located in Tampa and is part of the great metropolitan area of Tampa Bay. The city offers year round sunshine on the gulf coast, with a vibrant culture and numerous, beautiful state parks close to the city.

Candidates must have a PhD or equivalent degree in computational biology, bioinformatics, statistical genetics, systems biology or related area and should have experience working with large, high-throughput genomic data sets such as genome-wide association study (GWAS), epigenome-wide association study (EWAS) and Next Generation Sequencing (NGS) data sets. Candidates must also be proficient in one or more commonly used programming language such as R, C++, Python, or Perl.

Preferred Qualifications: Record of academic and research achievements. Experience integrating multi-omic data and/or genomic and epidemiologic/survey data preferred. Experience with human-based datasets and longitudinal analysis is also desirable.

To apply: Complete an online application. Visit <http://-employment.usf.edu> and search for Job ID 18270. 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.

Judy Sommers, MBA Department of Global Health College of Public Health University of South Florida 3720 Spectrum Boulevard, Suite 304 Tampa, FL 33612-9415 Tel: 813-974-9973

“Sommers, Judy” <jsommers@health.usf.edu>

UTexas Arlington EvolutionaryGenomics

Postdoc in Evolutionary Genomics, UT Arlington, USA

An NSF funded postdoctoral position is available in the Betran Lab to study the functions of domesticated transposases in *Drosophila* and understand the evolutionary processes that lead to those domestications. For additional information about the group and the research in the lab, please visit the lab webpage at <http://wwwb.uta.edu/faculty/betran> . The successful candidate will be a highly trained and motivated post-

doc with ability to think independently and to work cooperatively. Candidates should have a Ph.D. degree in genetics, development, molecular evolution, functional genomics or related disciplines with the desire to conduct functional and comparative genomics work in flies. Ideally the candidate should already have some *Drosophila* genetics and molecular biology training, and computer programming and statistics skills and the motivation to learn. The postdoc will work with graduate students and undergraduates at UT Arlington and other labs. The Betran lab has been collaborating with the Feschotte lab at Cornell University and the Buszczak lab at UT Southwestern Medical Center on this project.

This is a full time position for one year that can be renewed for up to three years. The salary will be competitive and commensurate with qualifications and experience.

The Betran lab enjoys vibrant interactions with other members of the Genome Biology Group (<https://www.uta.edu/biology/faculty-and-staff/index.php>). Additionally, the lab is benefiting greatly from newly established North Texas Genome Center, and the Shimadzu Institute for Research Technologies (a major partnership between UT Arlington and Shimadzu Scientific Instruments) that offers extensive resources for advanced imaging, proteomics and analytical chemistry and the Texas Advanced Computing Center (TACC) at UT Austin that offers extensive computational resources.

The University of Texas at Arlington is a Carnegie Research-1 'highest research activity' institution. With a projected global enrollment of close to 58,000 in Academic Year 2017-18, UTA is the largest institution in The University of Texas System. The University is a Hispanic-Serving Institution and is ranked fifth in the nation for undergraduate diversity by U.S. News & World Report.

To apply for this position please send a CV, a letter of interest and names of three potential referees to betran@uta.edu. The review of applications will begin immediately and continue until the position is filled.

As an equal employment opportunity and affirmative action employer, it is the policy of The University of Texas at Arlington to promote and ensure equal employment opportunity for all individuals without regard to race, color, religion, sex, national origin, age, sexual orientation, gender identity, disability, or veteran status.

Esther Betran, Ph.D.

Professor Biology Department University of Texas at Arlington Arlington, TX 76019

Office Phone (817) 272 1446 Lab Phone (817) 272 7178

E-mail: betran@uta.edu <http://www.uta.edu/faculty/betran> <https://mentis.uta.edu/explore/profile/estherbetran> betran@uta.edu

UToronto EvoGen

DEPARTMENT OF ECOLOGY & EVOLUTIONARY BIOLOGY University of Toronto

JOB POSTING - POSTDOCTORAL FELLOW

The Cutter lab at the University of Toronto is seeking to hire a highly motivated postdoctoral scholar to work on questions in evolutionary genetics.

Area of Research: Evolutionary Genetics

Description of duties: Research may focus on the genetics and development of speciation using *Caenorhabditis* nematodes, comparative population genomics, sperm cell biology and sexual selection, with technical approaches including computation/bioinformatics, experimental evolution, molecular biology, and manipulative experiments. Further information about research in the Cutter lab available at <http://labs.eeb.utoronto.ca/cutter>. Salary: \$45,000/year Please note that should the minimum rates stipulated in the collective agreement be higher than rates stated in this posting, the minimum rates stated in the collective agreement shall prevail.

Required qualifications: The candidate must have a recent PhD in genetics, evolution, molecular or developmental biology, bioinformatics or a related field, with strong evidence of published research productivity. The ideal candidate would have experience with next-generation sequence data and analysis, statistical and computing acumen, molecular techniques, and/or facility with *C. elegans*.

Application Instructions: All individuals interested in this position must submit a cover letter describing their interest in this position and research background/skills, a current CV, and contact info for three references to Prof. Asher Cutter (asher.cutter@utoronto.ca) by the closing date. Closing date:—— December 1, 2018 This position will remain open until filled, however we will begin to review complete applications after September 25, 2018

Supervisor(s): Prof. Asher Cutter (<http://labs.eeb.utoronto.ca/cutter>) Expected start date: January 1, 2019 with flexibility for an earlier or later start date Term: 12 months; renewable for another 12 months

subject to performance/suitable research progress

FTE:—— 100%

The University of Toronto is a leading institution in Canada and the world with over 60 faculty specializing in ecology and evolution, and home to >10 cross-disciplinary labs studying *C. elegans*. The Ecology & Evolutionary Biology department hosts a strong and active research cluster in evolutionary genetics and genomics. Strong links exist between the Department of Ecology and Evolutionary Biology and the Royal Ontario Museum, the Centre for Global Change, and the School of the Environment. The University owns a nearby field station dedicated to ecological and evolutionary research (the Koffler Scientific Reserve, www.ksr.utoronto.ca). The department also has a partnership with the Ontario Ministry of Natural Resources that helps provide access to infrastructure, including lab facilities in Algonquin Provincial Park (www.harkness.ca), funding, and long-term data sets. Genomic analyses are supported by a number of high-performance computing resources, multi-lab bioinformaticians, as well as staff at the Centre for the Analysis of Genome Evolution and Function.

Toronto is a vibrant and multicultural city, offering an exceptional quality of life.

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow recognizing that the needs of the employee's research and training and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work.

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement.

This job is posted in accordance with the CUPE 3902 Unit 5 Collective Agreement.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

Asher D. Cutter Professor and Associate Chair Undergraduate Department of Ecology and Evolutionary Biology University of Toronto 25 Willcocks St. Toronto, ON, M5S 3B2

tel: 416-978-4602 email: asher.cutter@utoronto.ca
<http://labs.eeb.utoronto.ca/cutter> Asher Cutter
 <asher.cutter@utoronto.ca>

UToronto EvolutionaryGenomics

The Weir lab at the University of Toronto Scarborough is looking for a Post-doctoral Researcher to work on avian genomics projects. The lab is developing several genomic-based study systems and has active projects addressing speciation dynamics from a number of Canadian and Amazonian avian hybrid zones, conservation genomics of kiwi, and the genomics of hybrid speciation to list a few. A key focus of the lab is using comparative genomic data to address broad-scale questions in ecology, evolution, and conservation. The successful candidate will work within one of these study systems but will be given freedom to develop their own research questions.

Qualifications: Applicants must have completed a PhD in Evolution, Bioinformatics, Genomics or related discipline within the preceding two years. The applicant should be well versed in coding, working with vertebrate genomic data including familiarity with commonly used pipelines for processing and analysing whole-genome data or reduced genome-datasets.

Salary: \$48,000 (plus benefits)

Duration: 2 years

Start Date: Flexible between the dates of March 1 to December 1, 2019.

How to Apply: Please send a curriculum vitae, one-page statement of research skills and interests and copies of two publications to Jason Weir (jason.weir@utoronto.ca) before November 1. Short-listed candidates will be provided with instructions on how to apply for an internal University of Toronto Scarborough Postdoctoral Fellowship. Eight such fellowships are awarded annually across the campus.

Example genomic publications from the Weir Lab (PDF's available at <https://www.utsc.utoronto.ca/~jweir>): 1. Barrera-Guzman, A. O., A. Aleixo, M. D. Shawkey, J. T. Weir. 2018. Hybrid speciation leads to novel male secondary sexual ornamentation of an Amazonian bird. PNAS. 115: E218-E225. 2. Weir, J. W., O. Haddrath, H. A. Robertson, R. M. Colbourne, A. J. Baker. 2016. Explosive ice age diversification in kiwi. PNAS. 113: E5580-E5587. 3. Pulido-Santacruz, P, A. Aleixo, J. T. Weir. 2018. Morphologically cryptic Amazonian bird species pairs exhibit strong post-zygotic reproductive isolation. Proc. R. Soc. B 285: 20172081

Jason Weir

Associate Professor Dept. of Ecology and Evolution and Dept. Biological Sciences University of Toronto 1265 Military Trail Toronto, Ontario, Canada M1C 1A4 <http://www.utoronto.ca/~jweir/> (reprints)

Jason Weir <jason.weir@utoronto.ca>

UVirginia EvolutionSexBiasedGenes

The Department of Biology at the University of Virginia invites applications for a postdoctoral Research Associate to study the evolution of sex-biased gene expression in the lab of Dr. Robert Cox.

The aims of the position will be closely associated with a new, NSF-funded project using comparative transcriptomics to explore the evolution of hormonally mediated gene expression across lizard species characterized by evolutionary reversals in sexual dimorphism. This project involves both field and lab components and is ideally suited for applicants with interests in the areas of sexual conflict, evolutionary physiology, functional genomics, and/or molecular evolution. Other opportunities for collaboration include studies of natural and sexual selection in wild populations, the quantitative genetics of sexual dimorphism, and a variety of other topics at the intersection of evolution, ecology, and physiology (<http://www.CoxLabUVA.org>), as well as with other groups in our Evolution, Ecology and Behavior cluster (<http://www.EEBvirginia.org>).

The Research Associate will work closely with the PI and members of the Cox lab at the University of Virginia while collaborating with the labs of co-PIs Christian Cox (Georgia Southern University) and Henry John-Alder (Rutgers University) to receive additional training in transcriptomics, hormone assays, and other techniques. The Associate will have the opportunity to mentor graduate and undergraduate students, design and lead research in the lab and field, manage and analyze large datasets, prepare conference presentations and manuscripts, and participate in our Evolution Education program for science teachers (<http://www.EvolutionEd.org>). The ideal candidate will have a promising record of scientific productivity, appropriate to career stage, in evolutionary biology or genetics. Preferred skills include expertise in RNA-seq, functional genomics, molecular and genome evolution, and programming and bioinformatics related to the above.

The completion of a PhD degree in Biology or a related field by the start date of the appointment is required. The ideal start date of the appointment would be between January and June 2019, but other start dates will be considered for highly qualified candidates. This is a one-year appointment that may be renewed for an additional two, one-year increments, contingent upon available funding and satisfactory performance.

To apply, visit <http://jobs.virginia.edu> and search on Posting Number 0624021. Complete a Candidate Profile online and attach the following: a cover letter summarizing your research interests, accomplishments, and professional goals; a curriculum vitae with a list of publications; and the contact information for three (3) references. Applications received by October 15, 2018 will be given full consideration. However, applications will be accepted until the position is filled.

Applicants with questions about the position and its scientific context and research goals are encouraged to contact Robert Cox at rmc3u@virginia.edu

For questions regarding the application, please contact Rich Haverstrom at rkh6j@virginia.edu

The University of Virginia is fundamentally committed to increasing the diversity of its faculty and staff. UVA is an affirmative action and equal opportunity employer. We welcome nominations of and applications from women, members of minority groups, veterans and individuals with disabilities. We also welcome others who would bring additional dimensions of diversity to the university's research and teaching mission. We believe diversity is excellence expressing itself through every person's perspectives and lived experiences.

The University of Virginia is consistently rated among the top public universities in the United States and is located in Charlottesville, VA, near the scenic Blue Ridge Mountains and Shenandoah National Park. The town and surrounding countryside provide a variety of opportunities to enjoy music and the arts, outdoor recreation, and a thriving food and restaurant scene supported by dozens of local farms, markets, orchards, vineyards, and breweries. Charlottesville is often ranked among the top cities in the country for quality of life and is located just over two hours from the Washington, DC metropolitan area.

Robert M. Cox Associate Professor, Director of Graduate Studies Department of Biology University of Virginia PO Box 400328 Charlottesville, VA 22904

Office (434) 982-1987 Lab: (434) 243-3399 075 Gilmer Hall www.CoxLabUVA.org www.EvolutionEd.org "rmc3u@virginia.edu" <rmc3u@virginia.edu>

UWashington MarineBiodiversityMetabarcoding

Postdoctoral Position at the University of Washington and NOAA PMEL

The Joint Institute for the Study of the Atmosphere and Ocean at the University of Washington invites applications for a full-time postdoctoral Research Associate position working on marine invertebrate and fish environmental DNA genetics/genomics/bioinformatics in the new G3 (Genetics and Genomics Group) at NOAA's Pacific Marine Environmental Laboratory (PMEL). The G3 lab uses multi-locus metabarcoding to study oceanic biological community responses to physical and chemical oceanographic parameters. Component species and population genetic relationships for invertebrates and fishes are identified and assessed using environmental DNA (eDNA), plankton, and sediment samples collected with plankton tows, CTD casts, ROVs, and sediment cores. Study regions include the west coast of North America, Salish Sea, Gulf of Alaska, Bering Sea, and U.S. Arctic, as well as deep sea vents and seeps across the Pacific. Physical, chemical and biological oceanographic parameters are considered to predict the effects on marine ecosystems of environmental change including acidification, warming, hypoxia, and deep sea mining. The Research Associate will work under the guidance of Dr. Carol Stepien of NOAA/PMEL and Dr. Kim Andrews of UW/JISAO and will be involved in designing the specific course(s) of study.

This position features laboratory research and execution of the following duties:

- Conduct bioinformatics and next-generation sequencing DNA assays and analyses
- Use of a wide application of complex principles and methods in the fields of genetics and genomics
- Collection, statistical analysis and archival of data
- Preparation of peer-reviewed scientific publications
- Presentation of papers at scientific conferences; participation in external seminars, workshops, and professional societies
- Maintenance of project website
- Assistance with the preparation and management of regulatory documents
- Assistance with the development of grant proposals
- Assistance with the training of graduate and undergraduate student researchers in lab work
- Participation in G3 group activities, including laboratory and other meetings

The successful candidate must possess knowledge of genetics, genomics, and bioinformatics, and be able to advance the state-of-the-art research in these areas. This individual will also have demonstrated excellent verbal and written skills, and the ability to work both independently, and in collaboration with other scientists.

This position is located at NOAA Pacific Marine Environmental Laboratory (PMEL) at Sand Point in Seattle. This is a twelve-month position, with the possibility of a second year based on availability of funds and satisfactory performance. A late 2018/ early 2019 start date is anticipated.

Qualifications

REQUIREMENTS:

PhD in Biology or Ecology or related field with specialization in Molecular Genetics. Degree must be conferred by the appointment start date. Must be within 5 years after receipt of terminal degree. Experience requirement, minimum: Two or more years' experience in DNA extraction, PCR, DNA sequencing, phylogenetic analysis, population genetics, environmental DNA, bioinformatics

Application Instructions

This institution is using Interfolio's Faculty Search to conduct this search. Applications can be submitted at this site:

<https://apply.interfolio.com/53135> Applicants to this position receive a free Dossier account and can send all application materials, including confidential letters of recommendation, free of charge.

Complete applications received by October 16, 2018 will be given preferred consideration.

Equal Employment Opportunity Statement

University of Washington is an affirmative action and equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, creed, religion, national origin, sex, sexual orientation, marital status, pregnancy, genetic information, gender identity or expression, age, disability, or protected veteran status.

Commitment to Diversity

The University of Washington is committed to building diversity among its faculty, librarian, staff, and student communities, and articulates that commitment in the UW Diversity Blueprint (<http://www.washington.edu/diversity/diversity-blueprint/>). Additionally, the University's Faculty Code recognizes faculty efforts in research, teaching and/or service that address diversity and equal opportunity as important contributions to a faculty member's academic profile and responsibilities

(<https://www.washington.edu/admin/rules/policies/-FCG/FCCH24.html#2432>).

Kim Andrews, PhD Research Scientist JISAO, University of Washington and NOAA PMEL (Pacific Marine Environmental Lab) 7600 Sand Point Way NE

— / —

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

WorkshopsCourses

Austria SMBEPolygenicAdaptation Feb11-14	125	Online UManchester Morphometrics Nov5-Dec14 .	130
Berlin GWAS Oct22-26 Deadline	126	Portugal ComparativePhylogenetics Nov26-28	130
Berlin LandscapeGenomics Nov26-30	126	QuebecCity eDNA Nov19-23	131
Berlin Python Oct15-19	127	UCollegeLondon GWASMethods Oct23	132
Crete PythonMachineLearning Dec03-07	127	UGroningen EvolutionaryDynamics Oct21-26	133
GothenburgU PopulationGenomicsBioinformatics Nov5-9	128	UGuelph eDNA Oct11-12	134
Langebio Mexico GWAsStructuredPopulations Nov27-30	129	UK IntroToRForBiologists Oct29-Nov1	135
		UK Scholarships IntroBioinformatics Sep1-5	136

Austria SMBEPolygenicAdaptation Feb11-14

We are delighted to announce that we will have a SMBE satellite meeting 'Towards an integrated concept of adaptation: uniting molecular population genetics and quantitative genetics' 11-14 February 2019 in Vienna, Austria.

This workshop will bring together theoreticians and empiricists, covering both molecular population genetics and quantitative genetics, with the implicit goal to develop the basis for a unified framework of adaptive genetic architectures. The new concept will in turn provide predictions that translate into guidelines for the most informative experimental designs, to uncover underlying adaptive processes.

We will have talks by invited speakers from both theoretical and empirical fields (*Drosophila*, yeast, *Arabidopsis*, human, sticklebacks, domestic animals). We will also have discussions in working groups on development of the new unified concept of adaptive traits and finding new analytical approaches.

Registration: Since the meeting is sponsored by SMBE and Vetmeduni Vienna, we can waive the registration fee for all participants. However, registration is compulsory. Registration deadline: Dec 31, 2018.

Abstract Submission: For contributed talks, submit your 250-words abstract by Oct 31, 2018. The deadline for submission of 250-words abstracts for posters is Dec 31, 2018. Submit your abstract to smbe.adapt19@gmail.com

Please visit <https://www.vetmeduni.ac.at/SMBE-Satellite-Meeting/> for more information. If you have any questions, please email smbe.adapt.2019@gmail.com

Neda Barghi (barghi.neda@gmail.com) On behalf of the

organization committee:

Christian Schlötterer (schlotc@gmail.com) Joachim Hermisson (joachim.hermisson@univie.ac.at) Ise Höllinger (ilse.hoellinger@gmail.com)

Neda Barghi <barghi.neda@gmail.com>

Berlin LandscapeGenomics Nov26-30

Berlin GWAS Oct22-26 Deadline

Dear all,

the registration deadline for the course “GENOME-WIDE SIGNATURES OF SELECTION AND ASSOCIATION STUDIES” is soon approaching (21st Sept) and we still have a few places left.

The course will be held in Berlin, from the 22nd to the 26th October.

Our instructors for this course are:

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
Please visit our website to have more information about the course content: <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/> 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

“info@physalia-courses.org” <info@physalia-courses.org>

Dear all,

we will run a LANDSCAPE GENOMICS course in Berlin, 26-30 November 2018, in the context of the beautiful botanical garden/Freie Universität Berlin Königin-Luise-Straße 6-8.

Our INSTRUCTORS for this course are:

- 1) Dr. Stéphane Joost (Lab of Geographic Information Systems (LASIG), EPFL, Lausanne, Switzerland)
- 2) Oliver Selmoni, MSc (Lab of Geographic Information Systems (LASIG), EPFL, Lausanne, Switzerland)

Course overview

The course will provide an overview of the type of dataset that can be used for a landscape genomics analysis. Firstly, students will learn how to obtain environmental data from publicly available databases, how to process it with Geographic Information Systems (GIS) and how to use the latter to produce indicators able to describe the characteristics of the landscape. Next, the course will discuss the different approaches to obtain genetic data and subsequently show how to study genetic variation and population structure across space in the R environment. Students will be given an overview of the different statistical approaches to study local adaptation, and will be trained in using two of them, Sambada and LFMM. The course will also cover the critical task of the interpretation and validation of the results. Finally, the course will consider the crucial aspects and good habits to account for when planning a landscape genomics experiment (e.g. sampling design).

Targeted Audience & Assumed Background

This course is aimed at all biologists, ecologists, geneticists, veterinarians that want to implement the landscape genomics approach in their own studies of evolutionary biology and conservation. Even though the course is not intended for a specialized audience, basic knowledge in evolutionary biology and population genetics would help. Students will learn how to use GIS, but basic computer skills are desirable (e.g. in the R environment). A basic understanding of statistics is also necessary.

Teaching Format

The course is organized in ten learning sessions. During the first two sessions, the course will provide a contextualization of the research field. Then, students will be guided through a landscape genomics experiment with sessions that couple brief theoretical introductions with practical work.

Please visit our website to have more information about the course content: <https://www.physalia-courses.org/courses-workshops/course17/> Here is the full list of our courses and Workshops: <https://www.physalia-courses.org/courses-workshops/> Please feel free to contact us if you need any further information.

Best regards, Carlo

Carlo Pecoraro, Ph.D

Physalia-courses DIRECTOR

info@physalia-courses.org

<http://www.physalia-courses.org/>
@physacourses

mobile: +49 15771084054

<https://groups.google.com/forum/#!forum/physalia-courses> “info@physalia-courses.org” <info@physalia-courses.org>

Assumed background:

Students should have enough biological background to appreciate the examples and exercise problems (i.e. they should know about DNA and protein sequences, what translation is, and what introns and exons are). No previous programming experience or computer skills (beyond the ability to use a text editor) are necessary, but you’ll need to have a laptop with Python installed.

Please visit our website to have more information about the course content:

<https://www.physalia-courses.org/courses-workshops/course2/> 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” <info@physalia-courses.org>

Berlin Python Oct15-19

Dear all,

There are still some places available on our Python for Biologists course in Berlin this October (15-19): <https://www.physalia-courses.org/courses-workshops/course2/>

Instructor: Dr. Martin Jones (founder, Python for biologists)

Course overview

This course is aimed at complete beginners and assumes no prior programming experience. It gives an overview of the language with an emphasis on practical problem-solving, using examples and exercises drawn from various aspects of bioinformatics work. After completing the course, students should be in a position to (1) apply the skills they have learned to tackling problems in their own research and (2) continue their Python education in a self-directed way. All course materials (including copies of presentations, practical exercises, data files, and example scripts prepared by the instructing team) will be provided electronically to participants.

Crete PythonMachineLearning Dec03-07

Dear evoldir members,

Transmitting Science is offering the course ‘PYTHON MACHINE LEARNING IN BIOLOGY’.

Instructor: Nichole Bennett (The University of Texas at Austin, USA) Dates: December 3rd-7th, 2018 Location: Heraklion, Crete (Greece)

COURSE OVERVIEW:

The field of biological sciences is becoming increasingly information-intensive and data-rich. For example, the growing availability of DNA sequence data or clinical measurements from humans promises a better understanding of the important questions in biology. However, the complexity and high-dimensionality of these biological data make it difficult to pull out mechanisms from the data. Machine Learning techniques promise to be useful tools for resolving such questions in biology because they provide a mathematical framework to analyze complex and vast biological data. In turn, the unique

computational and mathematical challenges posed by biological data may ultimately advance the field of machine learning as well. This course will cover basics of the Python programming language as well as the pandas and sklearn Python libraries for data wrangling and machine learning.

PROGRAM:

Monday, December 3rd, 2018. Python Foundations Morning: Python Basics, Handling Data in Pandas, Basic Pandas Data Cleaning Afternoon: Exploratory Data Analysis in Pandas, Data Visualization in Python.

Tuesday, December 4th, 2018. Supervised Machine Learning: Classification Morning: KNN, Introduction to sklearn workflow. Afternoon: Train/Test Split, and Bias-Variance Tradeoff, Model Evaluation.

Wednesday, December 5th, 2018. Supervised Machine Learning: Classification Morning: Decision Trees and Random Forest Afternoon: Support Vector Machines

Thursday, December 6th, 2018. Unsupervised Machine Learning Morning: Clustering Methods (K Means Clustering) Afternoon: Advanced Clustering Methods Hierarchical Clustering, DBSCAN

Friday, December 7th, 2018. Special Topics Participants will have the option to learn a particular model or receive an introduction to Neural Networks theory and applications.

For more information and registration: <http://bit.ly/python-machine-learning-in-biology> Contact: courses.crete@transmittingscience.org

All the best, Haris Saslis, PhD Course Coordinator Transmitting Science www.transmittingscience.org haris.saslis@transmittingscience.org

haris.saslis@gmail.com

GothenburgU Population Genomics Bioinformatics Nov5-9

Dear all,

Please pass on this information to interested PhD students and postdocs, application deadline is at the end of next week.

Best wishes, Pierre De Wit

Please find below the preliminary schedule and gen-

eral aims of the course, “An introduction to bioinformatic tools for population genomic data analysis”, offered November 5-9 2018 at the Tjärnö Marine Laboratory on the island of Tjärnö outside of Strömstad on the Swedish West Coast (http://loven.gu.se/english/-about_the_loven_centre/tjarno).

There is no course fee. Accommodation and meals for students are provided by the Centre for Marine Evolutionary Biology. Students will need to provide their own means of transportation to and from the course, however.

The course will be open to a maximum of 18 students, as large parts of the course will consist of hands-on exercises. The aim is a broad mix of students both from the University of Gothenburg and from the outside, mainly PhD students but postdocs are also welcome to apply.

Knowledge of general molecular biology and genetics is necessary, as is some previous experience with command-line interfaces. Previous experience working on a remote server will also be beneficial. No previous bioinformatics skills are needed, however.

For more information and registration, please visit the course web site at: <https://sites.google.com/view/-bioinformaticpipelines2018> Deadline for registration is September 15th 2018.

Please note that ALL students must bring their own computers.

Best wishes,

Pierre De Wit

—

An introduction to bioinformatic tools for population genomic data analysis, 2.5 higher education credits Third Cycle

Faculty of Science; Department of Marine Sciences

The Centre for Marine Evolutionary Biology

1. Course content

This course aims at detailed understanding and hands-on experience of using state of the art bioinformatics pipelines for one’s own biological research questions. An important aspect of the course is to show how genomic data can be applied to address and answer research questions in the fields of genetics, ecology, population biology, biodiversity monitoring and conservation. The students will be trained in the latest bioinformatic methods to analyze high throughput sequencing data, which is present in many research projects. The course will cover basic computing tools required to run command

line applications, processing high throughput sequencing data of whole genome / exome / restriction site digested (RAD) DNA for population genomic studies.

The first part of the course introduces general computing tools for beginners such as the UNIX command line environment, bash commands, data formatting using regular expressions and basic scripting in the unix shell with a series of examples and exercises using a remote server. The course introduces bioinformatics software for analysis of RAD-data, and downstream population genetic analysis of genotype data. The course also introduces basic and advanced concepts of population genomics data analysis such as genome/transcriptome assembly, alignment/mapping, differential Gene expression, functional enrichment tests, SNP genotyping, PCA, outlier tests. The course corresponds to 1 week of full time studies and is composed of lectures, demonstrations and computer labs.

2. Outcomes

1. Knowledge and understanding 1a. Demonstrate advanced knowledge of experimental strategies, applications and bioinformatic tools for population genomics. 1b. Demonstrate advanced knowledge of the potential of genomics approaches to answer ecosystem-wide questions, in particular for biodiversity monitoring.

2. Skills and abilities 2a. Ability to use basic commands in the Unix command line environment (reformatting data with regular expressions, basic scripting, running python scripts from the unix shell)

2b. Ability to use different software tools to analyse sequence data from restriction-site digested DNA (data cleaning steps, clustering of reads, mapping to reference genomes, extracting and filtering genotype data.

2c. Ability to use population genomics software tools to assemble a genome/transcriptome, and perform gene alignment/mapping, differential gene expression, functional enrichment tests, SNP genotyping, PCA, outlier tests.

3. Judgement and approach 3a. Formulate one's own research questions, identify data and tools needed to answer these questions and critically evaluate and analyse the results.

4. Required reading

Part 1: General computing tools. This will be the main textbook for the introduction to general computing tools: - Haddock and Dunn (2010). Practical computing for Biologists. Sinauer Associates.

Part 2: RAD data analysis. - Wang et al. (2012). 2b-RAD: a simple and flexible method for

— / —

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

Langebio Mexico GWAS Structured Populations Nov27-30

The Mexican Biobank Project, a collaboration between LANGEBIO, Cinvestav, The University of Oxford and Stanford University, invites you to the upcoming practical workshop “Large-Scale Genomic Data Analyses: GWAS in structured populations”.

IMPORTANT DATES Deadline for applications: 28th September 2018 Chosen participants will be notified by: 8th October 2018 Course date: 27th-30th November 2018

A maximum of 30 candidates will be accepted in the course. Candidates with active research projects that may benefit from the imparted techniques are encouraged to apply.

REGISTRATION FEE: \$800.00 MXN Registration fee includes course material, coffee breaks, lunches and the social event on day 3. Limited fellowships available (Transportation and lodging)

VENUE Advanced Genomics Unit, Langebio (UGA-LANGEBIO), CINVESTAV Irapuato, Guanajuato, Mexico

Full details at: <https://-mxbiobankworkshop.wordpress.com/> COURSE

DESCRIPTION: The Mexican Biobank Project aims to generate a nation-wide DNA biobank that is entirely genotyped in local institutions with scientists working locally directing the analyses of the genotyped data in collaboration with foreign scientists. In this workshop, through a combination of lectures and hands-on exercises, we will guide students and researchers on the basics of microarray and next generation sequencing data, their quality control, the implementation of genome-wide association studies (GWAS), and the challenges that remain in such studies especially regarding issues of conducting GWAS in structured populations and transferring GWAS statistics between populations.

Speakers and Instructors: Dr. Andrés Moreno-Estrada, UGA -LANGEBIO, Mexico Dr. Selene Fernández-Valverde, UGA -LANGEBIO, Mexico Dr. Chiara Batini, University of Leicester/HDR UK, UK Dr. Adrian Cortés, University of Oxford, UK Dr. Amanda Chong, Wellcome Centre for Human Genetics, University of Oxford, UK Dr. Mashaal Sohail, Department of Biomedical Informatics, Harvard Medical School, USA; Langebio, Cinvestav, Mexico

Tweet #MxGWAS2018 and follow @moreno_lab for updates.

Should you have any questions, you can reach the organising committee at: morenolab.langebio@gmail.com.

Looking forward to seeing you in Irapuato!

“Batini, Chiara (Dr.)” <cb334@leicester.ac.uk>

Online UManchester Morphometrics Nov5-Dec14

Dear colleagues

I would like to remind you of this year’s morphometrics course from the University of Manchester. This year’s course will run in the six weeks from 5 November to 14 December 2018.

Course content: * Data acquisition: the kinds of data and the equipment used to collect them. * Definitions of size and shape * Geometric methods to characterise shape from a configuration of landmark points (Procrustes superimposition) * Statistics of variation, scatter plots, basic multivariate statistics * Principal component analysis * Measurement error and outliers * Shape transformations and ‘warping’ – the thin plate spline * Analysis of outline shapes * Distinguishing between groups (taxonomy, clinical diagnosis, etc.) * Allometry and size correction * Influence of external factors on shape (ecomorphology, dose- response studies) * Symmetric forms and measurement of asymmetry. * Morphometric inferences on developmental processes * Morphological integration and modularity * Genetics of shape: analyses of resemblance between relatives, QTL analyses. * Phylogeny: examining the history of evolutionary changes of shape

Practice examples: As far as possible, practical exercises are provided to accompany the course content. These practice exercises consist of data sets and explanations on how to run the respective analyses using

the MorphoJ software (http://www.flywings.org.uk/-MorphoJ_page.htm). Participants who already have their own data are encouraged to use those and to discuss them as part of the course. I hope there will be a bit of a ‘workshop’ feel to the course unit.

Group work: Participants will work in small groups to prepare web presentations of possible morphometric studies (wikis prepared by the groups). This activity stimulates discussion and provides a broad overview of the broad range of questions that can be addressed with morphometric methods.

Further information on the course and a link to the registration page can be found on the following website: <http://www.flywings.org.uk/MorphoCourse> Registration uses the university’s e-store, which can process automatic *payments by credit card or debit card*. The deadline for registration via this site is the *29 October 2018*.

The direct link to the e-store is this: <https://estore.manchester.ac.uk/short-courses/-faculty-of-biology-medicine-and-health/school-of-biological-sciences/analysis-of-organismal-form/analysis-of-organismal-form?token=-4b10ca6c5fa0d1b5273920a4b103520e> The fee for the course is GBP 360.00.

If you cannot pay by credit or debit card, or *if you require a formal invoice* (e.g. for reimbursement by your institution), you need to contact the Short Course Office in our faculty via this E-mail: ShortCourses-biosciences@manchester.ac.uk If you need to use this option, please do so *as soon as possible*.

Best wishes, Chris

Christian Peter Klingenberg School of Biological Sciences The University of Manchester Michael Smith Building Oxford Road Manchester M13 9PT United Kingdom

Telephone: +44 161 275 3899 E-mail: cpk@manchester.ac.uk Web: <http://www.flywings.org.uk> Skype: [chris.klingenberg](https://www.skype.com/user/chris.klingenberg)

“cpk@manchester.ac.uk” <cpk@manchester.ac.uk>

Portugal ComparativePhylogenetics Nov26-28

Phylogenetic comparative methods are commonly used nowadays to investigate how species diversification oc-

curs and test hypotheses about the mechanisms that drive phenotypic evolution, e.g. to model speciation and extinction, to understand why some groups are more diverse than others, to test whether phenotypic traits have evolved under neutral, directional or diversifying selection, to investigate how evolutionary rates are modified across the evolutionary history of a group etc. In all these cases, a phylogenetic hypothesis for the group of interest is combined to phenotypic and ecological data at the species level to understand the tempo and mode of evolutionary change.

The objective of this course is to provide an overview of these methods and of the tools available for their implementation in the R statistical language. During theoretical sessions, we will review the main concepts and statistical tools necessary for testing hypotheses about species diversification and phenotypic evolution. These will then be implemented in practical lab sessions through worked examples to provide the participants with hands-on experience on data management and the implementation of these methods to real biological data.

A good knowledge of basic operations in R (file import, handling objects, using functions, getting help) is required and assumed to be able to adequately follow this course. BIODIV students are encouraged to take the Introduction to R course first.

Click < <https://cibio.up.pt/workshops-courses/details/advanced-course-phylogenetic-comparative-methods-for-studying-diversification-and-phenotypic-evolution> > here to see the programme for the course.

COURSE INSTRUCTORS

< <http://cibio.up.pt/people/details/akaliont> > Antigoni Kaliontzopoulou, AP, CIBIO-InBIO

< <http://cibio.up.pt/people/details/ajpajares> > Jess Muoz, PLANTBIO, CIBIO-InBIO

INTENDED AUDIENCE The course will be open to a maximum number of 20 participants.

Priority will be given to:

§1st year and other PhD students attending the BIODIV Doctoral Program;

§PhD students attending other courses;

§Other post-graduate students and researchers.

REGISTRATION Registration deadline: October 18, 2018

Participation is free of charge for BIODIV students | 65 euro (students) / 125 euro (other participants). CIBIO-InBIO members will have an additional discount of 20%. Does not include lunch nor coffee breaks.

To apply, please fill the form available < https://docs.google.com/forms/d/e/1FAIpQLSfuhk9wWRWkKW26u4NbwARaMM3wIzJPku-VZVP-mZ2x6DheyQ/viewform?usp=pp_url > HERE

If you do not agree to fill in the form, please send the requested information to post.graduation@cibio.up.pt, with the subject: REGISTRATION - ADVANCED COURSE: Phylogenetic Comparative Methods for studying diversification and phenotypic evolution.

All applicants will be notified about whether they are accepted a month prior to the course starting date.

For more information about the course, please contact: post.graduation@cibio.up.pt.

CIBIO - Centro de Investigao em Biodiversidade e Recursos Geneticos InBIO Laboratorio Associado, Universidade do Porto Campus de Vairao Rua Padre Armando Quintas 4485-661 Vairao Portugal

t: +351 252 660 411 Ext. 248 f: +351 252 661 780

e: divulgacao@cibio.up.pt w: <http://cibio.up.pt> | <http://inbio-la.pt/> f: <https://www.facebook.com/cibio.inbio>

CIBIO-InBIO Divulgao

QuebecCity eDNA Nov19-23

Course: eDNA Metabarcoding

When: 19-23 November 2018

Where: Institut de Biologie Integrative et des Systemes (IBIS), Laval University, Quebec City (Quebec), Canada

Instructors:

Dr. Vasco Elbrecht (University of Guelph, Canada)

Eric Normandeau (Laval University, Canada)

Website: <https://www.physalia-courses.org/courses-workshops/course40/> Course Overview

After completing the workshop, students should be in a position to (1) understand the potential and capabilities of eDNA barcoding and metabarcoding, (2) run complete analyses of eDNA metabarcoding pipelines and obtain diversity inventories and ecologically interpretable data from raw next-generation sequence data and (3) design their own eDNA projects, including bioinformatic data analysis and planning of laboratory work. All course materials (including copies of presentations, prac-

tical exercises, data files, and example scripts prepared by the instructing team) will be provided electronically to participants.

While this course will focus on eDNA metabarcoding, however targeted single species detection and other alternatives will also be explored, as they can sometimes be suitable metabarcoding alternatives.

Targeted audience & ASSUMED BACKGROUND

This workshop is mainly aimed at researchers and technical workers with a background in ecology, biodiversity or community biology who want to use molecular tools for biodiversity research, and researchers in other areas of bioinformatics who want to learn ecological applications for biodiversity-assessment. In general, it is suitable for every researcher who wants to join the growing eDNA community. This workshop will review mostly techniques and software useful for eukaryotic single species detection and eDNA metabarcoding. Other workshops focused on procedures currently used in bulk sample and microbial metabarcoding will be available from Physalia-courses. A survey will be provided 2 weeks ahead of the workshop, where participants can mention topics or aspects they are particularly interested in.

No programming or scripting experience is necessary, but some previous expertise using the Linux console and/or R will be most welcome. All examples will be run either in Linux or Mac environments. Please make sure to have linux installed if you bring a Windows based laptop. Among the software and tools we will be using is R or Rstudio (+ the JAMP & PrimerMiner package), FastQC, Usearch, Vsearch, Cutadapt, and mBRAVE.net. No prior knowledge of these software packages is required.

TEACHING FORMAT

The workshop is delivered over 5 days (see the detailed curriculum below). The lectures are interactive with active discussion where asking questions is strongly encouraged. A key aspect of this course are practical sessions in primer development, bioinformatic analysis of high throughput sequence data, and data visualization as well as a project planning exercise to apply what you learned in this course.

Session content: <https://www.physalia-courses.org/courses-workshops/course39/curriculum39/>

Here is the full list of our courses and Workshops: <https://www.physalia-courses.org/courses-workshops/> Should you have any questions, please do not hesitate 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" <info@physalia-courses.org>

UCollegeLondon GWASMethods Oct23

Please see below for details of a one-day workshop (lectures plus practical sessions) on GWAS methods by University College London Genetics Institute.

For more information or to register, visit this link

<https://www.eventbrite.com/e/ucl-short-course-understanding-the-genetic-architecture-of-complex-traits-tickets-50034528622?aff=ebdssbdestsearch>

Thanks, Doug

Description

Date: Tuesday 23rd October, University College London, 10am-4.30pm

Tutors: Prof David Balding (Melbourne and UGI) and Dr Doug Speed (Aarhus and UGI)

Cost: 40 (or 30 for UCL Members)

Advance Registration is REQUIRED

*

*Background: *In recent years there has been great progress in developing genome-wide statistical analyses for detecting causal variants, constructing prediction models and better understanding the genetic architecture of complex traits. However the underlying regression models involve very large numbers of predictors, and strong modelling assumptions are required to tackle the consequent problem of over-fitting. The results can be sensitive to these assumptions, and also to the effects of population structure, genotyping errors and the extent to which rare SNPs are included. Recently-developed methods based on summary statistics are susceptible to similar problems

*Course outline: *We will cover genome-wide association analysis, including latest developments in confounding adjustments, and heritability analyses, both using individual-level genetic data (GCTA, LDAK) and using summary statistics (LDSC, SumHer). We will also cover assessing heritability enrichment in functionally-

annotated regions, genetic correlation and risk prediction (e.g., polygenic risk scores, BLUP and Multi-BLUP). We will emphasise the common elements of these methods, highlighting a standard framework that has emerged for genome-wide SNP analysis, while also contrasting the differences in modelling assumptions underlying the different software.

The practicals will provide step-by-step details for analysing genetic data, starting either with individual-level data (e.g., PLINK files or the output from IMPUTE2) or summary statistics (p-values from a GWAS). There will be a selection of worked examples; to take part in the practicals, participants should bring a laptop with either MAC or LINUX OS

***Prerequisites:** Participants should be proficient in statistics including some familiarity with random-effects regression models. In genetics, knowledge of SNP genotypes and Hardy-Weinberg and linkage equilibrium will be assumed. Computer scripts and output will be discussed that assume some familiarity with scientific computing using linux. Some familiarity with PLINK would be helpful but is not essential.

Provisional Timetable

***10:00 - 12:20:** Lecture 1 followed by Practical 1*

Introduction to analysing GWAS data analysis using individual genotype data, kinship and heritability, both classical and SNP-based. Effect of LD, MAF and genotyping quality on heritability. GCTA and LDAK software.

***12:20 - 13:00:** Lunch*

***13.00 - 14:40:** Lecture 2 followed by Practical 2*

Methods based on summary statistics, assessing the effects of confounding in association analysis, enrichment of functional categories. LDSC, SumHer softwares

***14:40 - 15:00:** Break*

***15.00 - 16:30:** Lecture 3 followed by Practical 3 *

Genetic correlations, genomic prediction and enhanced polygenic risk scores.

Doug Speed <doug.speed@ucl.ac.uk>

UGroningen EvolutionaryDynamics Oct21-26

Postgraduate Course on 'Community and Ecosystem Dynamics'

This is the second announcement of the winter school for PhD students and Postdocs on Linking Community and Ecosystem Dynamics organized by Research School Ecology & Evolution of the Groningen Institute for Evolutionary Life Sciences (GELIFES; University of Groningen, Netherlands).

The school will be held in the University field station 'Herdershut' on the Dutch island of Schiermonnikoog from October 21 - 26 2018.

We are very happy to announce that this year we will have two special guest lecturers: Dr <<https://trishaatwood.weebly.com/people.html>> Trisha B Atwood (Utah State University) and Dr <<http://www.shaipilosof.info/>> Shai Pilosof (University of Chicago).

Dr Atwood is assistant professor and chair of the Aquatic Ecology and Global Change Lab. She and her team members are interested in three broad research themes across all aquatic ecosystems (marine, estuarine, freshwater, and riparian zones). 1. The effects of global change on aquatic food webs and species interactions. 2. How food webs and species interactions influence ecosystem function. 3. The role of aquatic ecosystems in climate change mitigation and biodiversity conservation.

By focusing on these three broad questions, her research has taken her all over the world with studies in Hawaii, Canada, Costa Rica, and Australia (including The Great Barrier Reef).

Dr Pilosof is postdoctoral scholar at the University of Chicago, at the lab of Mercedes Pascual. He is mostly interested in the application of network theory to ecological systems, specifically in the field of disease ecology. He uses a complex systems approach to study the factors that effect spread of disease in animal communities and from animals to humans. His research is unique as it takes the individual point of view: 1. What is the role of individual heterogeneity in shaping host-parasite interactions at the community level? 2. How does genetic variation affect infection with parasites in different hosts? 3. How does individual heterogeneity translate

to efficiency of disease spread in host communities?

Scope of the course

The research fields community and ecosystem ecology have diverged more or less independently over the last decennia. In community ecology progress is made in understanding shifts in community composition under the influence of environmental change and how these shifts can be explained by functional trait approaches of component species. Also, the importance of positive feedbacks in community dynamics is more and more appreciated, and merged with trophic interactions in ecological networks. Studies in ecosystem ecology traditionally have a strong focus on energy and nutrient fluxes and how deviation in these fluxes affect ecosystem functioning and stability. Recent studies reveal tight links between these sub-disciplines that enforce us to rethink how communities and ecosystems interact.

This course focuses on theoretical concepts, such as autocatalytic loops and positive and negative feedbacks between organisms in ecological networks as well as the importance of non-trophic interactions by ecosystem engineers. The course will address how these principles can be used to link communities to ecosystems enabling a better understanding of how environmental changes affect community and ecosystem dynamics. Students will construct ecological networks of their own study system or based on literature data and analyze these using structural equation modelling.

Course Set-up

The course is composed of a series of lectures, a poster session, analyzing ecological networks using structural equation modelling and finalized with a debating session.

Poster session: Prior to the course, participants submit a poster of their work (A4-size) in PDF, which will be printed and included in the course reader. The poster contains your name and affiliation, title and short description of research project (including concepts) with one highlight (something exciting) and the reason you want to participate in this course. During the course, participants briefly pitch their research (maximum 3 slides) and indicate where they would like to receive input from the course participants and lecturers.

Lectures and discussion: Each day starts with a key speaker who will give a lecture on one of the key course topics (covering both general theory and own research). After the lecture we'll have a discussion which is convened by three participants who challenge the speaker on the lecture and two papers that the speaker submitted which are related to the topic of the lecture (participants will receive these before the course to prepare them self).

Group activities: In the afternoons, participants will be split into working groups, which will work on specific group assignments

— / —

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>

UGuelph eDNA Oct11-12

Workshop

Pathway to Increase Standards and Competency of eDNA Surveys (PISCeS) A National Workshop on Environmental DNA

The University of Guelph's Biodiversity Institute of Ontario (BIO), Department of Integrative Biology & College of Biological Sciences are pleased to host a National eDNA workshop in the Arboretum on October 11-12, 2018. Academia, regulators, and industry will join in a discussion on Pathways to Increase Standards and competency of Environmental DNA Surveys. The intent is to explore and inform public policy, industry strategies and future research. Day 2 will consist of an eDNA tools training session especially designed for PISCeS participants. The session is free for all registered participants.

Preliminary session overview and direction of interest: 1. Where is the science at? Presented by speakers from academia. 2. How is the science starting to be applied? Presented by speakers from industry. 3. How will eDNA impact the regulatory framework? Presented by speakers from regulatory agencies. 4. The need for a National Network. Open discussion concerning a development of a National eDNA Network.

Registration The deadline for early bird registration is September, 15th 2018. If you have any questions regarding registration, please contact Conference Services at the University of Guelph at 519-824-4120 ext. 53350 or via email at eventreg@uoguelph.ca

Abstracts The Scientific Committee of the PISCeS workshop invites abstracts to be submitted for either poster or oral presentation related to the subjects of active or passive eDNA detection and its applications, especially as relates to best practices, standards, and applications involving Species-at-Risk in Canada. We are pleased

to note that proceedings from the workshop will be published in a special volume of the forthcoming new journal 'Environmental DNA' (Editor-in-Chief, Louis Bernatchez). Abstract Submission Deadline: 7 September 2018.

For more information please visit the website at <https://www.uoguelph.ca/ib/PISCeS> Rob Young <ryoung04@uoguelph.ca>

UK IntroToRForBiologists Oct29-Nov1

Dear Brian can you please post the following to the courses and workshops page of evoldir, thanks in advance, Oliver

Introduction to R for biologists (IRFB02)

<https://www.prstatistics.com/course/introduction-to-statistics-and-r-for-biologists-irfb02/> This course will be delivered by Dr. Olivier Gauthier in Glasgow city centre from the 29th October - 1st November 2018.

Course overview: The course will consist of a series of 8 modules each lasting roughly half a day, and designed to build required skills for subsequent modules and more advanced courses. At its conclusion, participants will have acquired basic skills in coding with R, and will be able to perform and interpret various analyses commonly seen in biology, ecology and evolutionary biology as well as be able to critically evaluate similar analyses from the scientific literature and technical reports.

Monday 28th 1. Data visualisation using ggplot2 2. Packages, names, data types 3. Read, write, access, manipulate data

Tuesday 29th 1. Scripts and projects 2. Probability distributions, parameter estimation, confidence intervals 3. Null hypothesis testing

Wednesday 30th 1. Control statements 2. Writing R Functions 3. Simple linear regression

Thursday 1st 1. Multiple linear regression (Estimation of model parameters, Ordinary and standardized regression coefficients, Multicollinearity, Hypothesis testing) 2. Model and variable selection

Email oliverhooker@prstatistics.com

Check out our sister sites, www.PRstatistics.com (Ecology and Life Sciences) www.PRinformatics.com (Bioinformatics and data science) www.PSstatistics.com (Be-

haviour and cognition)

1. October 1st - 5th TIME SERIES MODELS FOR ECOLOGISTS (TSME02) Glasgow, Dr Andrew Parnell <https://www.prstatistics.com/course/time-series-models-foe-ecologists-tsme02/>

2. October 1st - 5th 2018 INTRODUCTION TO LINUX WORKFLOWS FOR BIOLOGISTS (IBUL03) Glasgow, Scotland, Dr. Martin Jones <https://www.prinformatics.com/course/introduction-to-linux-workflows-for-biologists-ibul03/>

3. October 8th - 12th 2018 INTRODUCTION TO FREQUENTIST AND BAYESIAN MIXED (HIERARCHICAL) MODELS (IFBM01) Glasgow, Scotland, Dr Andrew Parnell <https://www.psstatistics.com/course/introduction-to-frequentist-and-bayesian-mixed-models-ifbm01/>

4. October 15th - 19th 2018 APPLIED BAYESIAN MODELLING FOR ECOLOGISTS AND EPIDEMIOLOGISTS (ABME04) Glasgow, Scotland, Dr. Matt Denwood, Emma Howard <http://www.prstatistics.com/course/applied-bayesian-modelling-ecologists-epidemiologists-abme04/>

5. October 23rd - 25th 2018 INTRODUCTIUN TO R (This is a private 'house' course) London, England, Dr William Hoppitt

6. October 29th - November 2nd 2018 INTRODUCTION TO R AND STATISTICS FOR BIOLOGISTS (IRFB02) Glasgow, Scotland, Dr. Olivier Gauthier <https://www.prstatistics.com/course/introduction-to-statistics-and-r-for-biologists-irfb02/>

7. October 29th - November 2nd 2018 INTRODUCTION TO BIOINFORMATICS FOR DNA AND RNA SEQUENCE ANALYSIS (IBDR01) Glasgow, Scotland, Dr Malachi Griffith, Dr. Obi Griffith www.prinformatics.com/course/precision-medicine-bioinformatics-from-raw-genome-and-transcriptome-data-to-clinical-interpretation-pmbi01/

8. November 5th - 8th 2018 PHYLOGENETIC COMPARATIVE METHODS FOR STUDYING DIVERSIFICATION AND PHENOTYPIC EVOLUTION (PCME01) Glasgow, Scotland, Dr. Antigoni Kaliontzopoulou <https://www.prstatistics.com/course/phylogenetic-comparative-methods-for-studying-diversification-and-phenotypic-evolution-pcme01/>

9. November 19th - 23rd 2018 STRUCTURAL EQUATION MODELLING FOR ECOLOGISTS AND EVOLUTIONARY BIOLOGISTS (SEMR02) Glasgow, Scotland, Dr. Jonathan Lefcheck <https://www.prstatistics.com/course/structural-equation-modelling-for-ecologists-and-evolutionary-biologists-semr02/>

— / —

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>

UK Scholarships IntroBioinformatics Sep1-5

PARTFUNDED SCHOLARSHIPS for the course “Introduction to bioinformatics using Linux (IBUL03)”

This course will run from the 1st - 5th October 2018 in Glasgow City Centre, Scotland, UK

<https://www.prinformatomics.com/course/introduction-to-linux-workflows-for-biologists-ibul03/>

PR INFORMATICS ARE PLEASED TO ANNOUNCE THAT THROUGH THEIR FUNDING SCHEME THEY ARE ABLE TO OFFER PART-FUNDED SCHOLARSHIPS FOR OUR UP-COMING COURSE

“Introduction to bioinformatics using Linux (IBUL03)”

SCHOLARSHIPS CONTRIBUTE TOWARDS COURSE AND ACCOMMODATION FEES WITH ALL INCLUSIVE PLACES (accommodation and meals included) AVAILABLE AT pounds 475.00 (Fees have been subsidised by 40% from pounds 775.00).

Applications should be sent to oliverhooker@prinformatomics.com and contain

the following.

1. Full name
2. Institute name
3. PhD subject title or Post doc research questions
4. Do you hold a funded position
5. 150 words why this course would be relevant to your research or how it would help.

Application deadline is Thursday 6th September and decisions will be made by Friday 7th September 2018.

We still have 'normal' places available for anyone else interested.

Full course details are given below

“Introduction to bioinformatics using Linux (IBUL03)”

Delivered by Dr. Martin Jones

<https://www.prinformatomics.com/course/introduction-to-linux-workflows-for-biologists-ibul03/>

Course Overview:

Most high-throughput bioinformatics work these days takes place on the Linux command line. The programs which do the majority of the computational heavy lifting – genome assemblers, read mappers, and annotation tools – are designed to work best when used with a command-line interface. Because the command line can be an intimidating environment, many biologists learn the bare minimum needed to get their analysis tools working. This means that they miss out on the power of Linux to customize their environment and automate many parts of the bioinformatics workflow. This course will introduce the Linux command line environment from scratch and teach students how to make the most of its tools to achieve a high level of productivity when working with biological data.

Please email any questions and/or applications to oliverhooker@prinformatomics.com – Oliver Hooker PhD. PR informatics 2017 publications - Ecosystem size predicts eco-morphological variability in post-glacial diversification. Ecology and Evolution. - The physiological costs of prey switching reinforce foraging specialization. Journal of animal ecology. [prinformatomics.com](http://www.prinformatomics.com) twitter.com/PRinformatics [facebook.com/prstatistics/](https://www.facebook.com/prstatistics/) 6 Hope Park Crescent Edinburgh EH8 9NA +44 (0) 7966500340

Oliver Hooker <oliverhooker@prinformatomics.com>

Instructions

Instructions: To be added to the EvoDir 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 notification of the availability of a monthly review pdf file.

To be removed from the EvoDir 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 EvoDir direct them to the email evodir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as L^AT_EX 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 formatted) the message will be sent 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 preformatting 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 L^AT_EX do not try to embed L^AT_EX or T_EX in your message (or other formats) since my program will strip these from the message.