
E v o l D i r

October 1, 2019

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

Foreword

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

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

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



Foreword	1
Conferences	2
GradStudentPositions	15
Jobs	46
Other	89
PostDocs	93
WorkshopsCourses	118
Instructions	131
Afterword	131

Conferences

AuburnU EcolEvolution Oct11-12 2	Naples EuroEvoDevo DeadlineSep30 9
Brisbane Qld QuantGenetics Jun14-19 AbstractsClosing 2	NHM London YoungSystematists Nov22 9
Debrecen Hungary Reproductive Strategies Nov 7-10 3	Porto Portugal EvolutionaryBiology Nov14-15 Dead- lineOct6 10
Debrecen Hungary ReproductiveStrategies Nov7-10 .4	QuebecCity SMBE2020 Jun28-Jul2 CallForSymposia 10
Helsinki EvolutionInsectNutrition Jul19-24 5	QuebecCity SMBE CallForSymposia Jun28-Jul2 ... 11
Helsinki InsectEvolution Jul19-24 5	SanDiego AvianGenomicsPAG Jan11-15 2 12
Helsinki InsectEvolution TravelAward 6	Toulouse MolecularEvolution Nov6-8 12
Hinxton UK HumanEvolution Oct30-Nov1 6	UDebrecen Hungary ReproductiveStrategies Nov7-10 12
Marseilles EBM23 Sep24-27 deadline 7	UNebraska EvolutionaryGenomics Oct11-13 13
Marseilles EvolutionaryBiology Sep22-25 7	vienna ExptEvolution Dec2-6 Registration 14
McMasterU EvolutionNematodes Jul24-27 7	
Melbourne Metaresearch Nov7-8 8	
Montpellier Recomb-CG Oct1-4 8	

AuburnU EcolEvolution Oct11-12

Auburn University is hosting SEEC 2019 from October 11th-12th with a focus on prescriptive evolution of South-eastern biodiversity. We are looking for undergraduates and graduates to present their research on Southeastern biodiversity. Students looking to participate can submit abstracts for poster or oral presentations before October 4th. There is no registration cost and a select few students with abstracts may be chosen for our Friday workshop.

More information can be found on our website: <https://seecau2019.wixsite.com/auburn> . Thank you so much,

Gavin Shotts

Gavin Shotts <gss0020@tigermail.auburn.edu>

Brisbane Qld QuantGenetics Jun14-19 AbstractsClosing

6th International Conference of Quantitative Genetics 2020 Abstracts Close October 4th 2019 <https://icqg6.org>

What do maize, humans, chickens, tropical cattle and Drosophila have in common? When it comes to quantitative genetic analysis, more than you'd think. Which is why the 6th International Conference of Quantitative Genetics (ICQG6) will bring together researchers in agriculture, human health, natural species and evolutionary genetics from across the world, united by their interest in understanding and translating the contribution of genetic variation of quantitative traits. The rapid technological advances of the last decade mean that quantitative genetics approaches are relevant across species whether in natural populations, model species,

crops, livestock or humans. There has never been a more exciting time to be a quantitative geneticist!

We have assembled a stellar line-up of internationally renowned speakers <https://icqg6.org/invited-speakers/>, who will present and discuss state-of-the-art results, theoretical developments and new methodologies relevant across natural populations, model species, crops, livestock and humans.

There will be plenty of opportunity for discussion and networking. And if that's not exciting enough, there is the added bonus of Brisbane as your destination, a city on the edge of the most extensive World Heritage sub-tropical Gondwana rainforest in the world, and of course the Great Barrier Reef just a short plane-hop away.

We are very excited and proud to be presenting ICQG6, and we do hope you'll join us for what we hope will be an outstanding week of presentations, discussion and networking.

Register now to secure the Early Bird discounted registration!

Register now at the early bird registration rate and you will save \$250 AUD. Registration Type

Full Registration 'V Academic - Early Bird \$950 AUD / ~645 USD / ~580 EUR Standard \$1,200 AUD / ~816 USD / ~734 EUR

Full Registration 'V Industry 'V Early Bird \$1,200 AUD / ~816 USD / ~734 EUR Standard \$1,500 AUD / ~1018 USD / ~917 EUR

Full Registration 'V Student* - Early Bird \$700 AUD / ~475 USD / ~428 EUR Standard \$950 AUD / ~645 USD / ~580 EUR

Call for abstracts 'V Abstracts due Abstract submissions for ICQG 6 2020 will be closing in just over 4 weeks! Don't leave it until the last minute, submit your abstract now. Abstract submissions are invited for the following broad themes;

1. Methodology
2. Livestock
3. Crops, horticulture, trees & other plants
4. Model species
5. Human
6. Cells and 'Vomics
7. G x E (genotype by environment)
8. Evolutionary genetics and natural populations

Call for abstracts closes Friday 4 October 2019.

Got questions? Get in touch with us

Conference manager The University of Queensland
Robyn Evans ICQG6 Manager Institute for Molecular Bioscience Brisbane QLD 4072 Ph: +61 (0) 450 152 866 Email: icqg6@uq.edu.au

Registration & Accommodation Jemma Hampel Con-

ference secretariat ICMS Australasia Delegate Services
PO Box 3599 Brisbane QLD 4101 Ph: +61 (0) 7 3255 1002 Email: registration@icqg6.org

Sponsorship & Exhibition Andrea O'Sullivan Conference secretariat ICMS Australasia Sponsorship & Exhibition PO Box 3599 Brisbane QLD 4101 Ph: +61 (0) 7 3255 1002 Email: sponsorship@icqg6.org

Steve Chenoweth <s.chenoweth@uq.edu.au>

Debrecen Hungary Reproductive Strategies Nov 7-10

Dear Colleagues,

We are delighted to invite you to present the results of your research at the Reproductive Strategies Symposium. This is the last call: PLEASE NOTE THAT REGISTRATION WILL CLOSE ON 30 SEPTEMBER 2019

To overview recent research on reproductive strategies of plants and animals, University of Debrecen (Hungary) will host a three-day international symposium 7 - 10 November 2019. The Symposium will offer opportunities to present your latest research, and it will provide a forum for researchers of reproductive behaviour of microbes, plants and animals including humans to consider the current state of science and where the field is going. World-leading speakers will overview their recent research and address the future challenges facing the field. We expect participants from evolutionary biology, ecology, botany, behavioural ecology, conservation biology, microbial biology, zoology and beyond. The conference will start with a reception on Thursday 7 November and close on Sunday 10 November with an optional excursion to nearby Hortobagy National Park, an UNESCO World Heritage Site.

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

Speakers will cover exciting aspects of reproductive strategies using cutting-edge research in life histories, neuro-genomics, population demography, sexual dimorphism, mating systems and parenting, dispersal and biodiversity conservation. Keynote speakers will in-

clude Prof. Andy J. Green (Estacion Biologica de Donana, Sevilla), Prof. Zoltan Barta (University of Debrecen), Prof. Michaela Hau (Max-Planck-Institute for Ornithology, Seewiesen), Prof. Ferenc Jordan (Hungarian Academy of Sciences, Budapest), Prof. Andras Liker (University of Pannonia, Veszprem), Prof. Szabolcs Lengyel (Hungarian Academy of Sciences, Debrecen), Dr. Araxi Urrutia (University of Bath) and Prof. Bela Tothmeresz (University of Debrecen).

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

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

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

We look forward seeing you in Debrecen.

Dr Orsolya Valko, University of Debrecen, valko.orsolya@science.unideb.hu Dr Zoltan Nemeth, University of Debrecen, nemethzoltan@science.unideb.hu Prof Tamas Szekely, University of Bath & Debrecen, T.Szekely@bath.ac.uk

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

“nemethzoltan@science.unideb.hu”
<nemethzoltan@science.unideb.hu>

Debrecen Hungary ReproductiveStrategies Nov7-10

Reproductive strategies in the 21st Century: from genes to societies. Debrecen, Hungary, 7-9 November 2019 <http://konferencia.unideb.hu/en/node/304> Dear Col-

leagues, We are delighted to invite you to attend the Reproductive Strategies Symposium. This is the last call: PLEASE NOTE THAT REGISTRATION WILL CLOSE ON 30 SEPTEMBER 2019

To overview recent research on reproductive strategies of plants and animals, we will host a three-day international symposium in November 2019 at the University of Debrecen (Hungary). The Symposium will provide a forum for researchers of reproductive behaviour of microbes, plants and animals including humans to consider the current state of science and where the field is going. World-leading speakers will overview their recent research and address the future challenges facing the field. We expect participants from evolutionary biology, ecology, botany, behavioural ecology, conservation biology, microbial biology, zoology and beyond. The conference will close on Sunday 10 November with an optional excursion to nearby Hortobagy National Park, an UNESCO World Heritage Site.

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

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

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

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

The Symposium will cover the following topics:

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

We look forward seeing you in Debrecen.

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

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

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

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

Tamas Szekely <bssts@bath.ac.uk>

Helsinki EvolutionInsectNutrition Jul19-24

Dear Colleagues,

We are looking for speakers to share their research in a symposium entitled “Nutritional dimensions in insect ecology and evolution”, taking place at the XXVI International Congress of Entomology from July 19-24, 2020, in Helsinki, Finland (<https://ice2020helsinki.fi/>). We specifically encourage graduate students in entomology and/or microbiology to submit an abstract for consideration.

The main goal of the session is to bring together symbiont- and host-encoded contributions to insect nutrition and discuss their evolutionary history and ecological consequences. We aim to showcase research at the forefront of a field that is redefining insect biology by the widespread application of genetic and genomic approaches. By including both microbial and host perspectives, this symposium will bridge schools of thought across subfields and enable us to apply multidisciplinary approaches for a more balanced overview of insect nutrition.

To submit an abstract, follow this link and click on the green button: <https://submit.peerageofscience.org/->

[conference/ICE.2020/109545](https://www.tobinhammer.com) Please feel free to contact us directly if you have any questions!

Toby Hammer (tobin.hammer@utexas.edu) and Hassan Salem (hassan.s.salem@gmail.com)

– Tobin Hammer Postdoctoral Researcher University of Texas at Austin www.tobinhammer.com Pronouns: he/him/his

Toby Hammer <tobin.hammer@utexas.edu>

Helsinki InsectEvolution Jul19-24

We would like to invite submissions to our symposium held during the International Congress of Entomology (ICE 2020) from July 19th - 24th, 2020 in Helsinki, Finland, entitled, *Exploiting host-location behaviors and host-plant resistance to manage invasive woodborers.*

International trade has increased the rate at which wood-boring insects are being introduced into novel habitats. The lack of coevolutionary history with potential host plants, and escape from natural enemies has caused these non-native insects to become ecological and economic threats in their new ranges. Identifying patterns in host-location behaviors by woodborers and their natural enemies, as well as within mechanisms of resistance by these plants to attackers, can lead to management practices that reduce the success of colonization and increase mortality of woodborers in novel habitats.

The goal of this symposium is to spur discussion regarding the theory and application of maintaining robust populations of trees that are resistant to attack by woodboring beetles. This task requires crosstalk among researchers that study host location by woodborers and their natural enemies, as well as those that study plant defense, ultimately leading to the selection of populations of trees that minimize damage and reduce the likelihood of outbreaks of woodboring beetles. We are looking for researchers that are currently conducting research in these topic areas to present and provide further insights.

Topics of interest include:

-Theoretical or synthetic presentations on: plant defense against woodboring insects and host-location by natural enemies

-Host selection cues used by woodborers and their natural enemies, including but not limited to: cues that are chemical, visual, and tactile

-Mechanisms of resistance used by host trees: antibiosis, antixenosis, and/or tolerance

-Patterns in coevolved resistant traits and lack of those mechanisms in novel hosts

If you are interested or have any questions, please feel free to reach out to either of us:

Todd Johnson (sttdj01@gmail.com) and Donnie Peterson (peterson.143@wright.edu)

Submissions to the symposium can be submitted through this link: <https://submit.peeraofscience.org/conference/ICE.2020/109384> More information about the conference can be found here: <https://ice2020helsinki.fi/> Todd D. Johnson (he/his) Postdoctoral Research Associate | Garnas lab Department of Natural Resources and the Environment University of New Hampshire Website < <http://www.forestentomology.com> > | Google scholar < <http://scholar.google.com/citations?user=3DC8d1I70AAAAJ&hl=3Den> > Sttdj01@gmail.com (610) 984-5636

sttdj01@gmail.com

Helsinki InsectEvolution TravelAward

Hello,

Travel funds have been made available by the National Science Foundation to provide travel support for early career investigators to attend the XXVI International Congress of Entomology in Helsinki, Finland (<http://www.ice2020helsinki.fi>). Applicants must be currently working at US institutions as graduate students or postdoctoral researchers. Applicants must also present at the conference about research related to global change and insects.

To apply for a travel award, please complete the following: 1. Submit the following items as a single PDF document <3 pages in length: (a) a short curriculum vitae (2 pages or less); (b) a brief description of up to 3 of your most significant contributions, including research (published or not), teaching, or service (i.e., outreach, departmental committees, society office, etc.); 2. Fill out the Qualtrics survey: https://udenver.qualtrics.com/jfe/form/SV_eqvWrr3RWGsNK0B Note: you will be asked to write brief descriptions summarizing the following: (a)

any professional outreach experience you have in the areas of entomology, ecology, and/or evolution (b) how you promote or represent diversity (c) what you would gain from participating in ICE 2020 (d) your abstract that you have submitted or plan to submit to ICE 2020 (e) any other financial support you have to attend ICE 2020

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

We intend to notify all applicants of the outcome of their applications by November 1, 2019. Awardees will be expected to submit their travel receipts for reimbursement. Funding will cover ICE meeting registration, airfare, and partial lodging. To be reimbursed, flights must follow these policies (<http://www.nsf.gov/pubs/policydocs/pappguide/nsf16001/aag.6.jsp#VIF>). Application materials and travel receipts may be made available to NSF upon request.

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

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

Hinxton UK HumanEvolution Oct30-Nov1

Human Evolution - From fossils to ancient and modern genomes

When: 30 October - 1 November 2019

Where: Wellcome Genome Campus, UK (Hinxton, near Cambridge)

Registration deadline: 1 October 2019

The conference aims at bringing together population and evolutionary geneticists, archaeologists, palaeontol-

ogists, primatologists and medical geneticists to discuss advances in the field of human evolution. This year's conference will not only focus on human demography, genetic admixture and adaptation but will also explore the evolution of technological innovations, languages and behaviour in human evolution as well as human diversity and dispersal.

More info: <https://coursesandconferences.wellcomegenomecampus.org/our-events/human-evolution/> Confirmed Speakers: Robert Foley - University of Cambridge, UK (Keynote) Chris Tyler-Smith - Wellcome Sanger Institute, UK (Keynote) Joshua Akey - Princeton University, USA Susana Carvalho - University of Oxford, UK Chris Clarkson - University of Queensland, Australia Francesco d'Errico - University of Bergen, Norway Anna Di Rienzo - University of Chicago, USA Russell Gray - Max Planck Institute, Germany Garrett Hellenthal - University College London, UK Asifa Majid - University of York, UK Maria Martinon-Torres - CENIEH, Spain Iain Mathieson - University of Pennsylvania, USA Lisa Matisoo-Smith - University of Otago, New Zealand Carina Schlebusch - Uppsala University, Sweden Sarah Tishkoff - University of Pennsylvania, USA Kira Westaway - Macquarie University, Australia

Nicole Schatlowksi <nicole.schatlowski@wellcomegenomecampus.org>

Marseilles EBM23 Sep24-27 deadline

Dear all

#EBM23

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

< <https://twitter.com/pontarotti> >

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

Marseilles EvolutionaryBiology Sep22-25

Dear colleagues

The inscriptions for the "23rd evolutionary biology meeting at Marseilles" are closed. The "24th evolutionary biology meeting at Marseilles" will take place from 22 to 25 September 2020. Early registrations: October 2019 see aebf.fr.

Best regards

Pierre Pontarotti

< <https://twitter.com/pontarotti> >

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

McMasterU EvolutionNematodes Jul24-27

Ecology, Evolution and Genomics of *C. elegans* and Other Nematodes June 24 'V 27, 2020 McMaster University, Hamilton, Canada

Mark your calendars!

For the first time, the conference "Ecology, Evolution and Genomics of *C. elegans* and Other Nematodes" Canada. The conference will be held at the McMaster University campus in Hamilton, Ontario. Conference website with more details will follow soon.

The meeting dates have been chosen so that participants can easily move on to join the annual SMBE (Society for Molecular Biology & Evolution) meeting, which will be held in Quebec City from June 28 to July 2 (<http://smbe2020.org>).

Organizers:

Te-Wen Lo, Ithaca College, USA Patrick Phillips, University of Oregon, USA Annalise Paaby, Georgia Institute of Technology, USA Christian Braendle, Institute of Biology Valrose, CNRS, France

Annalise Paaby

Assistant Professor School of Biological Sciences Georgia

Institute of Technology

website: genaamics.org

“Paaby, Annalise B” <paaby@gatech.edu>

Melbourne Metaresearch Nov7-8

Registration is now open for AMOS, a meta-research conference that includes many attendees from ecology and evolution disciplines.

Details:<https://www.amos2019conference.com/> When: 7-8th November 2019, Arts West Building, University of Melbourne

The Association for Interdisciplinary Meta-research and Open Science will cover a broad range of open science and scientific reform topics, including: pre-registration and Registered Reports; peer review and scientific publishing; using R for analysis; open source experimental programming; meta-research; replicability; improving statistical and scientific inference; diversity in scientific community and practice; and methodological and scientific culture change.

Rose O’Dea <rose.eleanor.o.dea@gmail.com>

Montpellier Recomb-CG Oct1-4

Dear colleagues,

The 17th RECOMB Satellite Conference on Comparative Genomics, RECOMB-CG 2019 will be held in Montpellier, France - October 1-4, 2019.

*PROGRAM*

Preliminary program is available online: < <https://recombcg2019.bitbucket.io/program.html> >

*PARTICIPATION*

Registration is open, please check < <https://recombcg2019.bitbucket.io> > for details. The early registration deadline is *SEPTEMBER 9, 2019*.

*KEYNOTE SPEAKERS*

* *Alessandra Carbone* (CNRS - Sorbonne Université) < <http://www.ihes.fr/~carbone/> > * *Rute A. R. da Fonseca* (University of Copenhagen)

< <https://rutefonseca.wixsite.com/bioinformatics> >
 * *Purificación López García* (CNRS - University Paris-Sud/Paris-Saclay) < <http://www.singek.eu/-network/supervisors/purificacion-lopez-garcia/> > *
 Romain Koszul (Insitut Pasteur) < <https://research.pasteur.fr/en/member/romain-koszul/> > *
 Benoît Nabholz (Université de Montpellier) < <https://sites.google.com/site/benoitnabholz/> >

*SCOPE*

The RECOMB-CG satellite conference brings together leading researchers in the mathematical, computational and life sciences to discuss cutting edge research in comparative genomics, with an emphasis on computational approaches and novel experimental results. The program includes both invited speakers, contributed talks and poster sessions.

Contributions on any theoretical and/or empirical approach to genome-wide comparison are welcome. Topics of interest include genome evolution, population genomics, genome rearrangements, genomic variation, diversity and dynamics, phylogenomics, comparative tools for genome assembly, comparison of functional networks, gene identification or annotation, cancer evolutionary genomics, comparative epigenomics, paleogenomics, epidemiology and related areas.

*COMMITTEES*

Steering Committee

* *Marília Braga* (Bielefeld University) * *Dannie Durand* (Carnegie Mellon University) * *Jens Lagergren* (Stockholm University) * *Aoife McLysaght* (Trinity College Dublin) * *Luay Nakhleh* (Rice University) * *David Sankoff* (University of Ottawa)

Organizing Committee

* *Severine Berard* (ISEM, University of Montpellier) * *Annie Chateau* (LIRMM, University of Montpellier) * *Krister Swenson* (CNRS, LIRMM, University of Montpellier) * *Mathias Weller* (CNRS, LIGM, University of Eastern Paris - Marne-la-Vallée) * *Virginie Feche* (LIRMM) * *Megane Miquel* (LIRMM)

Program Committee

* *Krister Swenson* (CNRS, LIRMM, University of Montpellier, co-chair) * *Annie Chateau* (LIRMM, University of Montpellier, co-chair) * *Severine Berard* (ISEM, University of Montpellier, co-chair) * *Mathias Weller* (CNRS, LIGM, University of East Paris, co-chair)

* *Max Alekseyev* (George Washington University) * *Nikita Alexeev* (ITMO University) * *Lars Arvestad* (Stockholm University) * *Anne Bergeron* (Université

du Quebec a Montreal) * *Marilia Braga* (Bielefeld University) * *Alessandra Carbone* (Sorbonne Université) * *Cedric Chauve* (Simon Fraser University) * *Rayan Chikhi* (Institut Pasteur) * *Daniel Doerr* (Bielefeld University) * *Ingo Ebersberger* (Goethe University Frankfurt) * *Nadia El-Mabrouk* (University of Montreal) * *Oliver Eulenstein* (Iowa State University) * *Guillaume Fertin* (LS2N, Université de Nantes) * *Pawel Gorecki* (University of Warsaw) * *Michael Hallett* (Concordia University) * *Fábio Henrique Viduani Martinez* (Universidade Federal de Mato Grosso do Sul) * *Katharina Jahn* (ETH Zurich) * *Asif Javed* (Genome Institute of Singapore) * *Manuel Lafond* (Université de Sherbrooke) * *Yu Lin* (Australian National University) * *Simone Linz* (The University of Auckland) * *Kevin Liu* (Michigan State University) * *István Miklós* (Rényi Institute, Hungarian Academy of Sciences) * *Bernard Moret* (Ecole Polytechnique Fédérale de Lausanne) * *Luay Nakhleh* (Rice University) * *Aïda Ouangraoua* (University of Sherbrooke) * *Fabio Pardi* (CNRS, LIRMM, Université Montpellier) * *Teresa Przytycka* (NCBI) * *Vaibhav Rajan* (National University of Singapore) * *Marie-France Sagot* (INRIA, LBBE, Lyon) * *Michael Sammeth* (Federal University of Rio de Janeiro) * *Celine Scornavacca* (CNRS, ISE-M, Université Montpellier) * *Mingfu Shao* (The Pennsylvania State University) * *Jens Stoye* (Bielefeld University)

— / —

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>

Naples EuroEvoDevo DeadlineSep30

Dear EvoDevo community,

Due to multiple requests, we extend the deadline for symposium proposals for the Naples 2020 conference of the European Society for Evolutionary Developmental Biology to the 30th of September 2019. Information on how to prepare a symposium proposal is available on the—website:

<https://evodevo.eu/call-for-symposia-for-the-8th-eed-conference-in-naples/> Also, the website for the Naples conference has just gone live and is available here: <http://www.evodevo2020.eu/> On behalf of the scientific committee,

Frietson Galis

Program Officer

EuroEvoDevo <eed.soc@gmail.com>

NHM London YoungSystematists Nov22

21st YOUNG SYSTEMATISTS??? FORUM Friday 22nd November 2019, 9:30 am Venue: Flett Lecture Theatre, Natural History Museum, London, UK

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

Prizes will be awarded for the most promising oral and poster presentation as judged by a small panel on the day.

Registration is FREE. Please register here <https://www.eventbrite.co.uk/e/21st-young-systematists-forum-tickets-71381037605> supplying your name, contact address and stating whether or not you wish to give an oral or poster presentation. Please also tell us your academic stage ??? e.g., Masters, PhD or postdoc. Send abstracts by e-mail to YSF.SystematicsAssociation@gmail.com ,

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

Again the YSF will be held the day after the Molluscan Forum (<http://www.malacsoc.org.uk/-MolluscanForum.htm>) also at the Natural History Museum. This has been arranged so both meetings can be attended, although if attending both you will have to register for both meetings separately.

Abstracts must be submitted by e-mail in English and in Word format no later than Friday 25 October 2019. The body text should not exceed 150 words in length. Title, authors, and their professional affiliations/addresses should be included with the abstracts. If the presentation

is co-authored, the actual speaker (oral) or presenter (poster) must be clearly indicated in BOLD text. The file should be in editable format (.doc or .odt, not pdf) and titled Surname.First-name_YSF2019.doc, for example Doe.Jane.YSF2019.doc.

If you have presented a talk at the YSF before, we ask that you submit only for a poster presentation, as speaker slots are limited and we want to give as many people a chance as possible. Similarly, if you are presenting at both the YSF and MF, we ask that you not apply for speaking slots in both (or let us know so we can assess).

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

With additional sponsorship from:

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

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

Porto Portugal EvolutionaryBiology Nov14-15 DeadlineOct6

Dear colleagues,

We're announcing the XV National Meeting of Evolutionary Biology (XV ENBE) which will be held on November 14-15, 2019, at CIIMAR, Porto de Leixões Cruise Terminal (Matosinhos/Porto, Portugal).

*Deadline for abstract submission: October 6
 Deadline for registration: November 1*

Inspired by the lectures of Chris Jiggins <<http://heliconius.zoo.cam.ac.uk/people/chris-jiggins/>> (University of Cambridge) and Isabel Henriques <<http://www.cesam.ua.pt/index.php?tab=peossoaldetail&menu=198&user=139>> (University of Coimbra) we will discuss results and create partnerships and projects to foster the development and excellence of evolutionary biology research in Portugal.

Whether you are a student or a principal investigator, and whether you work in Evolutionary Biology or in Evolution Education and Outreach, join us! Disseminate

and discuss your work with the community and identify and meet partners and projects that interest you. All participants are encouraged to submit an abstract for an oral or poster presentation.

Register and submit your abstract here <https://docs.google.com/forms/d/e/1FAIpQLSc9WWNpQ170y1Gyxmn2d0mP6jxmJhGYGsFy_TA1FEiM77/viewform> More information XV ENBE website <<http://xv-enbe.campus.ciencias.ulisboa.pt/>> Follow us on Facebook <<https://www.facebook.com/XVENBE>>

Research Associate, IF2014 Fellow CIBIO Profile <<https://cibio.up.pt/people/details/cginja>> Archaeogenetics Team Leader <<https://cibio.up.pt/research-groups-1/details/archgen/team>>

*CIBIO/InBIO *- Laboratorio Associado* *Centro de Investigação em Biodiversidade e Recursos Genéticos* Universidade do Porto Campus Agrario de Vairao Rua Padre Armando Quintas nº7 4485-661 Vairao, Portugal

E-mail: catarinaginja@cibio.up.pt Tel.: +351 252 660 411 Fax: +351 252 661 780

ARCHAIC project: Archaeogenetics of Iberian Cattle <<http://archaic.campus.ciencias.ulisboa.pt/Archaic/index.html>>

Catarina Ginja <catarinaginja@gmail.com>

QuebecCity SMBE2020 Jun28-Jul2 CallForSymposia

Dear SMBE Member,

We're delighted to announce that the Society for Molecular Biology & Evolution will be accepting proposals for symposium topics for the 2020 Annual Meeting from 9 September 2019. SMBE 2020 is taking place in Québec City, Canada, from 28th June to 2nd July 2020.

Please visit the SMBE 2020 website - smbe2020.org/call-for-symposia - to access information and the submission portal.

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

Key dates

10 October 2019 - Deadline for symposia applications

18 November 2019 - Abstract submission opens *20 January midnight GMT 2020* - Abstract submission deadline *24 January 2020* - Abstract review commences

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. To ensure the meeting is fully accessible to international participants, the conference organisers will provide supporting documentation and advice for visa applications to Canada. For each accepted symposium, SMBE will provide partial financial support to help attract outstanding invited speakers.

Symposium Proposal Guidelines

Please review the following guidelines before submitting a Symposium Proposal:

- Individuals can only be listed as an organiser for one symposium proposal, although organisers can be listed as an invited speaker on another proposal
- Each symposium will include one invited speaker plus a number of contributed speakers
- All invited speakers included within a symposium should have verbally agreed to be involved before the proposal is submitted
- An individual can only give one talk at the SMBE meeting, so in the event that a speaker is invited to two successful symposium application the organisers should consider a back up
- The Society provides financial support to facilitate symposium organisers in attracting outstanding invited speakers
- Symposium organisers should provide a description of the symposium (250 words max) that will be made public if selected. The symposium organisers will also provide a description of how their proposal brings forward the SMBE's objective of equity and diversity, as well as any additional information for the committee to make an informed review (250 words max).
- The symposia proposals selected for inclusion within the SMBE 2020 scientific programme will then be listed on the abstract submission portal, which will open in November 2019, for members to indicate that they would want their contributed talk to be featured in a specific symposia.

Please direct all questions regarding SMBE 2020 to SMBE2020@mci-group.com

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

QuebecCity SMBE CallForSymposia Jun28-Jul2

Dear SMBE Member,

We're delighted to announce that the Society for Molecular Biology & Evolution will be accepting proposals for symposium topics for the 2020 Annual Meeting from 9 September 2019. SMBE 2020 is taking place in Québec City, Canada, from 28th June to 2nd July 2020.

Please visit the SMBE 2020 website - smbe2020.org/call-for-symposia - to access information and the submission portal.

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

Key dates

- 10 October 2019 - Deadline for symposia applications
- 18 November 2019 - Abstract submission opens
- 20 January midnight GMT 2020 - Abstract submission deadline
- 24 January 2020 - Abstract review commences

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. To ensure the meeting is fully accessible to international participants, the conference organisers will provide supporting documentation and advice for visa applications to Canada. For each accepted symposium, SMBE will provide partial financial support to help attract outstanding invited speakers.

Symposium Proposal Guidelines

Please review the following guidelines before submitting a Symposium Proposal:

- Individuals can only be listed as an organiser for one symposium proposal, although organisers can be listed as an invited speaker on another proposal
- Each symposium will include one invited speaker plus a number of contributed speakers
- All invited speakers included within a symposium should have verbally agreed to be involved before the proposal is submitted
- An individual can only give one talk at the SMBE

meeting, so in the event that a speaker is invited to two successful symposium applications the organisers should consider a back up

- The Society provides financial support to facilitate symposium organisers in attracting outstanding invited speakers
- Symposium organisers should provide a description of the symposium (250 words max) that will be made public if selected. The symposium organisers will also provide a description of how their proposal brings forward the SMBE's objective of equity and diversity, as well as any additional information for the committee to make an informed review (250 words max).
- The symposia proposals selected for inclusion within the SMBE 2020 scientific programme will then be listed on the abstract submission portal, which will open in November 2019, for members to indicate that they would want their contributed talk to be featured in a specific symposia.

Please direct all questions regarding SMBE 2020 to SMBE2020@mci-group.com.

Society for Molecular Biology & Evolution
<smbe@allenpress.com>

SanDiego AvianGenomicsPAG Jan11-15 2

Dear colleagues,

This is a second circular, please also tell your friends. Deadline approaching! There will be an "Avian Genomics" workshop at the international PAG conference in January in San Diego <http://www.intlpag.org/>. I will host it for the 5th time: "Avian Genomics - Gone Wild!". PAG 2020 will be from Jan 11th to Jan 15th.

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

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

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

2016 - <https://pag.confex.com/pag/xxiv/meetingapp.cgi/Session/3531> 2017 - <https://pag.confex.com/pag/xxv/meetingapp.cgi/Session/>

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

Best wishes, Robert

rkraus@ab.mpg.de

Robert Kraus <rkraus@ab.mpg.de>

Toulouse MolecularEvolution Nov6-8

The call for abstracts for the annual meeting of research network AIEM (Interdisciplinary Approach of Molecular Evolution) is closing in one week, on *Friday, October 4th*. There are still available slots for oral communications covering the usual thematic of the network (<http://www.wabi.snv.jussieu.fr/aiem/>). Students and young researchers are particularly encouraged to submit, but all other propositions are also welcome.

The meeting will take place in Toulouse from november 6th (afternoon) to 8th (morning), 2019. Registration is free and the organizing comitee will cover accomodation costs (on november 6th and 7th) and most food costs, as well as student travel costs. Detailed information and links to register and submit abstracts are available at: <https://aiem2019.sciencesconf.org/> Registration deadline is on Thursday, October 17th.

Looking forward to seing you soon in Toulouse.

The organizing comitee:

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

Simon Boitard <simon.boitard@inra.fr>

UDebrecen Hungary ReproductiveStrategies Nov7-10

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

Dear Colleagues, We are delighted to invite you to our Symposium, see <http://konferencia.unideb.hu/en/-node/304> PLEASE NOTE THAT REGISTRATION WILL CLOSE ON 30 SEPTEMBER 2019

To celebrate 30 years of research on reproductive strategies of plants and animals at the University of Debrecen (Hungary), we will host a three-day international symposium in November 2019.

The Symposium will start with a welcome reception in the University Aula at 7 pm on Thursday 7 November 2019.

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

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

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

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

facilities.

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

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

The Symposium will include the following topics:

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

We look forward seeing you in Debrecen.

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

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

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

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

Tamas Szekely <bssts@bath.ac.uk>

UNebraska EvolutionaryGenomics Oct11-13

Evolutionary Genomics Symposium

Date: 11-13 October 2019 Location: University of Nebraska, Lincoln, NE, USA

Please join us for a symposium on evolutionary genomics on 11-13 October. The meeting will be held on the University of Nebraska campus.

Registration is now open and we are accepting abstracts for talks and posters.

For details regarding registration, abstract submission, and lodging:

<https://www.unveilnetwork.org/connect> Keynote speakers: *John Kelly (University of Kansas) *Sarah Fitzpatrick (Michigan State University) *Justin Fay (Rochester University)

Organizers: *Kristi Montooth (University of Nebraska)
*Colin Meiklejohn (University of Nebraska) *Jay Storz
(University of Nebraska)

(in collaboration with UNVEIL collaborators at U. Montana: Zac Cheviron, Jeff Good, Lila Fishman, and Scott Mills)

Jay F. Storz Willa Cather Professor of Biology School of Biological Sciences University of Nebraska Lincoln, NE 68588 E-mail: jstorz2@unl.edu

<http://storzlab.unl.edu/> Jay Storz <jstorz2@unl.edu>

vienna ExptEvolution Dec2-6 Registration

Dear all,

We would like to share again with you an announcement of the upcoming Experimental Evolution workshop that we are organizing in Vienna this year.

!!!! Registration deadline is the *30th of September, 2019*. !!!!

The Vienna Graduate School of Population Genetics is now accepting applications for the course *‘‘Experimental evolution: bringing theory and practice together’’* at the University of Veterinary Medicine in *Vienna,* *December 2-6, 2019*.

Experimental evolution is extensively used to address questions of evolutionary biology by exposing evolving populations to different environmental conditions. It offers the opportunity to replicate experiments and test for convergent outcomes. With the recent drop in DNA sequencing cost and the advance of sequencing technologies, the combination of experimental evolution with next generation sequencing of pools of individuals (Evolve & Resequence) has become a state-of-the-art method to link phenotypic responses to genetic changes. Although the availability of replicated time series data is one key advantage of E&R, the analysis of such data sets is still in its infancy. This course will introduce the participants to several new approaches for the analysis

of genomic time series data covering the latest software tools as well as required statistical and computational skills.

The course is targeted towards researchers interested in experimental evolution combined with NGS and will cover the design of experimental evolution studies as well as the analysis of Pool-Seq time series data.

The course aims to introduce participants to: - State-of-the-art software packages - Modeling of neutral data - Identifying selected regions - Comparison of n-point analysis with time series data - Haplotypes reconstruction from time-series data - Inferring linkage structure of Pool-Seq data - Estimating selection coefficients - Calling transposable elements in time series data - Inferring selection in transcriptomics data

Morning lectures by internationally renowned faculty will be followed by computer practicals on the analysis of experimental evolution data in the afternoon.

Faculty: *Anthony Long* (California Irvine Univ., US) - *confirmed* *Christian Schlötterer* (Vetmeduni Vienna, A) - *confirmed* *Dmitri Petrov* (Stanford Univ., US) - *waiting for confirmation* *Henrique Teotónio* (IBENS, FR) - *confirmed* *Molly Burke* (Oregon State Univ., US) - *confirmed* *Neda Barghi* (Vetmeduni Vienna, A) - *confirmed* *Robert Kofler* (Vetmeduni Vienna, A) - *confirmed* *Susan Bailey* (Clarkson Univ., US) - *confirmed*

The course is *free* but will be restricted for the practical sessions (hands on computer lab). Additional seats will be available for attending the lectures, only. Students and researchers are invited to apply by submitting a single .pdf file containing 1) a short CV, 2) a motivation letter and a statement of computer skills to popgen.vienna@gmail.com by *September 30, 2019*. Confidence in working with Unix command line as well as in R, is strongly recommended for the practicals. Participants are expected to arrange their own accommodation.

Further information and updates available at: <https://www.popgen-vienna.at/training/experimental-evolution-course/> Best regards,

PhD students of the Vienna Graduate School of Population Genetics

Claire Burny <claireburny1@gmail.com>

GradStudentPositions

Arizona ComputationalPopulationGenomics 15	UHongKong EvolutionaryEcology 31
ArizonaStateU EarthLifeEvolution 16	UHouston MolecularGenomeEvolution 32
AustralianNatIU EvolutionBioinformatics 16	UCeland GenomicsAdaptiveDifferentiation 32
BielefeldU MadagascarBirdEvolution 17	UKansas DrosophilaGenetics 33
BoiseStateU PlantHerbivoreInteractions 18	UKentucky InsectEvolutionSystematics 34
BoiseStateU PlantMicrobes 19	UKentucky QuantitativeEvolutionEcol 34
CIBIO-InBIO Portugal 2 HumanEvolGenetics 20	UKoblenzLandau Biodiversity 35
DTU-Aqua Denmark PopulationGenomics 20	ULausanne 15 QuantitativeBiology 35
EuropeMarineStations MarineEvolution 21	UMaryland Phylogenomics 36
FUBerlin 2 BrainEvolution 22	UniversityOfMelbourne HumanEvolutionaryGenomics 37
JagiellonianU MammalLifeHistoryMicrobiome 23	UNotreDame Evolution Ecology Environment 38
Lausanne BeeMicrobialEvolution 24	UOldenburg SensoryBiologyEvolution 38
MaxPlanckInst Marburg ProteinEvolution 24	UOulu ButterflyDiversity 39
MPIO Seewiesen EvolutionCognition 25	UPuertoRico EvoDevo 40
NorthernIllinoisU EvolutionaryBiol 26	USherbrooke TreeSwallowEvolution 41
OhioU PlantEvolution 26	UTexasAM SpeciationHybridZones 41
PortlandStateU PlantEvolutionaryBiology 27	UValencia Coevolution 42
PurdueU EvolutionaryEcology 27	UVermont Evolution 42
PurdueU PlantEvolution 27	UVirginia EvolutionEcolBehavior 43
UAlaska SalmonLifeHistory 28	UWashington Coevolution 43
UConnecticut PlantArthropodInteractions 28	VirginiaCommonwealthU 2 InsectSymbioses 44
UFlorida EvolutionaryEcol 29	WageningenU PlacentaEvolution 44
UFlorida EvolutionaryGenetics 29	WashingtonU StLouis Phylogenetics 45
UGottingen ForestGenetics 30	
UHongKong 3 EvolutionBodyStructure 30	

Arizona ComputationalPopulationGenomics

A PhD student position is available in the Gutenkunst group at the University of Arizona. The group focuses on computational population genomics, with an emphasis on methods development. Students may join the Gutenkunst group through PhD programs including Ecology & Evolutionary Biology, Genetics, and Statistics. For more information, see <http://gutengroup.mcb.arizona.edu> or contact Dr. Ryan Gutenkunst at rgutenk@email.arizona.edu.

The student will contribute to an NIH-funded project to develop and apply methods for inferring novel models of natural selection from population genomic data. In particular, the student will apply methods for inferring

the joint distribution of fitness effects to multiple species and extend those methods to ancient DNA. The student will also have the freedom to contribute to other ongoing projects and to develop their own projects that mesh with the group's interests.

Applicants should have a B.S. in molecular or evolutionary biology, bioinformatics, or a related field. Prior computational experience is highly desirable, and applicants should be motivated, creative, and collegial. The University of Arizona has great strength in population and evolutionary genetics, offering potential interactions with Drs. Joanna Masel, David Enard, Joseph Watkins, Mike Barker, and others. Computational resources are similarly excellent. The campus is highly interdisciplinary and very collegial. The University of Arizona is an EEO/AA - M/W/D/V Employer.

At 2,500 feet above sea level, culturally diverse Tucson, Arizona is nestled among five mountain ranges in the beautiful Sonoran Desert and is surrounded by Saguaro

National Park. Housing is affordable, quality of life is high, and outdoor recreation opportunities include the southernmost ski area in the United States and over 100 miles of bike trails. The area receives over 350 days of sunshine per year and enjoys average high/low temperatures of 82/54 degrees F.

Interested students should contact Dr. Gutenkunst directly to discuss which PhD program at the University of Arizona is most appropriate for their interests. Financial support is available through research assistantships, local fellowships, and teaching assistantships

rgutenk@email.arizona.edu

ArizonaStateU EarthLifeEvolution

Graduate position: Earth-life evolution, Geo-genomics, informatics

The Dolby and Kusumi labs at Arizona State University (School of Life Sciences) welcome graduate (PhD) applications to work on a new NSF- funded project that seeks to understand how Earth processes shape genomic evolution and diversification of species. This project includes reference genome assembly, population genomics (low coverage genome data), seasonal differential expression (RNAseq), and ecological niche modeling for at least six mammal, reptile, and plant species. The position will emphasize integration informatics including new analytical techniques for integrating geological and genomic data. The Dolby lab specializes in Earth-life evolution and geo-genomics; the Kusumi lab specializes in comparative and functional genomics as well as development. Research topics are flexible based on student strengths and interests; options include: 1. using geologic data to constrain evolutionary genomic models; 2. applying new developments from information theory to quantify population genomic divergence; 3. standardizing how we quantify landscape change as the work done by physical processes on that landscape.

The student will work as part of the larger Baja GeoGenomics consortium (www.BajaGeoGenomics.org) and have exceptional opportunity for broad training with other biology, geology, and physics collaborators to become an integrative interdisciplinary scientist. Students from any STEM background are welcome to apply. Women and people from underrepresented groups are encouraged to apply. Computational or mathematical strengths are desired. An eagerness to work on complex interdisciplinary problems is key along with strong

creativity, problem-solving, and communication skills. Must be able to work both independently and part of a large international team. Inquiries for this position are encouraged. Interested students should submit a CV and brief summary of interests including how you might apply your background to these ideas (email: Greer Dolby at <gdolby (at) asu (dot) edu>). Interested students will need to apply to the ASU SOLS PhD program between 1-Oct and 15-Dec.

Links: https://www.nsf.gov/awardsearch/showAward?AWD_ID=1925535&HistoricalAwards=false www.greerdolby.org <http://kusumi.lab.asu.edu> <https://sols.asu.edu/degree-programs/graduate>

Greer Dolby <gdolby@asu.edu>

AustralianNatIU EvolutionBioinformatics

PhD opportunities in Ecology, Evolution, and Bioinformatics

The Division of Ecology and Evolution at the Australian National University are seeking expressions of interest from students interested in pursuing a PhD. These scholarships are open to all citizens and permanent residents of Australia and New Zealand.

Projects available: - Living on the Edge: Thermal ecology of Australian alpine and desert plants (Nicotra Lab) - Marine ecology and conservation of tropical and temperate seascapes (Fulton Lab) - New Methods in Molecular Phylogenetics (Lanfear Lab) - The pace-of-life in a widespread Australian lizard (Noble Lab)

For more details on the projects, including on how to apply, navigate to <https://www.findaphd.com/phds/-research-school-of-biology/?c0wKNrI0> . If you have general questions please contact the HDR convenor, Rob Lanfear, at eeg.hdr.convenor.rsb@anu.edu.au.

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

Canberra and the ANU The ANU campus is situated in the heart of Canberra, which is ranked as the third best city in the world according to Lonely Planet (2018) and is Australia's most liveable city (Life in Australia Report 2019). The ANU has an international reputation for research excellence and is ranked among the best universities in the world (QS World University Ranking 2019).

Candidates These scholarships are open to citizens and permanent residents of Australia and New Zealand. ANU scholarships are highly competitive, and cover all fees and a ~\$27K stipend. In order to be put forward, you will need outstanding undergraduate marks and a first class honours or Masters by research (or be expecting to gain one by the end of 2019) or equivalent research experience. Please contact the relevant lab by following the links above.

General questions If you have general questions about anything related to pursuing a PhD with us, please contact the HDR convenor, Rob Lanfear, at eeg.hdr.convenor.rsb@anu.edu.au

RSB - EEG HDR Convenor
<eeg.hdr.convenor.rsb@anu.edu.au>

BielefeldU MadagascarBirdEvolution

3 year PhD studentship available: Bielefeld University (Germany) and University of Bath (UK).

With Prof Oliver Kruger, Dr Nayden Chakarov, Prof Joe Hoffman and Prof Tamas Szekely.

Mating systems and parental behaviour are among the most diverse social behaviours, and recent research suggests that the social environment influences these behaviours. Small plovers (*Charadrius* spp.) exhibit highly variable breeding systems, between and within species, making them an ideal model system for studying the causes and consequences of sex ratio variation. The objective of this studentship is to investigate these fundamental issues by means of fieldwork in three plover populations in Madagascar. The research builds on the results from previous successful studentships working with these birds.

We seek a bright and highly motivated student with a keen interest in evolutionary ecology and behavioural ecology. Willingness to carry out fieldwork in a challenging tropical environment is essential for this position.

The student will search for nests, trap birds and collect blood and other samples and record plover behaviour. In addition, they will use molecular methods in the laboratory for sexing and the genetic analysis of host-associated parasite communities. Previous experience of avian field biology or any other field experience in the tropics is very important, while experience of population genetic approaches and/or parasitology would be beneficial.

Fieldwork will be in a remote and pristine location in SW Madagascar. Facilities are extremely basic, the weather can be very harsh, and a great deal of walking and cycling are required. Opportunities for communication with the outside world are very limited. You must be physically fit, hard-working and meticulous, and have a proven ability to work independently. You must have a positive attitude and an ability to look after yourself (i.e. cook your own meals, deal with logistics and organise your own work over extended periods). Speaking French is advantageous, but is not a requirement.

The overall aim of the project is to study the immunological causes of sex ratio bias in three sympatric species of plovers with varying mating systems at a single location in Madagascar. At which stage of the life cycle and how do mortality differences between the sexes emerge, and what are the demographic consequences of these differences? We aim to experimentally manipulate parasite infections in plovers but also to monitor populations closely to identify the proximate causes of previously described adult sex ratio biases. In addition, the student will test hypotheses relating to mating system evolution, and develop demographic models to estimate key demographic properties of natural populations. Experience of statistical modelling and/or parasitological/immunological techniques is therefore advantageous and more generally, strong quantitative skills are highly desirable.

Key references

Eberhart-Phillips, L. J., Küpper, C., Carmona-Isunza, M. C., Vincze, O., Zefania, S., Cruz-Lopez, M., Kosztolanyi, A., Miller, T. E. X., Barta, Z., Cuthill, I. C., Burke, T., Szekely, T., Hoffman, J. I. & Krüger, O. (2018) Demographic causes of adult sex ratio variation and their consequences for parental cooperation. *Nature Comm.* 9: 1651.

Ancona, S., Denes, F. V., Krüger, O., Szekely, T. & Beissinger, S. R. (2017) Estimating adult sex ratios in nature. *Phil. Trans. R. Soc. Lond. B* 372: 20160313.

Eberhart-Phillips, L. J., Küpper, C., Miller, T. E. X., Cruz-Lopez, M., Maher, K., dos Remedios, N., Stofel, M. A., Hoffman, J. I., Krüger, O. & Szekely, T.

(2017) Sex-specific early survival drives adult sex ratio bias in snowy plovers and impacts mating system and population growth. *Proc. Natl. Acad. Sci. USA* 114: E5474-E5481.

The student will be based at the Department of Animal Behaviour at Bielefeld University (www.uni-bielefeld.de/biologie/animalbehaviour.html). The Department is the oldest of its kind in Germany and currently hosts 7 Principal Investigators, 7 Postdocs and 15 PhD students. It offers a stimulating international environment and an excellent research infrastructure with access to state-of-the-art methodologies. The working language of the Department is English. The student will also have the opportunity to spend some time at the University of Bath (www.bath.ac.uk/bio-sci/biodiversity-lab/index.htm) in the United Kingdom. The project and the supervision will provide the student with an integrative training and will prepare him/her very well for a scientific career in behavioural ecology.

The studentship (E13/65%) is funded by the German Science Foundation (DFG) and is available for 3 years. Additional funding is available for fieldwork and for attending conferences. Please send your CV, 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>

BoiseStateU PlantHerbivoreInteractions

Ph.D. Assistantship in Plant-Vertebrate Herbivore Interactions, Boise State University, Idaho, USA

GRADUATE ASSISTANTSHIP (Ph.D. in Ecology, Evolution, and Behavior) - at Boise State University. A position is available for a Ph.D. student to understand molecular, physiological, behavioral and demographic interactions between toxic plants and vertebrate herbivores. This multidisciplinary project will identify how the dietary quality of plants (availability, nutrients, chemical defenses) interacts with the gut microbiome and host physiology to influence the foraging behavior, physiological function, health and population dynamics of avian and mammalian herbivores in arid and arctic systems. The Ph.D. student will work as part of our collaborative team of universities who work closely with

wildlife agencies in the USA, Norway, and Iceland that includes, but is not limited to, the Bureau of Land Management, the US Geological Survey, US Forest Service, the Peregrine Fund, Norwegian Polar Institute, University of Oslo, and the Icelandic Institute of Natural History. The student will participate in: 1) field work that involves field observations of animal behavior and collection of biological samples across Idaho, Nevada, Alaska, Norway, and/or Iceland (15% of data collection) and 2) laboratory work that involves genetic, molecular, microbial, chemical, and/or physiological assays of collected samples and analyzing big data (genomic, metagenomic, proteomic, and metabolomic data, 85% of data collection) at Boise State University. Training for both field and laboratory activities will be provided by team members who offer expertise in genetics, ecology, physiology, bioinformatics, and chemistry.

Qualifications

Competitive students will have: 1) a Master's degree in Biology, Chemistry, or a related field; 2) evidence of strong writing (e.g., grant proposals, publications) and quantitative skills (e.g., bioinformatics, coding, modeling); 3) direct experience conducting genetic, chemical, or molecular assays; and 4) interest in understanding the molecular mechanisms influencing plant-herbivore interactions. Please address your qualification for each of these points in your cover letter. The position starts Fall (August) 2020 with potential support as a paid field and laboratory technician on the project starting as early as April 2020.

Stipend and tuition and fees

This position includes support in the form of a graduate assistantships (renewable, 12-month at \$25,000), tuition and fee waiver, and health insurance.

About the program and Boise

The Ecology, Evolution, and Behavior PhD is a new and modern graduate program at Boise State University. This program brings together faculty from across multiple academic departments including biological sciences, geosciences, anthropology, and the human-environment systems group to offer relevant courses and provide unique mentorship and training opportunities. This particular project will draw on molecular, chemical and bioinformatic resources and expertise available through the Biomolecular Research Center (<https://-brc.boisestate.edu/>) and affiliated NIH supported INBRE and COBRE programs and two NSF awards (with Forbey as PI and Co-PI) focused on understanding the genomics that explain phenotypes in plants and herbivores. Further, we have created a network of valuable connections in academia, local relationships with federal

and state agencies, nonprofits and NGOs, as well as partnerships with international organizations all dedicated to providing students with transformative research and educational experiences for diverse career opportunities. These centers and established networks help students gain diverse skills sets and collaborators to prepare them for broad career opportunities. To learn more about the EEB program, please visit: <http://boisestate.edu/eeb>. Students in this program enjoy living in the beautiful city of Boise, which strikes a perfect balance with close-by outdoor recreational activities as well as a vibrant downtown life. Nestled in the foothills of the Rocky Mountains and the capital of the State of Idaho, Boise is frequently featured as a top-ranked metropolis. The city has ample opportunities for world-class outdoor activities year round and a thriving arts and entertainment culture. In 2017, US News and World report ranked Boise the 12th best city to live in the United States. To learn more, please view 'Visit Boise' link at: <https://www.cityofboise.org/> To Apply

Please send via email in a single file attachment (include your last name in the file name): 1) a cover letter that states qualifications and career goals; 2) a CV with the names and contacts for 3 references (they do not need to provide a letter of recommendation at this time); 3) copies of transcripts (unofficial are okay); and 4) GRE

— / —

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>

BoiseStateU PlantMicrobes

The Bittleston Lab (<https://www.bittlestonlab.com/>) is recruiting motivated students for Fall 2020 to study ecological and evolutionary dynamics of plant and insect-associated microbial communities. Potential Ph.D. projects can be based in either the small ecosystems formed within pitchers of carnivorous pitcher plants, or the local sagebrush steppe ecosystem. The Ph.D. student will work as part of a collaborative team of researchers across different universities. The student will participate in fieldwork and lab work including culturing of bacteria or fungi and molecular assays as well as data analysis, writing, and presenting results.

Qualifications

Competitive students will have 1) a Master's degree in Biology, Ecology, Microbiology or a related field; 2) evidence of strong writing (e.g., grant proposals, publications) and quantitative skills (e.g., bioinformatics, coding, modeling); 3) experience with molecular assays and/or microbial culturing; and 4) an interest in understanding mechanisms of community assembly or the ecology and evolution of plant-microbial interactions. Please address these points in your introductory email and in your cover letter. The position starts Fall (August) 2020.

Stipend and Benefits

This position includes support in the form of a graduate assistantship (renewable, 12-month at \$25,000), tuition and fee waiver, and health insurance.

About the Program and Boise

The Ecology, Evolution, and Behavior Ph.D. is a new and modern graduate program at Boise State University. This program brings together faculty from across multiple academic departments including biological sciences, geosciences, anthropology, and the human-environment systems group to offer relevant courses and provide unique mentorship and training opportunities. Further, we have created a network of valuable connections in academia, local relationships with federal and state agencies, nonprofits and NGOs, as well as partnerships with international organizations all dedicated to providing students with transformative research and educational experiences for diverse career opportunities. Additional resources at Boise State include the Biomolecular Research Center (<https://brc.boisestate.edu/>) and a Research Computing cluster. Students in this program enjoy living in the beautiful city of Boise, which strikes a perfect balance with close-by outdoor recreational activities as well as a vibrant downtown life. To learn more about our EEB program, please visit: <https://www.boisestate.edu/eeb/>. Nestled in the foothills of the Rocky Mountains, Boise is the capital of the State of Idaho and is frequently featured as a top-ranked metropolis. The city has lots of opportunities for world-class outdoor activities year-round and a thriving arts and entertainment culture. US News and World report recently ranked Boise as the 17th best place to live in the United States.

To Apply

Applicants should email Leonora Bittleston (leonora-bittleston@boisestate.edu) before December 20th to indicate their interest in this position before officially applying. The email should include your CV, your GRE scores, and why you are interested in this research area in particular.

Applications and required application materials must be submitted to the University by January 15th, 2020. Applicants are required to submit a cover letter that states qualifications and career goals, a CV, the names and contact information for three references. Applicants will also submit official university transcripts and GRE test scores. More information about these requirements and the application process may be found at: <https://www.boisestate.edu/eeb/prospective-students/> Boise State University embraces and welcomes diversity in its faculty, student body, and staff. In addition, the Bittleston Lab is dedicated to increasing ethnic, gender, and socioeconomic diversity in STEM fields, because diverse perspectives lead to a stronger and more innovative society. Applicants from diverse backgrounds are encouraged to apply.

Specifically, students from underrepresented ethnic or racial groups who have participated in LSAMP (Louis Stokes Alliances for Minority Participation) programs in their undergraduate institutions are encouraged to co-apply for the Boise State Bridge to the Doctorate Fellowship. This fellowship includes an excellent funding package with a \$32,000 stipend annually for the first 2 years, a tuition and fee supplement, community building among fellows, individual faculty mentors provided to fellows, enriched academic and research opportunities, and participation in annual PNW LSAMP Alliance Conference and Graduate Showcase. More details can be found here:

— / —

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>

CIBIO-InBIO Portugal 2 HumanEvolGenetics

OPEN POSITIONS @ CIBIO-InBIO

2 PhD holder positions | Human Evolutionary Genetics
CIBIO-InBIO, Portugal

Application deadline: October 30, 2019

< <https://cibio.up.pt/open-positions-careers/details/iceta-2019-93> > Click here for more information and to know how to apply

EVENTS

TiBE 2019 | BIODIVERSITY, ECOLOGY AND EVOLUTION IN MEDITERRANEAN ECOSYSTEMS

December 04-06, 2019 | CIBIO-InBIO, Campus de Vairão

Abstract submission deadline: September 30, 2019

< <https://cibio.up.pt/tibe/details/tibe2019> > Click here for more information

CIBIO-InBIO's Office for Science Communication and Outreach
CIBIO - Research Center in Biodiversity and Genetic Resources
InBIO Associate Laboratory
University of Porto, Vairão Campus
Rua Padre Armando Quintas 4485-661 Vairão Portugal

t: +351 252 660 400

e: divulgacao@cibio.up.pt

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

f: <https://www.facebook.com/cibio.inbio>

CIBIO-InBIO Divulgação

DTU-Aqua Denmark PopulationGenomics

PhD scholarship in applied population genomics in European flat oyster (*Ostrea edulis*)

A PhD scholarship in population genomics is available at the National Institute of Aquatic Resources (DTU Aqua; www.aqua.dtu.dk), Denmark, with starting date November 2019. The scholarship is part of a larger Nordic collaborative project, MarGen_II, financed by the EU Interreg Åresund-Kattegat-Skagerrak Programme, the Danish Rod and Net License Funds and the National Institute of Aquatic Resources. The project will primarily be carried out in the population genetics group, Section for Marine Living Resources, situated in Silkeborg, Denmark. DTU Aqua is an institute at the Technical University of Denmark.

The population genetics group applies molecular methods with the aim to gain knowledge on how to preserve and manage biodiversity sustainably, in relation to recreational and commercial fisheries, biodiversity conservation and aquaculture. Knowledge is achieved through research into the evolutionary processes responsible for generating and maintaining genetic diversity within and among populations of marine and freshwater fish and shellfish

The project: Sustainable management, harvest and production of marine fish and shellfish resources require fundamental knowledge about the demography, distribution and connectivity of natural populations. The native European flat oyster (*Ostrea edulis*) is a sought-after food source commonly considered a luxury good. European flat oyster has received increased biodiversity conservation attention because native populations have declined due to overfishing and disease outbreaks. At the same time, the species is regarded as commercially valuable within its native range in northern Europe and has therefore attracted increased focus on development in aquaculture.

In this project, we focus on Scandinavian oyster populations that have so far received relatively limited attention. These populations are found within important environmental gradients and are close to the distributional margins of the species, which makes them interesting targets for analyses of population and, ultimately, aquaculture genomics. We have two overarching aims in the project:

(1) Increase our understanding of the distribution of natural genetic diversity. We will investigate when and how European flat oyster colonized Scandinavian coastal regions as well as the relationship and connectivity between populations.

Our approach here will be to use genome data (reduced representation or genome sequencing) from wild populations to model demographic history and investigate genetic structure, signatures of selection and connectivity among populations. We aim to link analyses to demographic and oceanographic data as well as habitat modelling.

(2) Develop genetics as a practical tool for European flat oyster aquaculture and restoration programmes, for example to monitor genetic diversity in aquaculture populations, identify brood-stocks and source populations for use in restoration programmes and breeding aimed at increasing disease resistance.

In (2) our approach will be to use a combination of population genomics data from (1) to identify source populations and new data for parentage analyses of aquaculture populations. Literature will be mined for disease resistance genes/genomic regions that can be assayed in wild/aquaculture populations.

Qualifications: Candidates should have a two-year master's degree (120 ECTS points) or a similar degree with an academic level equivalent to a two-year master's degree.

A background in population genetics is preferred and experience with bioinformatic analyses of large ge-

netic/genomic data sets is an asset.

In addition, we are looking for candidates who have - Master of Science (M.Sc.) degree in Biology, Computer Science or Engineering - Strong analytical skills/interest - Keen interest in research and the field of marine and aquatic sciences - Good collaborative skills - Proficiency in written and spoken English

Salary and appointment terms: The appointment will be based on the collective agreement with the Danish Confederation of Professional Associations; starting salary is around 3400 EUR per month + pension savings. The period of employment is 3 years.

Application: Apply online at <https://www.aqua.dtu.dk/english/about/vacancies/job?id=-d15641e3-e9d5-4225-9764-6a07df57a57b> no later than 01 October 2019. For further information, please contact Senior Researcher Jakob Hemmer-Hansen; jhh@aqua.dtu.dk.

Candidates may apply prior to obtaining their master's degree but cannot begin before having received it.

All interested candidates irrespective of age, gender, race, disability, religion or ethnic background are encouraged to apply.

Jakob Hemmer Hansen <jhh@aqua.dtu.dk>

EuropeMarineStations MarineEvolution

Are you interested in carrying out research on the evolution of marine organisms?

Europe's leading marine research stations are opening their doors to researchers and PhD students to carry out research at their facilities, work with leading experts, use state-of-the-art technologies, and gain new experiences.

This access is facilitated by the EU-funded ASSEMBLE Plus project, which provides on-site and remote access for researchers to Europe's leading marine biological stations. This is the 5th call for access within the project, with opportunities ranging from access to marine ecosystems, experimental facilities, technological services such as microscopy, molecular biology, and biochemistry, biological resources, and data. Access will be available from December 2019 until May 2020.

Get inspired by the experiences of other researchers that

have been hosted here <http://www.assembleplus.eu/-access/success-stories>. The application process is simple and straightforward, and successful applicants will be given access to marine biology research facilities and platforms. Visits can last for up to 30 days and can include up to two persons per project. In addition, ASSEMBLE Plus will provide funding for travel, accommodation and meals.

Online submission for the 5th call will close on 11th October 2019.

Click here to download and print the call flyer. For more information on the call, including eligibility and how to apply, please visit: assembleplus.eu/access/transnational-access.

For specific requests, contact assembleplus_ta@embrc.eu. For press queries, please contact the ASSEMBLE Plus Project Manager, Clément Brousse (clement.brousse@sorbonne-universite.fr)

Andrea Tarallo <andrea.tarallo@szn.it>

FUBerlin 2 BrainEvolution

We offer a fully funded PhD position. *Our group “Human Biology and primate Evolution” investigates the molecular evolution of humans using state-of-the art experimental and computational methods. Our focus is on differences in gene regulation, evolution of transcription factors and non-coding RNAs and their influence on the evolution of the brain, its development and functions. *

*The PhD student will participate in a project investigating molecular and environmental factors that determine brain size and cognitive abilities. As model system, this project will use rodents from Chernobyl, whose brain size depends on the level of radiation they are exposed to. RNA-Seq data from different areas of the brain from animals with high, medium and low doses of radiation will be analyzed. The goal is to determine expression differences and differences in co-expression networks that might be linked to brain size, shyness-boldness and exploratory behaviors, while controlling for bodily physiological costs and exercise capacity. The molecular data will be compared with behavioral and physiological data obtained from the same animals to decipher molecular signatures of behavioral performance. *

*Requirements for the position are a Master in Biology or Bioinformatics or another relevant field. The ideal candidate would have a strong interest in evolu-

tion, neuroscience, molecular biology and/or ecology and experience in the analysis of gene expression data. *

*If interested, please send a motivation letter including your CV and two reference letters to *katja.nowick@fu-berlin.de

*We offer a fully funded PhD position. Our group “Human Biology and primate Evolution” investigates the molecular evolution of humans using state-of-the art experimental and computational methods. Our focus is on differences in gene regulation, evolution of transcription factors and non-coding RNAs and their influence on the evolution of the brain, its development and functions. *

*The PhD student will participate in a project investigating molecular signatures of Alzheimer’s disease. In particular, the student will study expression patterns of single neurons derived from Alzheimer’s patients and controls. The goal is to determine mono-allelically expressed genes and to determine how their expression changes with Alzheimer’s progression. The project will include the analysis of genomic and transcriptomic data, as well as the analysis of co-expression networks and gene regulatory factors. *

*Requirements for the position are a Master in Bioinformatics or Biology or another relevant field. The ideal candidate would have a strong interest in neuroscience and evolution and experience in the analysis of Next Generation Sequencing data. *

*If interested, please send a motivation letter including your CV and two reference letters to *katja.nowick@fu-berlin.de

– Dr. Katja Nowick Professorin für Humanbiologie

Freie Universität Berlin Institut für Zoologie Königin-Luise-Straße 1-3 14195 Berlin

Phone: +49 30 83863761

Katja Nowick <katja.nowick@fu-berlin.de>

JagiellonianU
MammalLifeHistoryMicrobiome

PhD-position on the effects of the environment on pace of life and microbiome of bank voles

We are seeking a highly motivated student for a PhD-position based at the Jagiellonian University in Krakow (Poland) and the University of Jyväskylä (Finland). The student will join the project “The role of environmental factors in maintaining adaptive pace-of-life variation in a mammal holobiont: an experimental evolution approach.”

Our aim is to investigate how environmental conditions that animals experience at different times in life influence fitness. An animal and its microbiome (the community of commensal microbes inhabiting the gut) coevolve and should respond to the environment as a unit. The microbiome can, therefore, be very important in helping individual animals cope with the environment they develop and live in. To test this idea, we will study the effects of environmental manipulations on the life history and physiology of animals and associated changes in its gut microbiome. We will test hypotheses about the role of the microbiome in influencing the fitness of the animal host through lab and field experiments with established bank vole (*Myodes glareolus*) selection lines.

The student will have an opportunity to conduct experiments with captive voles in Krakow and participate in field experiments conducted in large field enclosures in central Finland. The project offers opportunities to learn state-of-the-art methods and a range of transferable skills, including physiological measurements, lab work such as DNA extractions, genomic analyses of the gut microbiome and the associated bioinformatics and statistical analyses. The student will collect and analyse data and prepare publications in close collaboration with an international team of researchers at the Jagiellonian University, Poland (Dr Anni Hämäläinen, Prof Pawel Koteja) and the University of Jyväskylä, Finland (Prof Phillip Watts, Dr Tapio Mappes, Dr Esa Koskela).

The successful candidate will have an MSc degree in a relevant field; evidence of good quantitative/computational skills; and strong English language, communication, organizational and collaboration skills. Previous experience with small mammals, microbial communities, bioinformatics, animal physiology and/or evolutionary

biology are considered advantageous.

The prospective student receives a stipend (4500 PLN/month, excellent standard relative to the low living costs in Krakow) from the National Science Centre grant for 3 years, and a supplement to attend conferences and travel for field work. Additional funding may be available e.g. through a graduate school.

For inquiries and to apply, please contact Dr. Anni Hämäläinen (anni.m.hamalainen@gmail.com).

How to apply

The applicant should send the following documents by email to the principal investigator, Dr. Anni Hämäläinen (anni.m.hamalainen[at]gmail.com):

- 1) A Curriculum Vitae (maximum 2 pages) including information on relevant academic achievements, publications, and awards, relevant experience and training. This document should also include the names, affiliations and email addresses of two people with first-hand knowledge of the applicant’s skills and past research experience.
- 2) A motivation letter in English, explaining how the applicant’s background and research interests make them a suitable candidate for the position.
- 3) A signed copy of a formal statement concerning the processing of personal data, available here:

https://www.dropbox.com/s/nq78kn27091uzo1/-Personal-data-info-and-statement_stipend-in-NCN-grant-2018-01924.docx?dl=0

- 4) A scan of MSc diploma, or a letter from supervisor confirming that the MSc thesis is completed and the defense or final exams are scheduled on or before 15 October 2019.

Based on these documents, shortlisted candidates who meet all formal criteria will be interviewed (typically via video conference). The evaluation of applications begins on September 30th, 2019 and continues until the position is filled.

The beneficiary of the National Science Centre stipend will be chosen by a selection committee based on regulations about scientific scholarships for young researchers in research projects financed by the National Science Centre. The criteria are as follows: scientific achievements, especially publications (50%), other achievements and honors related to scientific activity (awards, stipends, internships, workshops, etc.; 20%), competence in tasks required in the project realization (30%) (full description of the regulations is available here, in Polish:

— / —

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>

Lausanne BeeMicrobialEvolution

Work description: Our laboratory works on social bees to address current questions about the evolution, function, and ecology of specialized gut microbial communities. We are looking for an outstanding and highly motivated candidate to join our research group. The broad scope of the project will be to understand which ecological and evolutionary processes govern the composition of gut microbial communities at the strain/genomic level. The doctoral student will use a combination of computational and experimental approaches to (i) study the evolution of the gut microbiota across a wide range host and/or (ii) test different ecological processes that govern community assembly and resilience. The applicant will have the opportunity to work with samples from diverse bee species collected from all over the world. A wide range of bioinformatics and experimental skills will be acquired during the PhD thesis providing an excellent training to the prospective student. We are part of the Department of Fundamental Microbiology, a highly collaborative, multidisciplinary, and team-oriented scientific environment. Our group consists of a good mix of bioinformaticians and wet-lab biologists from all over the world, funded through the University of Lausanne, the Swiss National Science Foundation and the European Union (ERC-STG, Marie Skłodowska-Curie Actions). We are equipped with state-of-the art infrastructures enabling cutting-edge research with access to many core facilities located on campus (microscopy, proteomics, sequencing facilities). Our group has strong ties to other Departments within the University, such as the Department of Ecology and Evolution, and we also actively collaborate with other research teams within and outside of Switzerland. Last but not least, our Department is situated on a beautiful campus at the shore of Lake Geneva with a great view of the Alps and with plenty of opportunities for outdoor activities.

For recent publications from the lab, please visit the lab webpage at <http://wp.unil.ch/engellab>. Qualification: MSc. PhD position applicants should have a Master thesis in microbial genomics/ecology, bioinformatics, or microbiology. Prior research experience in large-scale sequence data analysis, evolutionary genomics, or microbiology wet-lab experimentation would be desirable. A

good command of the English language, a high personal motivation to excel in science and a curious mind for addressing standing questions in microbiology, gut microbiota research, and bacterial genomics are required. We offer a stimulating environment in a young international research group combining computational (i.e. microbial genomics) and experimental approaches to study microbial communities and symbiosis. The focus of the project can be adapted to the interests of the applicant. How to apply: Please submit your full application including motivation letter, CV, list of publications, copy of the PhD thesis (if available) and the names and addresses of two referees via the official UNIL career portal. Only applications through the official website will be taken into account. Link to the application form can be found here: <https://wp.unil.ch/engellab/open-positions/> For questions concerning the application, position, or research topic, or in case of problems with accessing the UNIL career portal using the above link, please do not hesitate to contact us: Philipp.Engel@unil.ch.

The application should be written in English.

Application deadline: 30.11.2019 (Note: We will start to evaluate applications mid of October.)

Philipp Engel Associate Professor Department of Fundamental Microbiology University of Lausanne Biophore Building CH-1015 Lausanne Switzerland

Phone: +41 (0)21 692 56 32 Mobile: +41 (0)78 879 96 36 <mailto:philipp.engel@unil.ch> Web page: <http://www.unil.ch/engellab> Philipp Engel <philipp.engel@unil.ch>

MaxPlanckInst Marburg ProteinEvolution

PhD positions in the Hochberg group in Evolutionary Biochemistry

The Hochberg lab is a new free floater group at the Max Planck Institute for Terrestrial Microbiology in Marburg and affiliated with the Chemistry Department of Marburg University. The group studies the evolution of protein complexes at the interface between physical biochemistry and evolutionary biology.

We are looking for highly self-motivated PhD students who are willing to tackle an interdisciplinary research program and join our group on fully funded positions to start as early as November 2019. For a description of the research we do please read below and visit our website:

<https://www.mpi-marburg.mpg.de/hochberg> The majority of proteins associate into higher-order complexes. They range from the simple - containing only a few genetically identical subunits - to the baroquely elaborate - containing dozens of genetically different subunits in precise arrangements. How and why complexes evolve and change in evolutionary history is largely unknown, but directly relates to major questions in evolutionary biology: Does biological complexity arise through many incremental steps, or through rare but drastic jumps? And is it always driven by natural selection for some beneficial function, or does blind chance play a role in creating and maintaining this complexity? Our group uses ancestral sequence reconstruction to resurrect ancient complexes that last existed hundreds of millions of years ago. By experimentally characterizing these ancient proteins using state-of-the-art mass spectrometry and high-throughput techniques, we will unravel the interplay of history, chance, and natural selection in producing the complexity that exists today.

Experience in biochemistry is not necessary, though basic skills are an advantage and a sincere interest and desire to learn are indispensable. Experience in phylogenetics is welcome. Possible projects include characterizing the complete set of interactions among all extant and ancestral members of a protein family to understand how and why interactions change over time; experimentally quantifying the rate at which random chance events produced stable protein complexes in evolutionary history; and investigating to what degree increases in the complexity of protein assemblies are reversible in evolutionary history.

This is a rare chance for young scientists to participate in shaping the research program of an emerging group. You will join a thriving scientific community at one of Germany's famous Max Planck Institutes. Marburg itself is a vibrant and beautiful medieval university town about an hour north of Frankfurt with all the necessities of student life.

Compensation will be competitive 50% of Entgeltgruppe 13, tier 1 of the TVöD Bund (<https://oeffentlicherdienst.info/c/t/rechner/tvoed/bund?id=tvoed-bund-2020&matrix=1>), and tier 2 from the second year on, plus a 15% bonus throughout the PhD (meaning a total of 65% of Entgeltgruppe 13). Interested candidates should send a brief introduction to themselves as well as a CV to georg.hochberg@mpi-marburg.mpg.de by October 15th 2019.

georg.hochberg@mpi-marburg.mpg.de

MPIO Seewiesen EvolutionCognition

PARROT COGNITION (TENERIFE)

MASTER PROJECTS / VOLUNTEER RESEARCH ASSISTANTS

Comparative Cognition Research Group, Max-Planck Institute for Ornithology, Tenerife, Spain

The Max-Planck Comparative Cognition Research Group (CCRG) <https://www.orn.mpg.de/Comparative-Cognition-Research-Group-von-Bayern> invites applications of Masters students and volunteer research assistants. The CCRG forms part of the collaboration between the Max-Planck Institute for Ornithology, Seewiesen, Germany, and the Loro Parque Fundación (LPF), Tenerife, Spain. We are currently running various comparative research projects on social and physical cognition in parrots. Interested candidates are encouraged to contact us to enquire about the ongoing projects. Successful applicants can expect to gain a solid insight in the field of Animal Cognition/Experimental Psychology and gain experience in working with psittacids in a dynamic, international research environment. The research is carried out on captive parrots of the LPF, which holds the largest parrot collection and gene reserve in the world (ca. 350 subspecies) for conservation and research purposes.

Logistics:

Voluntary research assistant position /Master Project starts in early October 2019. The position requires a minimum of 4 months, but ideally 6 months, continuous commitment at the research station in Tenerife, Spain. Free accommodation in a shared student apartment can be provided. Successful applicants will be responsible for their own transportation expenses to and from the research station (Puerto de la Cruz, Tenerife, Spain).

Important skills/qualifications:

Successful candidates will have:

- Completed a degree in Biology, Psychology or any related field
- A strong interest in comparative cognition
- High motivation and commitment to the project
- Reliability, efficiency and an ability to work both independently
- Confidence to interact with animals
- Previous research experience
- Good verbal and written English skills
- Initiative to develop the project
- Good team-

work attitude and social skills (shared accommodation between 3 students)

To apply:

For further info on how to apply please email to Dr. Pizza Chow (pizza.chow@orn.mpg.de) and Dr. Anastasia Krashennikova (akrashe@orn.mpg.de). Contact details of 2 referees may be requested. Closing date for the application is 15.09.2019.

“anastacia.k@web.de” <anastacia.k@web.de>

NorthernIllinoisU EvolutionaryBiol

The Ecology, Evolution, Behavior, and Conservation faculty in the Department of Biological Sciences at Northern Illinois University are seeking applicants to the M.S. and Ph.D. graduate programs starting fall 2020.

Research interests among the faculty are diverse and include community ecology, restoration ecology, conservation genetics, vertebrate and invertebrate evolution, plant phylogenetics, behavioral ecology, microbial ecology, and bioinformatics.

EEBC faculty that are taking graduate students for fall 2020 are:

-Neil W. Blackstone, ecophysiology of corals and their relatives, evolutionary conflict and conflict mediation: <https://niu.edu/biology/about/faculty/-blackstone/index.shtml> -Melvin Duvall (only accepting MSc students), plant evolution, grass phylogenetics and phylogenomics, botany: <https://mel-duvall.wixsite.com/labsite> -Holly P. Jones, restoration ecology and conservation biology: <https://hjones82.wixsite.com/website> -Bethia H. King, entomology (basic biology, especially behavior, and applied), behavioral ecology <http://niu.edu/biology/about/faculty/-bking/index.shtml> -Jennifer A.H. Koop, ecology and evolution of host-parasite interactions; invasion biology <https://jenniferkoop.weebly.com/people.html> -Karen E. Samonds, paleontology, skeletal biology and paleobiogeography: <http://www.sadabe.org/Samonds/Index.html> -Wesley D. Swingley, environmental microbiology, extreme ecosystems, and astrobiology: <https://wswingley.wixsite.com/labsite> Details of the graduate program and application process are available at <http://niu.edu/biology/academics/graduate-studies/-index.shtml>. The department offers teaching assistantships including stipend and tuition waiver, on a competitive basis. The deadline for application materi-

als is January 1, 2020. However, prospective students should contact potential faculty advisors well in advance of applying to discuss research interests and relevant qualifications.

Northern Illinois University is a 17,000-student research university situated an hour from downtown Chicago in DeKalb, Illinois, a diverse community of 50,000 with a low cost of living. Regional research resources include The Field Museum, Burpee Museum of Natural History, Nachusa Grasslands, Morton Arboretum, Fermilab, Argonne National Laboratory, the NIU Lorado Taft campus, and numerous local county forest preserves and state parks.

OhioU PlantEvolution

GradStudentPositions:OhioUniv.PlantEvolution

M.S. and Ph.D. positions starting Fall 2020, Plant Evolution

The Schenk lab at Ohio University invites applicants for a Master's and Ph.D. Degree in plant evolution, starting Fall semester, 2020. 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 or teaching assistantships. For full consideration, the application deadline is January 15th.

Interested students should contact Dr. John Schenk (schenk@ohio.edu) prior to submitting an application (the earlier the better).

For more information, visit the Schenk lab website (<https://schenklab.weebly.com/>) and the Department of Environmental and Plant Biology's website (<https://www.ohio.edu/cas/plant-biology>). More information about the graduate program can be found at the departmental web page (<https://www.ohio.edu/cas/plant-biology/graduate/admissions>).

John J. Schenk, Ph.D. Assistant Professor Department of Environmental and Plant Biology 401 Porter Hall Athens, Ohio 45701-2979 Office phone:

(740) 593-0716 E-mail: schenk@ohio.edu Lab website: <https://schenklab.weebly.com> “Schenk, John” <schenk@ohio.edu>

PortlandStateU PlantEvolutionaryBiology

The Cruzan Lab at Portland State University is recruiting graduate students (MS or PhD) to study aspects of plant evolution with emphasis on the effects of biological features of plants on evolutionary processes. Students interested in applying genomic approaches to the study of somatic mutation accumulation, clonal evolution during vegetative growth, or the effects of mutation filtering during gametophytic selection and selective ovule abortion on standing genetic variation in populations are encouraged to apply. Interested students should send a copy of their CV, a letter explaining the types of research questions that interest them, and information on their academic record to cruzan@pdx.edu.

More information on our research and activities can be found at our lab web site: <https://cruzanlab.weebly.com/>

Mitch Cruzan Professor of Biology Portland State University PO Box 751 Portland, OR 97207 USA Web:<https://cruzanlab.weebly.com/> Evolutionary Biology - A Plant Perspective Mitchell B. Cruzan Available through all good bookshops, or direct from Oxford University Press

Mitchell Cruzan <cruzan@pdx.edu>

PurdueU EvolutionaryEcology

Two PhD positions are available in the Christie Lab at Purdue University. The positions are available for candidates interested in rapid evolution, the intersection between ecology and evolution, population genetics, and conservation in general. For more information about our research please visit: <http://christielab.bio.purdue.edu>

Potential projects include: (1) Examining the rapid genetic adaptation of introduced species, (2) Identifying the genetic and evolutionary consequences of domestication, captive breeding, and supplementation of wild pop-

ulations, and (3) Using existing and novel approaches to determine patterns of dispersal, gene flow, and local adaptation within a metapopulation context. These are the main research themes in our lab, and research often focuses on fishes, but graduate students are encouraged to explore independent lines of inquiry in any system. Previous research experience with molecular techniques, computational work, statistics, bioinformatics, and assisting with the design and implementation of experiments will be highly regarded.

If you are interested in joining the lab, please contact me directly at markchristie1500@gmail.com or christ99@purdue.edu with a CV and a brief description of your research interests and experience. Formal applications are due in December and on-campus interviews typically occur at the end of January.

Mark Christie Assistant Professor Purdue University <http://christielab.bio.purdue.edu/> markchristie1500@gmail.com

PurdueU PlantEvolution

Graduate positions in plant ecological and evolutionary genetics/genomics at Purdue University.

The Oakley lab at Purdue University (<https://btny.purdue.edu/labs/oakley/>) is looking to recruit 1-2 graduate (PhD or MS) students for Fall 2020.

Our lab is broadly interested in questions related to plant ecological genetic. Based on current research strengths in the lab there are two potential topics for PhD projects. 1) The genetic basis of local adaptation and adaptive traits, and 2) Using heterosis and inbreeding depression as tools to investigate the balance between mutation, drift, and selection in natural populations. Both projects could include some combination of field and growth chamber/greenhouse experiments with wet lab and -omic approaches in our well-developed system of natural populations of *Arabidopsis thaliana*. I am also open to discussing projects using these and other approaches in other well-established systems. Graduate courses offered by members of the Purdue Center for Plant Biology (<https://ag.purdue.edu/cpb/faculty/>) will help to provide training in developing the interdisciplinary skillset needed to address these big questions in evolutionary biology.

I am also interested in recruiting a highly motivated MS student interested in plant mating system evolution, par-

ticularly the ecological and genetic factors maintaining outcrossing in highly selfing species.

PhD and MS students can apply to the Department of Botany and Plant Pathology (<https://ag.purdue.edu/btny/Pages/default.aspx>). PhD students also have the option of applying to the Interdisciplinary Program in Plant Biology (<https://www.purdue.edu/gradschool/pulse/groups/plant-biology.html>). Please contact me prior to applying to discuss which option might be best for you. These positions will be funded (including stipend, health insurance, and tuition waiver) by some combination of research and teaching assistantships. Some internal fellowships are available for applications submitted before Nov. 15.

To inquire about graduate research in my lab please contact me by email (oakleyc@purdue.edu). Please include a copy of your CV and a brief description of your research interests and experience, and how these interests/experience fits with current research in the lab. Please contact me by Nov. 1, 2019.

Chris Oakley Assistant Professor Department of Botany and Plant Pathology and the Purdue Center for Plant Biology Purdue University <https://btny.purdue.edu/labs/oakley/> oakleyc@purdue.edu

“Oakley, Christopher G” <oakleyc@purdue.edu>

UAlaska SalmonLifeHistory

Applicants sought for Master of Science (MS) in Fisheries position at the University of Alaska Fairbanks (UAF; campus located in Juneau, Alaska, USA).

Project: Salmon life history evolution and hatchery mating policy in Alaska: is non-selective mating unnatural?

Currently there is minimal understanding of how well salmon hatchery production protocols mimic natural mating strategies or maintain genetic variation and fish size. The successful applicant will conduct MS thesis research using a demographic and genetic dataset of unparalleled richness (Auke Creek coho salmon) to: 1) quantify the relative fitness (survival and reproductive success) of ‘jacks’ (precocial males) and full-size males in a wild coho population; 2) determine whether jacks are more likely to sire jacks and larger female offspring than are full-size males; and 3) assess the contribution of jacks to the maintenance of genetic diversity in wild and hatchery populations. Fieldwork and computer analyses required. Population genetics background preferred.

Final confirmation of funding anticipated shortly.

Project team: Megan McPhee (UAF) *mvmcphee@alaska.edu*, David Tallmon (University of Alaska Southeast & UAF) *datallmon@alaska.edu*, Scott Vulstek (NOAA Auke Bay Laboratories) *scott.vulstek@noaa.gov

Start date: 01/10/20

Salary: ~\$30K/yr + tuition + health insur; 2 yrs pending final confirmation of funding.

Information about UAF MS application: <https://www.uaf.edu/cfos/academics/apply/> “datallmon@alaska.edu” <datallmon@alaska.edu>

UConnecticut PlantArthropodInteractions

The laboratory of Interactions and Global Change 'V University of Connecticut is accepting applications from prospective PhD students interested in the study of ecological and evolutionary processes in plant-arthropod interactions and climate change. Successful candidates will join our team researching processes involve in the adaptation of organisms to novel environments from genetic, physiological and demographic perspectives.

How to apply e-mail the PI 'V Carlos Garcia-Robledo (carlos.garcia-robledo@uconn.edu), a one-page letter of intent describing your research interests and a brief description of the type of research that you would like to pursue in grad. school. Please also include your CV and unofficial transcripts, and if already available, GRE (all students) 'V TOEFL (only international students) scores.

More information about the lab: <http://carlogarciarobledo.org/UCONN/> Carlos Garcia-Robledo

Carlos Garcia-Robledo Assistant Professor Department of Ecology and Evolutionary Biology University of Connecticut 75 N. Eagleville Road, Unit 3043 Storrs, CT 06269-3043 USA Pharmacy/Biology PBB 400A (office) Pharmacy/Biology PBB 217 (lab) 860-486-4027 (office phone) 860-486-0805 (lab phone) 860-486-6364 (fax) Lab website: <http://carlogarciarobledo.org/> carlos.garcia-robledo@uconn.edu

UFlorida EvolutionaryEcol

I am looking to recruit multiple graduate students for Fall 2020 to work on topics related to evolutionary ecology and behavior.

Research in my lab primarily focuses on sexual selection, examining the evolutionary interplay of behavior and morphology. The leaf-footed bugs, Family Coreidae, are excellent experimental subjects for our investigations. These insects wrestle with their hind legs over territories and have an amazing diversity of hind leg shapes. Ongoing projects in the lab include studies of trade-offs between weapons and testes; the effect of nutrition and social environments on weapon structure, testes size, and male fighting behavior; and the role of phenotypic plasticity in the processes of invasion. We are currently reconstructing a phylogeny of the Coreidae to next test hypotheses of weapon shape evolution.

Successful applicant for this position will have previous research experience and coursework in the fields of ecology, evolution, and/or animal behavior. Most students conduct at least one experimental lab-based project, followed by additional local and/or international research. Prospective students are encouraged to email Dr. Christine W. Miller at cwmiller@ufl.edu by October 1st, though I will also attempt to consider later inquiries. Before you email, please first consult my laboratory's website, www.millerlab.net to learn about some of the research priorities for the coming years.

Your email should include 1) a statement of the kinds of research questions that you would like to pursue, 2) an explanation of how these fit in with current lab research, 3) a brief overview of your previous academic and research experiences, 4) a CV or resume, 5) GRE scores (if you have them), 6) an unofficial transcript, and 7) whether you are seeking a M.S. or Ph.D. at this time. Accepted students will be provided a tuition waiver and a competitive stipend.

Diversity and inclusion are more than just words for us. These are central in guiding how we come together as a research team, cultivate excellence, and go forth into the world to share our discoveries and our love of our work. If this all sounds good to you, then please inquire about joining the lab!

Information about Gainesville, Florida:

Situated in the rolling countryside of north central

Florida, Gainesville, is close to world-class fishing, snorkeling, canoeing, tubing and kayaking. On land, those so inclined may enjoy birding, hiking, biking, and fishing. Home of the University of Florida, seat of Alachua County's government and the region's commercial hub, Gainesville is progressive, environmentally conscious and culturally diverse. The presence of many students and faculty from abroad among its 99,000-plus population adds a strong cross-cultural flavor to its historic small-town Southern roots. Its natural environment, temperate climate and civic amenities make Gainesville a beautiful, pleasant, and interesting place in which to learn and to live.

Christine W. Miller Associate Professor | University of Florida, USA email: cwmiller@ufl.edu phone: (352) 273-3917 web: www.MillerLab.net facebook: @bugweapons

Find me on twitter: @cwmillerlab

"Miller, Christine W." <cwmiller@ufl.edu>

UFlorida EvolutionaryGenetics

Graduate Position: University of Florida.Evolutionary Genetics

The Baer lab (<https://people.clas.ufl.edu/cbaer/>) in the Department of Biology at the University of Florida is recruiting a Ph.D student for admission in the Fall 2020. Broadly speaking, we study the causes and consequences of genetic variation at the phenotypic and genomic level, with a specific focus on the interplay between mutation and natural selection. We use nematodes in the genus *Caenorhabditis* as our study system. The lab is currently funded by the NIH and NSF.

The University of Florida is located in Gainesville, a family-friendly city of ~200K in North Central Florida, USA. Gainesville has a robust night life (or so I hear), and year-round outdoor recreational opportunities abound, provided they don't require topography or snow.

Please direct inquiries to Charlie Baer (cbaer@ufl.edu; 1-352-392-3550). Information about the Department of Biology can be found at: <https://biology.ufl.edu/>. Charles F. Baer Department of Biology / University of Florida Genetics Institute 621 Bartram Hall 876 Newell Dr. University of Florida Gainesville, FL 32611-8525 USA

Office 352-392-3550 Lab 352-273-0143 Fax: 352-392-3704

Email: cbaer@ufl.edu web: <http://people.clas.ufl.edu/~cbaer/about/> “Baer,Charles” <cbaer@ufl.edu>

UGöttingen ForestGenetics

The Department of Forest Genetics and Forest Tree Breeding at the Georg-August-University of Göttingen is offering a position starting as soon as possible for a

Research Scientist (doctoral student) - Salary is E13 TV-L (65%)

The position is limited to 36 months. The successful candidate will work in the German Science foundation (DFG) funded project: “Detecting genomic signatures of ecological speciation and parallel evolution in oaks”

Your tasks - Analysis of genomic signatures of speciation in European and North American oaks using whole genome resequencing - Sampling of interspecific species pairs in Europe and North America - Analysis of Single Nucleotide Polymorphisms in selected populations - Publication of results in peer-reviewed journals - Assistance with the organization and coordination of the project

Your profile - Master degree in biology, agricultural sciences, forest sciences or related disciplines - High motivation and enthusiasm - Sound knowledge and understanding of molecular and genetic methods - Experience and profound knowledge in statistics and data analysis - Excellent English language skills - Very good written and oral communication skills - Ability to work in a team

Please send your application with the usual documents (in electronic form preferably in a single PDF-file) by e-mail within 3 weeks after appear to: Georg-August-Universität Göttingen, Abt. für Forstgenetik und Forstpflanzenzüchtung, Büsgenweg 2, 37077 Göttingen, forstgen@gwdg.de.

If you have any questions, please contact: Prof. Dr. Oliver Gailing, Phone: 0551 39 33536, E-Mail: ogailin@gwdg.de

“Gailing, Oliver” <ogailin@gwdg.de>

UHongKong 3 EvolutionBodyStructure

Our lab has vacancy for three Ph.D. students in the Interdisciplinary PhD Programme in Veterinary Medicine at The Jockey Club College of Veterinary Medicine and Life Sciences, City University of Hong Kong. My group is mainly interested in the embryology, evolution, development, and paleontology of vertebrate body structure. Our group is equipped with two cutting-edge microCTs (Shimadzu inspeXio SMX-90CT Plus and Bruker Skyscan 1272) and advanced histological instruments (Thermo Fisher CryoStar NX70, Rotary Microtome HM340E), and two fluorescent microscopes (Nikon Ni-E and Nikon SMZ18).

Ongoing projects include (but not limited to),

1. Evolution and development of echolocation-related traits in bats
2. Evolution of reproduction-related traits in bats
3. EvoDevo and palaeontology of skull bauplan in diapsids, synapsids, and anapsids
4. Skull cartilage (chondrocranium) evolution in mammals
5. Taxonomic and biodiversity studies of Hong Kong local mammals

For previous publications, please see <https://scholar.google.com/citations?user=Y4PkKWQAAAAJ&hl=ja> Perceptive students do not need a veterinary degree. Masters' degree is preferable but not required. The successful candidate should have a strong background in evolutionary biology and/or developmental biology and will initiate research in the above noted areas. Students will receive fully-funded salary of 16,500 HKD (c.a. 2,100 USD) per month, up to four years. Starting time of Ph.D. is flexible and negotiable.

Requirements (you will need the scores before the end of 2019 for one of the following): - a minimum total score of 550 (paper-based test); or 79 (internet-based); or 59 (revised paper-delivered test; sum of Reading, Listening and Writing section scores) in TOEFL - a minimum overall band score of 6.5 in IELTS - other test scores that may be regarded as equivalent to TOEFL 550 (paper-based) or 79 (Internet-based) or 59 (revised paper-delivered test) - a minimum score of 490 in the Chinese mainland's College English Test Band 6

City University of Hong Kong is a young institute just celebrating its 25th anniversary, but is ranked 52th in the world and 12th in Asia by the QS World University

Ranking 2020, with 80% of postgraduate students being non-local international students. The official language of the University is English, and all university activities are done in English.

If interested, to dkoyabuATcityu.edu.hk please send

1) CV 2) A brief account of the your research interests and motivation for applying for the position 3) The names and contact information for two reference persons

Applications will be considered until the position are filled.

“Dr. KOYABU Daisuke” <dkoyabu@cityu.edu.hk>

UHongKong EvolutionaryEcology

The Integrative Biology and Evolutionary Ecology Research group (iBEER Lab) at the University of Hong Kong is seeking applications for highly motivated Master & PhD students interested in studying eco-evolutionary dynamics in changing environments. The research will involve fieldwork in tropical and sub-tropical regions in Asia as well as manipulative laboratory experiments in Hong Kong. The research projects aim to gain a better understanding of phenotypic and molecular mechanisms of adaptive evolution in extreme environments and along geographic/climatic clines. Our research group follows the Krogh’s Principle (i.e., for every biological problem, there is an organism ideally suited as an experimental model). Based on this concept, we have worked in different ecological systems (e.g., Antarctic waters, tropical coasts, upwelling regions, deserts), using different organisms, from unicellular fungi and phytoplankton, to bigger eukaryotes such as molluscs, crustaceans, elasmobranchs, seaweeds amphibians and marsupials. In our work, we address transversal questions in evolutionary biology using the interaction of different approaches from comparative physiology to quantitative genetics, genomics and transcriptomics. More info:—<https://www.ibeerlab.com>— or—<https://sites.google.com/site/jdgecv/> Potential areas of research are: - Genetic basis of phenotypic plasticity & physiological adaptations in marine organisms. - Functional Phylogeography: understanding local adaptation & geographic gradients of selection - The adaptive role of host-microbiome interactions in changing oceans - Seaweed and seagrasses functional genomics and evolution.

Qualifications and requirement: - BSc degree in biology

or related fields (or will have completed a BSc before the position start); - High motivation & strong interest for evolutionary biology; - Proficiency in English;— - Evidence of strong academic record (GPA >3.5 and ideally publications)— - Background in eco-physiology , population genetics, functional genomics, quantitative genetics, molecular ecology, bioinformatics, evolutionary biology, or related disciplines is desirable; - Strong and collaborative communication skills - Willingness to learn new skills and theoretical frameworks in evolutionary biology.

Study Environment: The University of Hong Kong is an English-speaking institute and one of the most international universities in Asia. HKU was ranked 36th according to the Times Higher Education World University Rankings 2019.—<https://www.gradsch.hku.hk/gradsch/prospective-students/why-choose-hku> A Postgraduate Scholarship will be available to graduates with good quality degrees (1st class honours or equivalent, GPA >3.5), in addition to annual leave and medical benefits. Applicants who have a Bachelor’s degree with honours will be considered for admission to a 4-year PhD programme, whereas those who have already hold a research master’s degree (e.g., MPhil) will only be considered for admission to a 3-year PhD programme. Information about the programme, including requirements for admission can be found here:—<https://www.gradsch.hku.hk/gradsch/prospective-students/how-to-apply> Application deadline for 2020: 1st of December 2019. Applicants are encouraged to contact me at least 2 months prior to the deadline.

Start Date: any time in 2020 or early-2021.

How to apply: Please send (1) a CV, (2) motivation letter describing research interests, skills and career goals, and (3) contact details for 2-3 references to Juan Diego Gaitan-Espitia ([juadiegaitan @gmail.com](mailto:juadiegaitan@gmail.com)). Review of applications will begin immediately and continue until the position is filled.

Juan Diego Gaitan-Espitia Assistant Professor Integrative Biology & Evolutionary Ecology Research (iBEER) School of Biological Sciences University of Hong Kong ebsite:—<https://www.ibeerlab.com>=C2=A0<https://oak.scifac.hku.hk/research/research-hku-science> juadiegaitan@yahoo.com

UHouston MolecularGenomeEvolution

Two PhD positions are available in Dan Graur's Lab at the University of Houston.

The positions are available for candidates with computational skills interested in researching topics in molecular and genome evolution by using computational methods.

Potential projects include methodological topics related to the detection of species introgression and positive selection.

Previous experience with computational work, statistics, and bioinformatics will be highly regarded. Independent research is highly valued in Graur's lab.

If you are interested in joining the lab, please contact me directly at dgraur@uh.edu with a CV and a brief description of your research interests and experience.

Dan Graur

Moores Professor of Biology and Biochemistry

University of Houston

Dan Graur <dgraur@gmail.com>

UIceland GenomicsAdaptiveDifferentiation

PhD position in biology, Institute of Life and Environmental Sciences, University of Iceland A full PhD position in biology is open for applications, at the Institute of Life and Environmental Sciences for the project: The genomic basis of adaptive differentiation between closely related morphs of Arctic charr

To what extent do loci with moderate to large effects on phenotype contribute to adaptive differentiation between ecotypes of Arctic charr specialising on foraging for different prey types in different environments within Thingvallavatn? Are loci related to adaptive differentiation fixed, or do they cause variation both between and within morphs? Are there evidence of positive selection in the genome? Do genomic regions with signatures of selection also associate with phenotype? These and

related questions will be addressed by a team of researchers, and a capable Ph.D. student responding to this advertisement. The Arctic charr (*Salvelinus alpinus*) of Lake Thingvallavatn are ideally suited for studies of the ecology and genetics of adaptive diversification: i) it is an extraordinarily well-characterised system, ii) it has young evolutionary history, iii) it has diverged into four morphs with distinct variation in life history characteristics, behaviour and trophic morphology, suggesting rapid adaptive diversification. This system thus represents an extremely compelling case of rapid adaptive differentiation. However, to date, the system has been under-used to answer fundamental questions about the genetic basis of this diversification, due in large part to a lag in the development of genomic resources, and the long generation time. These issues have recently been overcome, and it is now possible to get at some long-outstanding questions. The overall aim of this project is to answer fundamental questions about the genetic basis of this extraordinary case of rapid adaptive differentiation, by determining the number, genomic distribution, range of effect sizes on traits and evidence of selection of loci contributing to adaptive diversification. We will answer these questions by deploying a series of studies, using both classical genetic study designs (QTL mapping) of carefully constructed laboratory crosses, and modern population genomic analyses of field-collected specimens.

We are seeking a student with dedication, drive and good theoretical background in evolution, ecology, population genomics and quantitative genetics. The position will be at the University of Iceland. The project is in collaboration with Michael B. Morrissey at the university of St Andrews, Scotland and Moira M Ferguson at the university of Guelph (Canada). The work will be divided between the universities of Iceland, St. Andrews and Guelph. The PhD study should be completed within four years of full time study. The PhD-student may be involved in teaching, for two semesters maximum.

Applications should be submitted here: <https://www.stjornarradid.is/efst-a-baugi/laus-storf-a-starfatorgi/laust-starf/2019/09/18/Doktorsnemi-vid-Lif-og-Umhverfisvisindastofnun/> accompanied by i) a letter of intent (maximum two pages) explaining interest in working on this project, the reason to pursue a PhD, hopes to gain and learn during the PhD studies and what makes them suitable for this project ii) CV, iii) transcripts of university diplomas, courses taken at bachelor and masters level, iv) degree project thesis and vi) names and contact information of two persons that could provide letters of references. Applications should be sent before October 31st 2019

The student will join the Arctic charr group at the In-

stitute of Life and Environmental Sciences. The Arctic charr group consists of several PhD students and senior personnel, and has collaborators in Iceland, Scotland and Canada. The combined expertise covers population ecology and genetics, molecular and developmental biology and bioinformatics. At the institute we have well equipped molecular biology labs, and instruments and computer pipelines for high throughput sequencing, are accessible there or at collaborating centers.

The University of Iceland strives to work against workplace discrimination and to offer equal opportunities to everyone.

For further information contact: Kalina H. Kapralova (kalina@hi.is). Further information on Arctic charr group at the University of Iceland: <http://luvs.hi.is/en/-arctic-charr-development-and-genomics> Kalina Hristova Kapralova <kalina@hi.is>

UKansas DrosophilaGenetics

KU Drosophila Biology Graduate Student Recruitment for Fall 2020

Drosophila research labs in the departments of Molecular Biosciences (MB) and Ecology and Evolutionary Biology (EEB) at the University of Kansas seek talented applicants for graduate admission to begin study in the Fall of 2020. Our strengths include evolutionary and quantitative genetics, behavior and development with labs working on specific projects including genetic conflict, mating behavior, the genetics of complex traits, the evolution of immunity and limb development.

Faculty members:

* Justin Blumenstiel (genetic conflict, EEB, can take students through MB) < <https://eeb.ku.edu/justin-blumenstiel> > * Jennifer Gleason (evolution and genetics of courtship behavior, EEB, can take students through MB) < <https://eeb.ku.edu/jennifer-gleason> > * Stuart Macdonald (genetics of complex traits, MB) < <https://molecularbiosciences.ku.edu/stuart-j-macdonald> > * Rob Unckless (evolution of immunity and genetic conflict, MB, can take students through EEB) < <https://molecularbiosciences.ku.edu/robert-unckless-0> > * Jamie Walters (sex chromosome evolution and reproductive proteomics in lepidoptera, EEB) < <https://eeb.ku.edu/james-r-walters> > * Rob Ward (tissue growth and morphogenesis, MB) < <https://molecularbiosciences.ku.edu/robert-ward> >

Applicants to the EEB program (<https://eeb.ku.edu/-prospective-students>) are admitted directly to work with a specific advisor while applicants to the MB program (<https://molecularbiosciences.ku.edu/-graduate-program-faqs>) complete a rotation cycle before choosing a laboratory. Interested candidates should peruse the MB faculty website (<https://molecularbiosciences.ku.edu/faculty>) and the EEB faculty website (<https://eeb.ku.edu/faculty>) and contact the department or specific faculty members for more information.

Application materials can be found at:

Molecular Biosciences - <http://molecularbiosciences.ku.edu/admissions> Ecology and Evolutionary Biology - <https://eeb.ku.edu/how-apply> Deadlines for Fall 2019 admission:

Molecular Biosciences - December 1, 2019 Ecology and Evolutionary Biology - December 1, 2019

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

About KU:

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

EEO Statement:

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

“Unckless, Robert L” <unckless@ku.edu>

UKentucky InsectEvolutionSystematics

PhD position in insect evolution, speciation, systematics

I am seeking a highly motivated PhD student to join my lab at University of Kentucky in Fall 2020. Work in my lab focuses on insect evolution, speciation, integrative taxonomy, species delimitation, and molecular systematics using genomic approaches. The exact research project topic for this potential student is flexible. Potential projects include 1) studying the genomic architecture of speciation and hybridization in swallowtail butterflies, 2) evaluating ecological drivers of diversification in buck moths, and 3) developing molecular diagnostic tools for species identification and pathway analysis in invasive insect pests. I am also open to ideas and encourage potential applicants to contact me directly to discuss their interests and suitability. For more information, see www.julianrdupuis.com. The Department of Entomology at University of Kentucky offers excellent graduate training in diverse areas of insect biology. The Entomology graduate program is ranked in the top 10 nationally and is consistently rated as one of the most productive programs at the University of Kentucky, measured by the total number of student publications and presentations. Students from our department go on to have successful careers in a variety of sectors, including academia, industry, government science, and extension, to name a few.

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

Interested applicants should submit 1) a cover letter detailing research experience, interests, and career goals, 2) a CV and unofficial transcript, and 3) name and contact information for three references to julian.dupuis@uky.edu. The successful applicant will be required to apply to the University of Kentucky Graduate School, although application to the graduate school can come a later time. See <https://entomology.ca.uky.edu/-academics/graduate> for more information on how to apply.

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

“Dupuis, Julian R.” <Julian.Dupuis@uky.edu>

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 2020. The lab is generally interested in quantitative and mathematical approaches to evolutionary biology and ecology. Past and current research areas include social evolution and other topics in evolutionary ecology, the evolution of phenotypic plasticity and bet-hedging, how populations cross fitness valleys, and epigenetic processes including genomic imprinting (see here for publications: <http://vancleve.theoretical.bio/publications>).

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

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

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

Questions about the Biology Graduate program can be sent to Van Cleve (jvancleve@uky.edu) or the Director of Graduate studies, David Weisrock (david.weisrock@uky.edu).

Please note that applications should be received by January 1st 2020 for full consideration.

– Jeremy Van Cleve

Assistant Professor Department of Biology University of Kentucky E-mail: jvancleve@uky.edu Webpage: <http://vancleve.theoretical.bio>

[/vanleve.theoretical.bio](http://vanleve.theoretical.bio) Phone: (859) 218-3020

“Van Cleve, Jeremy” <jvanleve@uky.edu>

UKoblenzLandau Biodiversity

Job announcement

University of Koblenz-Landau, Institute for Integrated Natural Sciences PhD Position Insect-Plant-Interaction / Biodiversity Research

Application deadline: 01.11.2019

A PhD position is available at the Institute for Integrated Natural Sciences, University of Koblenz-Landau, Campus Koblenz. Starting date is January 1st 2020. The position is initially for 2 years, a prolongation is planned and very likely. Salary scale: TV-L 13, 50%.

We invite applications from highly motivated candidates with passion for and experience in research related to plant-herbivore interactions and / or biodiversity research. Specifically, we will investigate indirect effects of global change phenomena (climate change, nutrient loading) on insect herbivores. Insects show an extremely high diversity, but are currently heavily declining, especially in agricultural ecosystems. In herbivorous insects indirect, plant-mediated effects of environmental change need to be considered along with direct effects (Global Change Biol 19: 3272). We will here explore indirect effects of changing temperatures and land-use practices (fertilization) on selected butterfly model species.

The successful applicant will (1) hold a M.Sc. degree (or equivalent) in biology or another relevant discipline, have (2) a solid background in experimental ecology, (3) experience with experimental designs in ecology and according statistical analyses, and (4) an excellent command of the English language. Experience in the fields of plant-insect interactions, plant chemistry or butterflies will be beneficial.

To apply please send an email to bewerbung@uni-koblenz.de before November, 1st 2019 and refer to the following reference number: KO 103/2019. Please attach a single PDF file to this email including a (1) cover letter, (2) scientific CV including copies of all degrees, (3) motivation letter including personal research interests, (4) contact details of two academic referees, and (5) the abstract of the latest thesis.

The University of Koblenz-Landau is an equal opportunity employer. Application expenses cannot

be refunded. The official version of this advertisement is published on the university's homepage: <https://www.uni-koblenz-landau.de/de/uni/-organisation/stellen/wissenschaftliche-stellen>. For any enquiries please contact: Prof. Dr. Klaus Fischer;

e-mail: klausfischer@uni-koblenz.de

Prof. Dr. Klaus Fischer Institut für Integrierte Naturwissenschaften Abteilung Biologie Universität Koblenz-Landau Universitätsstraße 1 D-56070 Koblenz

klausfischer@uni-koblenz.de Phone: +49-261-287-2238

Klaus Fischer <klausfischer@uni-koblenz.de>

ULausanne 15 QuantitativeBiology

15 Fully funded PhD studentships in Quantitative Biology The advent of large-throughput data is transforming life sciences into an increasingly quantitative discipline. The University of Lausanne (Switzerland) is at the forefront of this revolution, with quantitative research ramping up throughout the Faculty of Biology and Medicine, a dedicated department of Computational Biology, and interdisciplinary units such as the Center for Integrative Genomics. UNIL also hosts the headquarters of the Swiss Institute of Bioinformatics, to which many quantitative research groups are affiliated, and closely collaborates with EPFL on the same campus. Ideally situated along the lake of Geneva, near Lausanne's city center, UNIL brings together over 120 nationalities.

UNIL's Faculty of Biology and Medicine has a recently launched a doctoral programme entitled “Quantitative Biology”. A wide range of research groups are recruiting PhD students, covering areas as diverse as evolution, synthetic biology, plant science, cancer genomics, microbiology, molecular biology, neuroscience, biological imaging, and computational biology.

Hiring principal investigators include Roman Arguello, Richard Benton, Sven Bergmann, Giovanni Ciriello, Adrien Depeursinge, Paul Franken, Maria-Cristina Gambetta, Jerome Goudet, Laurent Keller, Zoltan Kutalik, Liliane Michalik, Serge Pelet, Alexandre Reymond, Marc Robinson-Rechavi, Sebastian Soyk, Yuko Ulrich & Jolanda van Leeuwen.

Job information

Expected start date: 01.03.2020 or to be agreed Contract length: The initial contract is for one year and

is extendable to a total of 4-5 years. Activity rate: 80-100% Workplace: University of Lausanne, Dorigny, Switzerland

Your qualifications We are accepting applications from talented and enthusiastic candidates who are interested in a dynamic, well-supported lab at a top research institution. Candidates need to finish a Master's degree in a relevant area before the start date of their doctoral studies.

We are looking for three main types of PhD students: * Students with a life science degree, interested in working in an experimental lab, but with a high degree of motivation to learn the fundamentals of computational biology, and to develop quantitative skills to analyse data more effectively * Students with a life science degree interested in working in a dry computational lab, keen to deepen their quantitative skills and broaden their horizon in terms of experimental and computational techniques * Students with a non-biological background (e.g. computer science, maths, physics), who are highly motivated to transition to Life Sciences

A high level of written and spoken English proficiency is required since most scientific activities are conducted in English.

What the position offers you You will develop your research project while working in a world competitive, interdisciplinary and highly collaborative environment.

The PhD programme in Quantitative Biology provides opportunities for professional training and acquisition of highly transferable skills. This is complemented by a wide range of activities (retreats, symposia, student life).

The positions are fully funded. Salary and benefits are internationally highly competitive. Additional funding for consumables, computing, and to attend international conferences is available.

Informal inquiries Prof. Christophe Dessimoz, Director of the UNIL Doctoral Programme in Quantitative Biology program christophe.dessimoz@unil.ch

Your application Please, submit your full application in Word or PDF at the URL

<http://career5.successfactors.eu/sfcareer/-jobreqcareer?jobId=3D14879&company=universitdP> by 15 October 2019.

Your application should include: * Cover letter, including research interests and motivation to join the programme * Curriculum vitae including, if available, extracurricular activities, internships, publications, conferences, awards, software contributions, etc. * Master's thesis summary (max. one page) * The names and

contact details of 2-3 reference * The name of preferred host laboratories (this is only indicative and can still change at the interview stage)

Lab visits and interviews will take place on 3-4 December 2019 in Lausanne.

For more information, please consult <http://unil.ch/-quantitative-biology> "Christophe.Dessimoz@unil.ch" <Christophe.Dessimoz@unil.ch>

UMaryland Phylogenomics

Graduate Assistant Position at the University of Maryland, College Park (USA)

The Esp  ndoLab has an opening for a Graduate Assistant position, with a potential start date in the Fall semester 2020. The lab is interested in understanding the effect of the environment on inter-species interactions and communities. To do so, we combine geospatial, phylogenetic and phylogeographic, and ecological approaches. One of the current foci in our work is seeking to understand how changes in the biotic and abiotic environments affect and have affected through historical and geological times the gain, loss, and maintenance of specialized pollination interactions, and the structure of communities. Work in our lab has spanned many taxa (from plants, to insects, to snails, and millipedes) and large spatial scales (with field sites in South America, Europe, and North America).

The Department of Entomology at the University of Maryland, College Park (www.entomology.umd.edu) is housed in the Colleges of Computer, Mathematical, and Natural Sciences (CMNS) and Agriculture and Natural Resources (AGNR). The Department stands out for its state-of-the-art science, its collegiality, diversity, and inclusiveness. The Department is in suburban Maryland, in the Washington D.C. area, offering opportunities of collaborations with many of the research and teaching institutions present in the region. The location gives unique access to cultural and recreational activities available both in the city and the surrounding region. The University of Maryland, College Park is considered a "Public Ivy-League", ranked among the 50 top Universities in the world, and offers an excellent educational, cultural, and recreational environment to work, study, and live.

We are seeking a motivated, independent, and creative Graduate Assistant to join our lab to work on phy-

logenomics or on pollination interactions in fragmented landscapes. The ideal candidate holds a Master's degree (or equivalent), has experience in independent research, and is interested in joining a dynamic and collaborative working environment. Women and members of minority groups are encouraged to apply. If interested, email a motivation letter, your CV, and contact information of two references to Prof. Anahí Espíndola (anahiesp[at]umd.edu). Applications received before October 31st, 2019 will be fully considered, and the selected candidates will be invited to apply to the Entomology or Biological Sciences Graduate Program, as appropriate. Application and acceptance by the University of Maryland Graduate program is required. For questions, email Prof. Espíndola (anahiesp[at]umd.edu).

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Learn about the lab: <http://anahiespindola.github.io>
Entomology Graduate Program: <https://entomology.umd.edu/graduate.html>
Biological Sciences Graduate Program: <https://www.bisi.umd.edu/bees-1>
Contact: Prof. Anahí Espíndola, anahiesp[at]umd.edu

– Anahí Espíndola *pronouns: she/her/hers* Assistant Professor Department of Entomology University of Maryland 3138 Plant Sciences Building 4291 Fieldhouse Dr. College Park, MD 20742-4454 Phone: 301-405-3920 anahiespindola.github.io

Anahi Espindola <anahiesp@umd.edu>

UniversityOfMelbourne HumanEvolutionaryGenomics

The Gallego Romero lab (<http://igr-lab.science.unimelb.edu.au>) at the University of Melbourne is looking for an enthusiastic PhD student to join our group, working in the fields of functional and evolutionary genomics. Our lab combines high throughput functional genomics approaches with induced pluripotent stem cells (iPSCs) and computational biology to address questions about the mechanisms of evolutionary adaptation in humans and the great apes that are intractable by any other means, with special interests in using transcriptomics to better understand the peopling and history of Island Southeast Asia and addressing global disparities in human genetics research.

We are part of the Melbourne Integrative Genomics (<https://research.unimelb.edu.au/integrative-genomics/MIG-home>) initiative at the University, as well as members of the School of BioSciences (<https://biosciences.unimelb.edu.au/home>) and the Centre for Stem Cell Systems (<https://biomedicalsciences.unimelb.edu.au/departments/-anatomy-and-neuroscience/engage/cscs>). We additionally have established collaborations in Indonesia, New Zealand, and Papua New Guinea.

Lab projects incorporate aspects of cell culture and experimental manipulation, genomics, and bioinformatics to varying degrees. Students will have the opportunity to be involved in both the tissue culture and data analysis aspects, and to contribute intellectually to the development of their project at all stages.

How to apply: Interested candidates should email a CV (including names and contact details of two-three references) and a one-page cover letter stating their motivations to Irene Gallego Romero (irene.gallego@unimelb.edu.au) with the subject line “PhD application” in the first instance. Note that students will then have to formally apply for admission to the University of Melbourne.

Funding and admissions: Funding, including 3.5 years of living stipend and a one-off relocation allowance, is available for both domestic and overseas students through multiple University of Melbourne schemes (see here for more information:

scholarships.unimelb.edu.au/awards). Acceptance is contingent on students meeting the University of Melbourne's general admission criteria, including the award of a Melbourne Research Scholarship or equivalent.

Start date: Flexible, early-mid 2020.

"irene.gallego@unimelb.edu.au"

<irene.gallego@unimelb.edu.au>

UNotreDame Evolution Ecology Environment

Graduate Program in Ecology, Evolution, and the Environment at the University of Notre Dame

The Department of Biological Sciences at the University of Notre Dame offers a wide range of research opportunities and graduate coursework in ecology and evolutionary biology, allowing students to excel in field, laboratory, and mathematical biology. Strengths of the program include: research on the dynamics and divergence of populations, evolutionary and ecological genomics, terrestrial and aquatic community and ecosystem ecology, epidemiology and disease ecology, experimental biology, and the impacts of global changes, including climate change, invasive species, and land use change. Our close-knit faculty provides interdisciplinary research opportunities and excellent research mentorship.

Our students take advantage of many resources at Notre Dame, including excellent laboratory facilities in the Hank Family Center for Environmental Studies and state-of-the-art instrumentation in our Center for Environmental Science and Technology (CEST; <https://cest.nd.edu>), the Genomics & Bioinformatics Core Facility (<http://genomics.nd.edu>), the Center for Research Computing (<http://CRC.nd.edu>), and the Notre Dame Linked Experimental Ecosystem Facility (ND-LEEF). Other hubs of EEE research include the University of Notre Dame Environmental Research Center (UNDERC; <http://underc.nd.edu/>) with sites located in the Upper Peninsula of Michigan and western Montana and the Notre Dame Environmental Change Initiative (<http://environmentalchange.nd.edu/>). Numerous opportunities for interdisciplinary interactions among research areas are available, including our GLOBES graduate training program (<http://reilly.nd.edu/globes/>) and the REACT program, which provides funding to support student training in computational techniques.

The following faculty members have vigorous graduate

programs in:

Beth Archie 'V behavioral ecology, population biology, microbiome dynamics Gary Belovsky 'V terrestrial ecology and modeling, conservation biology Nora Besansky 'V evolutionary, ecological and functional genomics of malaria vectors Sunny Boyd 'V behavioral ecology, neuroendocrinology and behavioral neuroscience Jeff Feder 'V ecological and evolutionary genetics, speciation Mike Ferdig 'V systems genetics of malaria parasite drug resistance Hope Hollocher 'V population genetics, disease ecology, and microbiome interactions Stuart Jones 'V aquatic microbial and ecosystem ecology Cristian Koepfli 'V molecular epidemiology of infectious disease Gary Lamberti 'V stream and wetland ecology, ecotoxicology, and plant-animal interactions Jason McLachlan 'V global change ecology, ecological forecasting David Medvigy 'V terrestrial ecosystem modeling, ecosystem-climate interactions Alex Perkins 'V disease ecology, epidemiological modeling, population biology of disease vectors Mike Pfrender 'V ecological and evolutionary genomics, adaptation, phenotypic plasticity Matt Ravosa 'V evolution and pathobiology of the mammalian skull and musculoskeletal system Adrian Rocha 'V arctic terrestrial ecology Jason Rohr - ecology and public health Jeanne Romero-Severson 'V genomics of adaptive variation in natural populations of forest trees Jennifer Tank - stream ecosystem ecology and biogeochemistry

All graduate students are funded with competitive stipends. A variety of fellowship opportunities are open to top applicants. For more information regarding the Biology Graduate Program see <http://biology.nd.edu/> and <http://graduateschool.nd.edu/>. The deadline for receipt of all application materials for the Ph.D. program is December 1st, 2019, although earlier submission is encouraged to ensure full consideration for available fellowships. Please begin your application by directly contacting faculty of interest.

Elizabeth Archie <Elizabeth.A.Archie.2@nd.edu>

UOldenburg SensoryBiologyEvolution

The German Research Foundation (DFG)-funded Research Training Group 1885 Molecular Basis of Sensory Biology is offering a

Ph.D. position(TV-L E13 65%) m/f/d* *

*Sensory basis of orientation behavior in fish***

at the Carl von Ossietzky University of Oldenburg.**

We are offering a 3 year - PhD student position in sensory ecology at the Institute of Biology and Environmental Science (IBU, CvO University Oldenburg). The project will be conducted within the framework of the Research Training Group 1885 Molecular Basis of Sensory Biology (<https://uol.de/en/sensorybio>) and interacts with scientists of the Collaborative Research Centre SFB 1372 'Magnetoreception and navigation in vertebrates: from biophysics to brain and behavior' (<https://www.sfb1372.de/>).

In our group we study evolutionary and sensory basis of orientation behavior in fish in order to unravel mechanisms how animals find their way or search for suitable social or environmental habitat; for example: what are the molecular mechanisms of fish visual or olfactory perception and preferences? The candidate should have experience in molecular techniques (PCR, q-RT-PCR, transcriptomics). The project requires also experience or interest in fish biology.

More information on this position can be obtained from Prof. Dr. Gabriele Gerlach (gabriele.gerlach@uni-oldenburg.de).

We are looking for a candidate holding a very good academic university degree (Master or equivalent) with experience in molecular methods studying the background of sensory behavior.

Salary and conditions: The position will be starting as soon as possible for a duration of three years. Salary will be according to TVL E13 (65%).

The University of Oldenburg is dedicated to increase the percentage of female employees in the field of science. Therefore, female candidates are strongly encouraged to apply. According to 21, 3 NHG female applicants are to be preferentially considered in case of equal qualification. Applicants with disabilities will be preferentially considered in case of equal qualification.

Your application should include a letter of motivation, a detailed CV, a publication list, university and high school certificates. Please send your application preferentially per email as a single pdf-file to Prof. Dr. Gabriele Gerlach (gabriele.gerlach@uni-oldenburg.de).

All applications received *before the 01st of October 2019 *will be considered. We will start looking at the applications after the deadline and will consider further applications until the position is filled.

Gabriele Gerlach, Prof. Dr. Biodiversity and Evolutionary Biology of Animals Carl von Ossietzky University Carl von Ossietzky Str. 9-11 26111 Oldenburg Germany
Tel. +49 441 798 3986 email: gabriele.gerlach@uni-oldenburg.de

<https://www.uni-oldenburg.de/biodiv-evo-tiere/> Gabriele Gerlach <gabriele.gerlach@uni-oldenburg.de>

UOulu Butterfly Diversity

Doctoral student position open in the Ecology and Genetics Research Unit at the University of Oulu (48 months, funded)

The University of Oulu is one of the largest universities in Finland. It is an international scientific community, with 14,000 students and approximately 3,000 employees. The strengths of the University are wide multidisciplinary study/research interests and modern research and study environment, as well as good cooperation with international educational and research institutes. More information: <http://www oulu.fi/english/> . We are now looking for a doctoral student to join the Ecology and Genetics Research Unit at the University of Oulu.

Project description Documenting general patterns of genetic diversification across large geographic areas is essential to understand evolutionary processes and can also aid conservation efforts aiming to preserve genetic diversity. However, obtaining massive DNA data sets for speciose taxonomic groups at large spatial scales is extremely challenging. The current project will be the first to analyze the spatio-temporal dynamics of genetic differentiation at a continental-scale for an entire, diverse taxonomic group. We will use an unparalleled genetic data set of over 22,000 cytochrome c oxidase subunit 1 (COI) sequences covering 95% of the ca. 520 European and North African butterfly species (Lepidoptera). This data set will allow the inference of paradigms in phylogeography and the assessment of continental-scale patterns of genetic diversity and endemism. Next-generation sequencing (ddRAD-sequencing) will also be used with selected taxa to determine whether results inferred with mitochondrial DNA are also reflected in the nuclear genome. The research will be conducted with extensive national and international collaboration. The project is financed by the Academy of Finland. The Principal Investigator (PI) of the project is Vlad Dinca (University of Oulu, Finland).

Duties The doctoral student will participate in 3-4 separate research studies. She/he will participate and is expected to gain good skills in laboratory analyses, data analyses, bioinformatics, scientific writing and field work.

She/he will be a leading author in at least two research papers and will be supervised by the project PI and other senior core team members. The doctoral student will have the possibility to develop professionally with the help of an experienced and enthusiastic team, using modern scientific methods and high-quality data.

Qualification and selection criteria The doctoral student must reach the MSc degree in biology (or similar) before the start of the contract. She/he is expected to be highly motivated and committed to finish her/his PhD studies during the funding period. Good English communication skills (writing and speaking) are mandatory. Previous experience and interest in genomic methods, bioinformatics and/or statistics, as well as working with insects, are considered as an advantage.

Duration and terms of employment The doctoral student will start earliest on 1st of November 2019 and not later than 1st of January 2020. The duration of employment is 48 months. The salary will be based on the levels 2-4 of the demand level chart for teaching and research staff of Finnish universities. In addition, a salary component based on personal work performance will be paid (maximum of 50 % of the job-specific component). The gross salary will be about 2,300-2,500 euro/month. A six-month trial period is applied in the beginning of employment. Health care is provided by the employer.

For further information, please contact Vlad Dinca (vlad.dinca(at)oulu.fi).

How to apply Link to the application: https://rekry.saima.fi/certiahome/open_job_view.html?did=-5600&jc=1&id=00007847&lang=en Submit your application online latest on Friday 4 of October 2019 at 24:00 (EET). The application must be submitted using the electronic application form with the following documents (in English): (1) Motivation letter where the reasons for interest in this position are clearly indicated (max. 1 page). (2) CV formatted according to the guidelines of the Finnish National Board on Research Integrity (TENK; see <http://www.tenk.fi/en/template-researchers-curriculum-vitae>) (3) List of publications formatted according to the guidelines of the Academy of Finland (see <https://www.aka.fi/en/funding/apply-for-funding/az-index-of-application-guidelines/list-of-publications/>) (4) Contact information of two referees (recommended, but not mandatory) and copy of the MSc degree.

Vlad Dinca <vlad.e.dinca@gmail.com>

UPuertoRico EvoDevo

Graduate Positions: Evolutionary Developmental Genomics, University of Puerto Rico

The Papa lab (<https://butterfly-madness.uprrp.edu/>) in the Department of Biology at the University of Puerto Rico has 2 graduate positions available (Ph.D or Master) fully funded for admission in January or July 2020. We are looking for highly motivated students interested in evolutionary and developmental questions applied on butterfly systems. Our lab studies the genetic changes that underlie trait variation using the most powerful high-end approaches in genomics and functional genetics in order to address fundamental questions in evolutionary and developmental biology. Our major motivation is to explain the origin and maintenance of biodiversity at the level of individuals, populations, species, and entire communities from molecules to ecosystems. The lab is currently funded by several grants from NIH, NSF and the Puerto Rico Science Trust.

The University of Puerto Rico 'V Rio Piedras campus, is located in the heart of San Juan, the capital of Puerto Rico. San Juan is a cosmopolitan, international city full of art, history and unarguably the world's most vibrant music scene. Puerto Rico is named the enchanted island for his lush green vegetation and incredibly beautiful water coastline.

A diverse array of projects are available that can be tailored to the student's interest. Interests in performing molecular bench work as well as obtaining a bioinformatics skillset is a plus. Multiple opportunities for national and international collaborations are available.

Please direct inquiries to Riccardo Papa (riccardo.papa@upr.edu) and Steven Van Belleghem (steven.van@upr.edu) by October 30. Please include a copy of your CV and a brief description of your research interests and experience, and how these interests/experience fits with the general research in the lab.

Riccardo Papa <riccardo.papa@upr.edu>

USherbrooke TreeSwallowEvolution

MSc or PhD project: Evolutionary ecology of Tree swallows

We are seeking to recruit a student at the MSc or PhD level to join our research team at the Département de biologie, Université de Sherbrooke, starting in January or May 2020.

Our research aims at assessing the effects of environmental heterogeneity on evolutionary-related parameters in a population of Tree swallows (*Tachycineta bicolor*). The research project of the candidate will thus be developed within this framework. The candidate will participate to a long-term study conducted in southern Québec since 2004 and will benefit from biological data collected on more than 13000 individuals. The candidate will contribute to field work (2-3 months each year) and should ideally have skills in handling birds and a good knowledge of statistical analyses. The Université de Sherbrooke is a French-speaking institution, therefore either some knowledge of French or an interest in learning it is essential.

Interested candidates should send a CV and a cover letter, as well as the contact information of two references before 11 October to:

Dany Garant: Dany.Garant@Usherbrooke.ca

<https://labogarant.weebly.com/> Dany Garant
<Dany.Garant@USherbrooke.ca>

UTexasAM SpeciationHybridZones

The Delmore Lab at the University of Texas A&M is looking for PhD students to join our group. We study speciation using hybrid zones and work at both the micro and macroevolutionary scale. One of our research streams focuses on speciation genomics and includes work on the processes that generation genome-wide variation in estimates of differentiation. We use both genomic data and computer simulations to address this question.

Another research stream focuses on behaviour 'V how

variation in behavioural traits contributes to speciation and the molecular basis of these traits. One of the behaviours we study is seasonal migration. Much of this work focuses on a hybrid zones between Swainson's thrushes but we are constantly expanding the scope of this work. Another behaviour we study is courtship behaviour using a hybrid zone between ruby-throated/black-chinned hummingbirds.

You can apply to work in our lab through three degree programs: Ecology and Evolutionary Biology (<https://eeb.tamu.edu>; deadline Dec 15, 2019), Genetics (<https://genetics.tamu.edu/>; deadline Dec 1, 2019) and Biology (<https://www.bio.tamu.edu/>; deadline Dec 1, 2019). These programs integrate labs across the TAMU campus from international backgrounds. The atmosphere is highly collaborative, enthusiastic and supportive. You will be able to develop knowledge in evolution and substantial genomic and computational skills while you're here.

Ph.D. in Genetics at Texas A&M University genetics.tamu.edu

The Program in Genetics is the main interdisciplinary Ph.D. program in the Natural Sciences at Texas A&M University

Texas A&M Biology www.bio.tamu.edu Biology Department at Texas A&M University in College Station, TX. Graduate and Undergraduate Education in Biology, Microbiology, and Cutting Edge Research!

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

You can find out more about our lab at delmorelab.com. If you are interested in these positions please email a CV (including names and contact details of two-three references) and a one-page cover letter stating your motivations to Kira Delmore (kdelmore@bio.tamu.edu) with the subject line "PhD application" in the first instance. Note that students will then have to formally apply for admission to Texas A&M University through any of the degree programs mentioned above.

Kira Delmore | Assistant Professor Biology, College of Science | Texas A&M University 3528 TAMU | College Station, TX 77843 1 (979) 900-2129 | kdelmore@bio.tamu.edu delmorelab.com

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

UValencia Coevolution

I am looking for a PhD candidate at the Cavanilles Institute of Biodiversity and Evolutionary Biology, University of Valencia funded by a three-year research fellowship from the Government of Valencia.

The position is available for EU-EES nationals or residents in Spain holding a valid student visa. The project will focus on developing new tools and approaches in cophylogeny.

Papers related with the position:

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0061048> <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/2041-210X.12736> <https://academic.oup.com/sysbio/article/65/1/51/2461585> <https://www.php.obs-banyuls.fr/Viemilieu/index.php/volume-67-2017/-volume-67-issue-2/672-article-7.html> <https://www.biorxiv.org/content/10.1101/481846v2.full>

A good academic record (GPA 2-3, B or higher) is a requirement to apply. Experience with computational work, statistics, and bioinformatics and knowledge of R will be highly regarded.

If you are interested, please contact me directly at j.a.balbuena@uv.es with a CV and a brief description of your research interests and experience. Deadline for pre-applications 25 September.

Dr. Juan A. Balbuena Cavanilles Institute of Biodiversity and Evolutionary Biology Symbiont Ecology and Evolution Lab University of Valencia <http://www.uv.es/~balbuena> <j.a.balbuena@uv.es> P.O. Box 22085 <http://www.uv.es/cophylpaco> 46071 Valencia, Spain e-mail: j.a.balbuena@uv.estel. +34 963 543 658 — fax +34 963 543 733

*NOTE!*For shipments by EXPRESS COURIER use the following street address: C/ Catedrático José Beltrán 2, 46980 Paterna (Valencia), Spain.

Juan Antonio Balbuena <j.a.balbuena@uv.es>

UVermont Evolution

Subject:

Applications open for graduate studies in ecology and evolution and QuEST Doctoral Training program, Department of Biology, University of Vermont

Message:

The Department of Biology, University of Vermont, seeks qualified PhD and MS applicants for the Fall of 2019 to join our interdisciplinary research program in ecology and evolution.

We are a medium-sized, integrative biology department (most labs typically have 3 to 5 graduate students) with a passion for our research and our teaching. We will work with you to design a successful research program that will prepare you for your career in academic, medical or private sector research; government work; or teaching at the baccalaureate level.

Our department has recently been awarded a major NSF-funded National Research Training grant in Quantitative and Evolutionary STEM training (QuEST). The QuEST grant provides doctoral students with foundational training in quantitative data analysis and modeling, fellowship support, and internship placements to apply evolutionary principles toward solving real-world problems.

Potential faculty mentors in the Department of Biology include: Ingi Agnarsson (systematics), Alison K. Brody (plant-animal interactions), Charles J. Goodnight (evolutionary theory), Nicholas J. Gotelli (community ecology), Sara Helms Cahan (sociobiology), Brent L. Lockwood (physiological ecology), Melissa Pespeni (ecological genomics), Lori Stevens (population genetics).

The department and campus have excellent facilities for research, and there are opportunities for collaboration with faculty and graduate students in other units on campus, including Complex Systems, Plant Biology, The Rubenstein School of Environment and Natural Resources, and The Gund Institute for the Environment. Our faculty conduct their field research at sites around the globe, but there are also exciting projects ongoing in Lake Champlain and the nearby Green Mountains and Adirondacks.

Founded in 1791, UVM is consistently ranked as one of the top public universities in the United States. The

University is located in Burlington, Vermont, a vibrant and environmentally-minded small city rich in cultural and recreational activities for graduate students and their families.

We only admit students for whom we have secured financial support through graduate teaching fellowships, QuEST fellowships, or external grants. Before you apply, you should directly contact individual faculty members to explore mutual research interests and projects.

This link will give you an overview of graduate life in the Biology Department: (<https://www.uvm.edu/cas/biology/graduate-programs-overview>)

This link will let you explore the web pages and research interests of individual faculty: (<https://www.uvm.edu/cas/biology/faculty-staff>)

This link will give you information about the QuEST program:

(<https://www.uvm.edu/quest>)

This link will let you begin the application process:

(<https://www.applyweb.com/uvmg/index.ftl>)

If you have any additional questions, please contact the Chair of Graduate Affairs, Dr. Nicholas J. Gotelli (ngotelli@uvm.edu).

We hope to see your application for Fall 2020!

Emily Mikucki, Ph.D. candidate Department of Biology University of Vermont Room 202, Marsh Life Science Bldg. 109 Carrigan Drive Burlington, VT 05405 802-656-2921

Emily Mikucki <Emily.Mikucki@uvm.edu>

from all over the world.

Check out more details about our graduate program, including program requirements and opportunities, at <https://www.eebvirginia.org/> Research in the EEB group at UVA spans a wide range of techniques and organisms. We encourage prospective students to reach out to faculty to discuss potential research projects and the application process (applications due December 1, 2019). Faculty currently recruiting students are:

Alan O. Bergland: Evolutionary ecology and ecological genetics of rapid adaptation in *Drosophila* and *Daphnia*.

Butch Brodie: Evolution of social behavior and co-evolutionary dynamics in beetles, snakes, and newts.

Bob Cox: Natural and sexual selection, evolutionary genetics, and evolutionary endocrinology in lizards.

Laura Galloway: Mating system evolution and speciation in plants.

Mandy Gibson: Host-parasite interactions and coevolution in *C. elegans*.

Jennifer GÅÅ¹ler: Evolution of drug resistance in malaria

David Parichy: Evolution and development of pigmentation in zebrafish

Deborah Roach: Life history evolution and plant evolutionary ecology

Doug Taylor: Population genomics and molecular evolution in subdivided populations

Martin Wu: Microbial ecology and the microbiome

"Bergland, Alan Olav (aob2x)" <aob2x@virginia.edu>

UVirginia EvolutionEcolBehavior

The Department of Biology at the University of Virginia is currently recruiting PhD students in Evolution, Ecology, and Behavior (EEB). Graduate training in EEB at the University of Virginia emphasizes research creativity, independence, and collaboration. We are looking for students who bring their own ideas to the conversation, and who are willing to explore and master new techniques to research those ideas. Our culture provides exceptional opportunities for close interaction with faculty both in a student's home laboratory and across the department. Many students conduct their research at the Mountain Lake Biological Station (<https://mlbs.virginia.edu>) where they interact closely with scientists and students

UWashington Coevolution

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

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

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

and genetic variation.

- 3) Understanding the selective pressures acting on sexually dimorphic traits, for instance in particular cases of bill dimorphism (trade-offs between fighting and nectar extraction abilities), and more generally in the evolution of intrasexually selected weapons across animals.
- 4) Deciphering the causal mechanisms for social dominance and intra- plus inter-specific competition outcomes, and how variation in behavioral strategies (e.g., interference vs. exploitative competition) maximizes net energy gain.
- 5) Performing comparative studies along gradients from trait development (e.g. weapons achieved only until adulthood) and interindividual variation (e.g. polymorphisms), to parallel (e.g. independent appearances of weapons in hummingbirds) and convergent (e.g. in other nectar-feeding birds) evolution.
- 6) Quantifying the physiological and biomechanical trade-offs among hummingbird feeding, breathing, and locomotion, that constrain the highest mass-specific metabolic rates in vertebrates.
- 7) Technology and software development employing mechanical engineering, electronics, and computer vision, among others, in order to pioneer methods to push the current limits of the field.

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

Alejandro Rico-Guevara

a.rico@berkeley.edu

VirginiaCommonwealthU 2 InsectSymbioses

I am currently seeking two graduate students to start in the fall 2020 to study insect-microbial symbioses.

Research in my newly established lab focuses on the evolution of insect-microbial symbioses. Parasitic lice (Phthiraptera) and their symbiotic microbes (Ca. *Riesia* species, <https://www.ncbi.nlm.nih.gov/genome/53872>) serve as the primary focus of my research. Currently

I am investigating how microbial symbioses facilitates the evolution of novel insect phenotypes, how symbioses impacts genome evolution in bacteria, and the roles mobile genetic elements play in insect-microbial symbioses. Students working in the lab will gain experience in bioinformatics and wet lab techniques. An emphasis will be placed on bioinformatics and students will gain experience with phylogenetic methods, genome/transcriptome assembly, genome annotation and comparison, and metagenome analysis. You can learn more about my work by visiting rampages.us/bboydlab/

If you are interested in insect or bacterial evolution, phylogenetics, and evolutionary biology, please contact me by email at boydbm@vcu.edu. The email should include a 1) short description of your research interests and experience, 2) your CV, and 3) whether you are seeking a Ph.D. or M.S. Please send inquires before November 1, 2019.

The lab is centrally located in the bustling Monroe Park campus of Virginia Commonwealth University. Located along the James River in Richmond, Virginia, the area is known for its numerous dining and entertainment options. The greater Richmond area is host to many craft breweries and nature parks.

Bret Boyd

Bret Boyd <boydbm@vcu.edu>

WageningenU PlacentaEvolution

Evolution of Maternal Effects in Placental Fishes

Job description A 4-year PhD position (1.0 FTE) is available in the lab of Dr. Bart Pollux in the Experimental Zoology group at Wageningen University, the Netherlands. The aim of this project is to study the mechanisms that underlie maternal effects on developing offspring during pregnancy, and how these change in livebearing animal lineages during the evolution of a placenta.

The placenta is an intimate maternal-fetal connection that plays a crucial role in the regulation of embryo development. The evolution of such an intimate connection implies that stressful conditions experienced by the mother during pregnancy can more easily be transmitted to the embryo via the placenta. The project will study how the mechanisms, by which adverse environments experienced by the mother (e.g. nutritional stress or the perception of predation risk) are transmitted to their

developing offspring, change during the evolution of a placenta.

We will study this by comparing live-bearing fish species (family Poeciliidae) with and without placentas. This family contains closely-related species, as well as populations within species, that vary markedly in the presence and/or complexity of placentas. This variation offers a unique opportunity to study how maternal effects evolve in association with the evolution of the placenta. Depending on the applicant's interest, the project can include a combination of fieldwork (Costa Rica, Surinam), common garden breeding experiments, anatomical and functional studies of placenta & brain, physiological & cognitive performance studies, and comparative genomics & transcriptomics.

Requirements For this interdisciplinary project, we look for an enthusiastic, creative, result-driven person with an MSc degree (obligated) in biology or related field. Applicants should have a genuine interest in evolutionary biology - in particular the relationship between ecology, development and evolution. Research experience in the relevant domains (MSc thesis) is required and excellent communication skills and proficiency in English (both oral and written) are a prerequisite.

Additional information For further information, please contact Dr. Bart Pollux (Assistant Professor Evolutionary Biology; email: bart.pollux@wur.nl; phone: +31.6.317.486083; website: www.bartpollux.nl). The application deadline is Monday 30 September 2019. The preferred starting date is as soon as possible. Applications should include a letter of motivation, a detailed CV and names of three references.

Please send all application materials directly to bart.pollux@wur.nl.

"Pollux, Bart" <bart.pollux@wur.nl>

WashingtonU StLouis Phylogenetics

A PhD student position is available in the lab of Dr. Michael Landis. Located in the Department of Biology at Washington University in St. Louis, the Landis

group studies problems in phylogenetics, biogeography, and trait evolution by designing statistical models, developing inference methods as software, and applying those methods to selected groups throughout the tree of life. Learn more about the Landis Lab here: <http://landislab.org>. The position is to research macroevolutionary questions using phylogenetic analyses. Possible research topics include efficient estimation of species relationships using large phylogenomic datasets, divergence time estimation using biogeography and/or fossils, and modeling gene expression evolution. Depending on the skills and interests of the new student, they will help tailor the project so it suits their educational and professional goals. The student will collaborate within projects, write first author papers, mentor undergraduate students, receive room to establish intellectual independence, and train skills as needed.

Candidates should hold an undergraduate degree in biology, bioinformatics, computer science, statistics, or another quantitative discipline. Programming experience is desired. Candidates should share the lab's interest in using statistical models or software methods to study evolutionary biology.

PhD applications are officially handled through the Division of Biology and Biomedical Sciences (DBBS): <http://dbbs.wustl.edu/prospstudents/PhDAdmissions>. Applications are due December 1, 2019.

St. Louis is a culturally dynamic and family friendly city, with affordable housing and excellent access to food, music, art, and public spaces. Wash U offers outstanding benefits, including health, dental, vision, and life insurance: <http://dbbs.wustl.edu/curstudents/StipendBenefitsandGrants>. Wash U is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, age, sex, sexual orientation, gender identity or expression, national origin, genetic information, disability, or protected veteran status.

Before applying, please take a moment to contact michael.landis@wustl.edu to introduce yourself and to share your research interests.

Michael Landis michael.landis@wustl.edu landislab.org

"Landis, Michael" <michael.landis@wustl.edu>

Jobs

AdelphiU EvolutionaryBiology	46	SanFranciscoStateU EvolutionaryPhysiologist	67
AmericanMuseumNaturalHistory Bioinformatics ..	47	SyracuseU LabTech DrosophilaGenetics	68
CaliforniaStateU SB EvolutionaryBiol	47	TexasAMU TheoreticalEvolutionaryBiology	68
CarrollCollege Genetics	48	TexasStateU ParasitologyImmunology	69
ChapmanU TeachingEvolution	48	TuftsU ComparativeGenomics	70
Clemson LabTech PlantEvolutionEcol	49	UBath Teaching Evolution short term	71
ClemsonU HumanEvolutionaryGenetics	50	UCaliforniaIrvine 2 MicrobiomeEvolution	71
CornellU Limnology FreshwaterBiology	51	UCalifornia SanDiego 2 EvoDevo EvolNeurology ..	72
CornellU OrganismalEvolution	52	UCLA BiodiversityInformatics	73
CornellU PlantEvolution	52	UConnecticut GenomeBiology	73
CzechRep 1yr BioinformaticsBiostatistics	53	UEastAnglia EvolutionaryBiology	74
EmoryU 2 TeachingEvolution	54	UKentucky 2 EvolutionaryBiology	74
GeorgeMasonU Genetics	54	UMassachusetts Lowell Bioinformatics	75
HarvardU EvoDevo	55	UMemphis EvolutionaryAnimalPhysiology	76
IllinoisStateU Evolution	55	UOklahoma EvolutionBehavior	76
IllinoisStateU SchoolDirector	56	UOklahoma Tech Genomics	77
IndianaU EvolutionaryBiology	57	USouthCarolina EvolutionMicrobiome	78
JohnInnesCentre UK InsectGenomes	57	USouthernCalifornia SystemsBiology	79
LouisianaStateU QuantitativeBiology	58	USouthernCal MarineGenomics	79
MasseyU IndigenousHumanGenomics	59	UTexas ElPaso EvolutionaryBiology	80
MBL ResAssist MicrobialProteinEvolution	59	UToronto Mississauga MicrobialEvolution	81
Melbourne ComputationalPlantBreeding	60	UTulsa ComparativeNeurobiology	82
NTNU Norway WolfPopGenomics	60	UVienna BioinformaticsCompBiol	83
OklahomaStateU 2 GenomicsEvolPhysiology	61	UWashington MarineGenomics	83
PrincetonU LabTech MammalianEvoDevo	62	UWashington NaturalHistoryConservation	84
PrincetonU ResSpecialist EvolutionaryBiol	63	UWisconsin Madison 2 Genetics	85
ProvidenceCollege EnvBiolEvolution	64	UWisconsin Madison EvolutionaryBiology	86
RhodesCollege InvertebrateEvolution	64	UWisconsin Oshkosh PlantEvolution	87
RhodesCollege MicrobiologyEvolution	65	VanderbiltU EvolutionaryGenomics	87
RockefellerU OrganismalBiologyAndEvolution	66	YorkU LabManager BeeGenetics	88
RutgersU EvolutionaryEcol	66		

AdelphiU EvolutionaryBiology

Please share the following with friends or colleagues:

JOB SUMMARY:

Adelphi University invites applications for a tenure-track assistant professor in biology with a focus in evolutionary biology to begin fall 2020. The candidate is expected to teach undergraduate and graduate courses in evolution, introductory biology, and additional courses in

the candidate's area of specialty. Research areas could include evolutionary modeling, phylogenetics, comparative methods, molecular evolution, or other related fields. The successful applicant will have a commitment to teaching students from diverse cultural backgrounds and excellent potential as a teacher, plus a record of significant research accomplishment and the potential to develop a fundable independent research program involving undergraduate and master's students. Preference will be given to applicants who could incorporate computational methods into their area of research. The successful applicant will join an active, engaged, and collegial department spanning all areas of biology that is particularly focused on the use of

evidence-based teaching practices. Opportunities for collaboration exist within the university as well as in the NY metropolitan area. For more information about the department, visit <http://biology.adelphi.edu/>. To apply: <https://chm.tbe.taleo.net/chm02/ats/careers/v2/-viewRequisition?org=ADELPHI&cws=43&rid=2309>
 Andrea B. Ward Chair Professor Department of Biology
 516.877.4204 / f 516.877.4209

Science, Room 102 One South Avenue Garden City, NY 11530

<http://home.adelphi.edu/~aw17333/index.html> Andrea Ward <award@adelphi.edu>

AmericanMuseumNaturalHistory Bioinformatics

Position Title: Bioinformatics Specialist

Position Link: <https://careers.amnh.org/postings/2048>

Position Summary: The Bioinformatics Specialist will provide informatics and computational support for scientists and students affiliated with the Sackler Institute for Comparative Genomics. The Bioinformatics Specialist will facilitate the processing, analysis and management of large quantities of biological information (including genomic, transcriptomic, proteomic, and morphological data).

Responsibilities include, but are not limited to:

1. Build, maintain, and deploy containerized pipelines for common workflows used across Sackler Institute for Comparative Genomics (SICG) projects.
2. Test and benchmark new pipelines for non-model organism genomics as they become available.
3. Interface with the Museum's Information Technology Department (IT) to develop best practices for high performance computing (HPC) and develop cloud bursting methods.
4. Test and maintain code, libraries, software packages and containers on all SICG's on-premise resources in partnership with IT, and maintain an internal website that details available software and hardware resources.
5. Collaborate with Museum scientists to develop original research on non-model organism genomics

Priority given to applications submitted by 09/30/2019

Required Qualifications 1. Bachelor's degree in bioinformatics, computer science, biology, biochemistry or similar field and 2 to 3 years of relevant work experience or Master's degree in bioinformatics, computer science,

biology, biochemistry or similar field and 1 to 2 years of relevant work experience. 2. Working familiarity with Unix, bash, HPCs, containers, and at least one scripting language such as python, Perl, or R.

For further questions, please contact Apurva Narechania at anarechania@amnh.org or apply at the link above.

Apurva Narechania <anarechania@amnh.org>

CaliforniaStateU SB EvolutionaryBiol

Title: Assistant Professor: Population/Evolutionary Biology
 Position Type: Tenure-Track Assistant Professor
 Institution: California State University San Bernardino
 Department: Biology Field: Evolutionary Biology City: San Bernardino, CA USA

General Information: The Department Biology at CSUSB invites applications for a tenure-track position in Population/Evolutionary Biology. CSUSB is designated as a Hispanic Serving Institution and is committed to building a diverse and inclusive faculty. Applicants with a commitment to serving a diverse student population in an equitable and inclusive fashion are strongly encouraged to apply. We are particularly interested in receiving applications from women and members of historically underrepresented groups.

Qualifications: Candidates must have a Ph.D. in the biological sciences; postdoctoral experience is desirable. Candidates must have a record of published research and show potential for developing an externally funded research program involving both undergraduate and M.S. students.

Responsibilities: The successful applicant will develop an independent research program addressing fundamental questions in population and/or evolutionary biology; Furthermore, the incumbent will teach courses in evolution, population biology/population genetics, and additional courses within the candidate's area of expertise at the undergraduate and M.S. levels.

Instructions: Candidates should submit applications via the website <https://www.governmentjobs.com/-careers/csusb/jobs/2520645-0/evolution-population-biology-assistant-professor-tenure-track> In brief: submit cover letter, curriculum vitae, statement of research accomplishments and goals, statement of teaching philosophy, diversity statement, and contact

information for at least three references via our online application system as indicated in the link above. Official post-secondary transcripts will be required prior to appointment. Referees should email their confidential letters of recommendation directly to facultyrecruitment@csusb.edu.

For further inquiries regarding the Population Biology/Evolutionary Biology position, please contact.

Contact: Dr. Mike Chao, department chair: +1.909.537.5388 or mchao@csusb.edu

WebLink: <https://www.governmentjobs.com/careers/-csusb/jobs/2520645-0/evolution-population-biology-assistant-professor-tenure-track> Review Starts: 10/14/2019 Application Closes: 10/31/2019 or until position is filled.

James A. Ferrari, Ph.D. Professor Department of Biology California State University San Bernardino San Bernardino, CA 92407 Phone: (909) 537-5364

JFerrari@csusb.edu

CarrollCollege Genetics

Position Description: Assistant Professor of Biology (Genetics)

This is a full-time, tenure-track position in the Department of Life and Environmental Sciences. The primary teaching responsibility for this position is Genetics (BI 281) and associated labs. Other teaching responsibilities may also include Biological Principles (BI 171 & 172) and upper division, writing-intensive courses representing an area of specialty.

Job Advertisement

Carroll College, a Catholic, coeducational and comprehensive liberal arts college in Helena, Montana, invites applications for a full-time, tenure-track position in the Department of Life and Environmental Science to begin in August 2020. We seek a broadly trained biologist with a strong commitment to teaching at an undergraduate institution. Primary teaching responsibilities include Genetics, introductory-level courses, and an upper-level, writing intensive, course in an area of specialization such as Evolutionary Development, Evolutionary Analysis, or Evolutionary Ecology. Applicants with a specialization in Evo/Devo are especially encouraged to apply.

The successful candidate: 1) will have earned a Ph.D. in Biology or a related field; 2) will have a demonstrated

ability to teach Genetics; 3) will be open to using a variety of high impact teaching practices; 4) will be expected to engage undergraduates in research opportunities. Review of applications will begin October 25, 2019 and will continue until the position is filled.

Applicants should submit curriculum vitae, three letters of recommendation, teaching evaluations, and a statement of teaching and scholarly philosophy to: Genetics Search Committee, Office of Human Resources, Carroll College, 1601 North Benton Avenue, Helena, MT 59625 or electronically submit to www.carroll.edu/employment. To learn more about Carroll College, please visit our web site: <http://www.carroll.edu>. Carroll College is an Equal Opportunity Employer and we encourage a diversity of applicants.

“Almquist, Travis” <talmquist@carroll.edu>

ChapmanU TeachingEvolution

Schmid College of Science and Technology at Chapman University seeks applicants for a non-tenure track, full-time Instructional Assistant Professor of Biological Sciences, beginning August 2020.

Chapman University, located in the heart of Orange County, California, offers traditional undergraduate programs in the arts and sciences and select pre-professional and graduate programs. Currently ranked #5 in Regional Universities West, by U.S. News and World Report, Chapman University has been elevated to R2 status by the Carnegie Classification of Institutions of Higher Education, a distinction held by just 10% of all U.S. Universities. Chapman has gained national recognition with its commitment to excellence through research and innovative 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 ft² 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 www.chapman.edu/science. The Biological Sciences program is home to a diverse 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 de-

gree in Biological Sciences 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 on matters of faculty governance at both the program and college levels.

The University is dedicated to enhancing diversity and inclusion in all aspects of recruitment and employment. More information on diversity and inclusion at Chapman University is available at <https://www.chapman.edu/diversity>. Qualifications A Ph.D. in Biology or related field is required. Broad training within evolution, ecology and physiology; experience teaching at the introductory level in lectures and labs; ability to design class-based labs; familiarity with evidence-based instruction; and good organizational, interpersonal, and communication skills is preferred.

Responsibilities The successful candidate will teach lectures and labs in the introductory biology course sequence, which includes two separate semester-long courses: 1) "From Molecules to Cells: Evolution of Life on Earth", and 2) "Evolution and Diversity of Multicellular Organisms", with the primary emphasis on the evolution and diversity course. In addition, the successful candidate will develop laboratories and manage lab sections and instructors for the introductory course devoted to evolution and diversity.

Contact Information Candidates are invited to electronically submit:

* Chapman University Faculty Employment Application * Cover letter * Curriculum Vitae * Statement of Teaching Philosophy and Diversity * Three letters of recommendation c/o: Academic Jobs Online at <https://academicjobsonline.org/ajo/jobs/14604> Inquiries maybe directed to Dr. Walter Piper, Search Chair, at schmidcollege@chapman.edu. Please use "NTT Biology Position" as the email subject line.

Application review will begin October 15, 2019 and will continue until the position is filled.

<https://www.higheredjobs.com/search/details.cfm?JobCode=3D177094243&Title=Assistant%20Professor%20of%20Biology%2C%20Non%20Biology%20Plant%20and%20Environmental%20Sciences>

Clemson LabTech PlantEvolutionEcol

Clemson Department of Biological Sciences Clemson, South Carolina Koski Lab

The Koski Lab studies the evolutionary ecology of plant reproduction and is hiring a lab technician/manager to oversee daily lab operations (<https://koskimatt.wixsite.com/matthewkoski>). Primary duties of the lab technician will be to assist in setting up equipment (microscopes, molecular equipment, spectrophotometers etc.), and collect data for lab-, greenhouse- and field-based experiments. Supervision of undergraduates and coordination with graduate students and the PI are required, so strong communication and interpersonal skills are a must. The manager should also have strong organizational skills as management of large datasets, and curation of lab protocols will be necessary. The Koski Lab and Clemson University are committed to building a culturally diverse community.

Duration: 1 year with possibility of extension

Duties and Responsibilities:

Plant maintenance and propagation (watering, fertilizing, cloning, potting, labeling etc.)

Assist with ordering and setting up lab equipment and supplies

Collection of phenotypic and molecular data

Organization and management of datasets

Supervision of undergraduate researchers

Requirements:

* Bachelors degree in a relevant field of study * Research experience in a biology lab or lab of similar field

Preferred:

* Bachelors degree in Ecology, Evolutionary Biology, Biology, Plant Science, Environmental Sciences * Skill in basic molecular techniques * Ability to coordinate with and communicate with lab personnel * Strong experience with data management

* Solid understanding of various biological systems * Strong troubleshooting/problem solving and analytical skills * Strong project management skills

* Ability to manage multiple projects amid shifting pri-

orities * Ability to work independently and in group settings

How to Apply: Visit https://cujobs.clemson.edu/psc/ps/JOBS/EXT/c/-HRS_HRAM.HRS_APP_SCHJOB.GBL?Page=-HRS_APP_SCHJOB&Action=U&FOCUS=-Applicant&SiteId=1&LabSpecialist=104550

Applications will be reviewed on September 18, 2019.

Contact Matt Koski, mkoski@clemson.edu, with any questions.

Matthew Koski Assistant Professor Clemson University Dept. of Biological Sciences <https://koskimatt.wixsite.com/matthewkoski> Matthew Harold Koski <mkoski@clemson.edu>

ClemsonU HumanEvolutionaryGenetics

Clemson University invites applications for three tenure-track Assistant Professor positions at the new Center for Human Genetics, with an expected start date of August 2020.

The positions are broadly defined and will include individuals who use statistical, computational, bioinformatic, genetic, genomic and comparative evolutionary approaches to explore the genetic and environmental basis of human health and disease, and promote precision medicine. Areas of research may include π but are not limited to π genomic prediction, the role of gene-gene and gene-environment interactions in human genetics and methods to detect such interactions, de novo regulatory network construction, integration of data across many levels of biological organization, explicitly modeling variants of unknown significance from clinical sequencing in model systems, including cell lines, and expanding human genomic studies to include whole genome sequencing and discovery of regulatory variants affecting health and disease.

The Center for Human Genetics is housed in Self Regional Hall, a new 17,000-square-foot building located in Greenwood, South Carolina on the campus of the Greenwood Genetic Center. The Center for Human Genetics is ideally configured for collaborative research with excellent bioinformatics facilities and state-of-the-art molecular laboratories. The Center for Human Genetics and the Greenwood Genetic Center are well-equipped for genomics, proteomics and metabolomics research,

including a NovaSeq 6000 sequencer.

Successful applicants will be part of a collaborative and interdisciplinary environment that includes the research, diagnostic and clinical geneticists at the Greenwood Genetic Center, the genetics, genomics, statistics and bioinformatics faculty at Clemson University, the USC School of Medicine in Greenville and the Greenville Health System. The home department will be determined by the fit of the applicant's research interests with the mission of one of the departments in the College of Science (www.clemson.edu/science), including the Department of Genetics and Biochemistry (www.clemson.edu/science/departments/genetics-biochemistry/index.html), the Department of Mathematical Sciences (www.clemson.edu/science/departments/mathematical-sciences/index.html) and the Department of Biological Sciences (www.clemson.edu/science/departments/biosci/index.html).

Clemson University is South Carolina's public land-grant University. As a Carnegie R1 Institution, the University has excellent research resources including the globally ranked Palmetto Cluster high performance computing cluster; Sciences Genomics and Bioinformatics Facility; state-of-the-art light microscopy, electron microscopy, animal, or fish facilities; a multi-user analytical laboratory and metabolomics core; and the Campbell Museum of Natural History.

The University and Center for Human Genetics are committed to building a diverse and inclusive community of faculty scholars dedicated to working and teaching in a multi-cultural environment (<http://www.clemson.edu/inclusion/>). We encourage applications from women, minorities and individuals with a commitment to mentoring colleagues and students from demographic groups underrepresented in the sciences. We are also supportive of the needs of dual-career couples.

Successful candidates must hold a doctoral degree and have postdoctoral experience. Competitive candidates will demonstrate an ability to develop a vigorous and independent, externally funded and nationally recognized research program; demonstrate teaching excellence and a commitment to diversity inclusion; and participate in relevant undergraduate and graduate education programs.

Applicants should submit the following items via Interfolio at apply.interfolio.com/68162: (1) cover letter; (2) Curriculum Vitae; (3) statement of research interests including future plans; (4) statement of teaching interests and experience; (5) statement describing past experience and/or future plans to promote diversity and inclusion; and (6) up to three reprints in one PDF. Applicants

should also arrange, through Interfolio, the submission of three confidential letters of recommendation on their behalf.

Inquiries should be directed to Dr. Trudy Mackay (tmackay@clermson.edu).

For full consideration, applications should be submitted by October 18, 2019. Review will continue until the positions are filled.

Clemson University is an AA/EEO employer and does not discriminate against any person or group on the basis of age, color, disability, gender, pregnancy, national origin, race, religion, sexual orientation,

— / —

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>

CornellU Limnology FreshwaterBiology

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: July 2020 or as negotiated

POSITION DESCRIPTION: We invite applications for a tenure-track position in Limnology / Freshwater Biology, at the level of Assistant or early Associate Professor. We are searching broadly for an individual who will establish an innovative, high-profile research program that addresses key concepts and questions in ecology and/or evolution. Research should focus on freshwater systems, but can address any level of biological organization (organism/population/community/ecosystem/landscape/biosphere) and can include empirical and/or theoretical approaches. The appointed faculty member will be expected to establish an independent, externally-funded, and internationally recognized research program at the cutting edge of freshwater science. We are especially interested in candidates who will interact widely and embrace a culture of collaboration within and across departments. —Contributions to both undergraduate and graduate teaching in ecology and/or evolution

are expected, with the use of modern active learning techniques, which are supported by Cornell's Center for Teaching Innovation and Active Learning Initiative. The successful candidate will contribute to a century-long Cornell tradition of classroom and field teaching in Limnology / Freshwater Biology. Cornell is situated in the Finger Lakes Region of New York, an area known for its rich abundance of lakes and streams. Notable resources include access to an extensive experimental ponds facility; the Cornell Biological Field Station at Shackelton Point on Oneida Lake; the Cornell Museum of Vertebrates with worldwide collections of fishes; and the opportunity to join our campus-wide community of sustainability scholars affiliated with the Atkinson Center for a Sustainable Future.

QUALIFICATIONS: —A Ph.D. is required at the time of appointment. Applicants should have demonstrated excellence in research in freshwater systems, strong interest in collaboration, and a dedication to teaching. Postdoctoral experience is highly desirable.

SALARY/BENEFITS: Competitive salary and start-up funding will be commensurate with qualifications and experience. An attractive fringe benefit package is included.

APPLICATIONS: Candidates should submit via the website <https://academicjobsonline.org/ajo/jobs/-14624a> cover letter briefly summarizing your background, vision, and qualifications; curriculum vitae; contact information for three references; a research statement; a teaching statement outlining experience, philosophy, and interests; a statement of contribution to diversity, equity, and inclusion; and up to three representative publications. Inquiries can be directed to Search Committee Chair, Alex Flecker, at limnosearch@cornell.edu Review of applications will begin October 20, 2019 and continue until the position is filled.

ABOUT CORNELL: —Cornell is an innovative Land-Grant and Ivy League university. Situated on Cornell's main campus at Ithaca, NY, the College of Agriculture and Life Sciences is a pioneer of purpose-driven science and home to the university's second largest grouping of students, faculty and staff. 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. The Department of Ecology and Evolutionary Biology and the College of Agriculture and Life Sciences at Cornell embrace diversity and seek candidates who will create a climate that attracts persons of all races, ethnicities, and genders. Diversity and

Inclusion are central to Cornell University's heritage and identity. We are a recognized employer and educator valuing AA/ EEO, Protected Veterans and Individuals with Disabilities. 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 help with child care, elder care and those with disabilities. For more details, see:

— / —

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>

of teaching interests and experience, a statement of contribution to diversity, equity, and inclusion <<https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/-dist/8/6767/files/2018/08/Appendix-I-Request-for-Diversity-statement-lizep7w.pdf>>, and up to three representative publications. Inquiries can be directed to Search Committee Chair, Robert Reed, at orgbiosearch@cornell.edu.

Review of applications will begin October 20, 2019 and continue until the position is filled.

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

Patty Jordan <pj17@cornell.edu>

CornellU OrganismalEvolution

Assistant or early Associate Professor: Organismal Biology

The Department of Ecology and Evolutionary Biology at Cornell University invites applications for a tenure-track position in Organismal Biology. The ideal candidate in this broadly defined search will be an expert on the diversity and natural history of a particular taxonomic group of multicellular organisms, and use this expertise to address fundamental questions that help us understand organismal evolution and the traits and strategies that organisms display. The candidate could work within a variety of disciplines including evolutionary biology, development, physiology and/or ecology, but preference will be given to candidates who employ state-of-the-art mechanistic and experimental approaches in a phylogenetic and/or comparative context. Applicants should have a Ph.D. and preferably postdoctoral experience, demonstrated excellence in their field of organismal biology, a collaborative outlook and a dedication to undergraduate and graduate teaching.

Candidates should submit via the website <https://academicjobsonline.org/ajo/jobs/14675>: a short cover letter, curriculum vitae, contact information for three references, a research statement, a statement

CornellU PlantEvolution

Link: <https://academicjobsonline.org/ajo/jobs/14180>
Position: Assistant/Associate Professor; Plant Biology; tenure track, academic year appointment (9-month)

Start Date: July 1, 2020 or as negotiated

Location: School of Integrative Plant Science, Plant Biology Section, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY

The School of Integrative Plant Science at Cornell University (<https://sips.cals.cornell.edu>) invites applications for a tenure track position at the Assistant or Associate Professor level in Plant Synthetic Biology. Plant synthetic biology is an emerging field that combines engineering principles with plant biology. Plant synthetic biology will play an important role in the future of agriculture for traditional crop improvement, in enabling synthesis of novel products of nutritional, pharmaceutical or other values, as well as in fundamental understanding of plant biological processes. The new faculty member will be expected to develop a strong, internationally recognized program in plant synthetic biology. Examples of relevant research topics include, but are not limited to: i) the engineering of genetic circuits to program predictable plant behavior and traits, ii) the generation of novel traits to improve crop plant

productivity, iii) transforming plants, cyanobacteria, or algae into platforms that synthesize chemicals and complex biomolecules by reconfiguring existing biosynthetic pathways or incorporating newly designed pathways from other organisms, iv) engineering and introducing in planta biosensors for rapid detection and high-throughput phenotyping of biotic (e.g. viruses, bacteria, fungi, natural products) and abiotic (e.g. temperature, chemicals, toxins) factors from the sub-cellular to whole-organism scale.

The ideal candidate will thrive in the highly collaborative environment of Cornell University, which includes diverse faculty affiliated with the School of Integrative Plant Science (SIPS) in the College of Agriculture and Life Sciences (CALS), Cornell Initiative for Digital Agriculture, Robert Frederick Smith School of Chemical and Biomolecular Engineering, Boyce Thompson Institute, and the USDA Agricultural Research Service Robert W. Holley Center for Agriculture and Health. The expected affiliation for the position will be the SIPS Section of Plant Biology on the Ithaca campus. The position will have a 60% research and 40% teaching responsibility. The successful candidate will teach in the areas of comparative physiology, plant hormone biology, stress response, chemistry of plants, and/or plant genetic engineering using synthetic biology tools.

SIPS and CALS at Cornell embrace diversity, and seek candidates who will create a climate that attracts students of all races, nationalities, and genders. Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans and Individuals with Disabilities. Cornell understands the needs of dual career couples, which it attempts to meet through a Dual Career program and membership in the Upstate New York Higher Education Recruitment Consortium, which assists dual career searches. Visit <http://www.hercjobs.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 feel welcomed here, to support your well-being, and to help with child care, elder care, and those with disabilities. For more details, see: https://hr.cornell.edu/sites/default/files/documents/family_resources_faculty.pdf. Qualifications: Ph.D. in Plant Biology, Chemical Engineering, Biomolecular Engineering, or related disciplines. The candidate should welcome the opportunity to work in a multidisciplinary and multicultural setting and create a collegial professional environment. Well-qualified applicants are expected to have a demonstrated record of publication excellence. Preferred qualifications include postdoctoral

experience, ability to work with a team and ability to communicate effectively with students, colleagues, and external stakeholders.

Salary and Benefits: Salary is competitive and commensurate with background and experience. An attractive fringe benefits package is provided.

Application procedure: Submit as a single PDF file to Academic Jobs Online (<https://academicjobsonline.org/ajo/jobs/14180>) a letter summarizing your background and qualifications, a statement of research

— / —

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>

CzechRep 1yr BioinformaticsBiostatistics

Dear colleagues,

Please note our opening for a biostatistician/bioinformatician in plant evolution at the Bioinformatics department at Institute of Botany CAS (IBOT) (Pr¹ahonice, Czech Republic). The full time position is funded for one year with option for extension.

Application deadline: Oct 30 2019.

Full details and instructions to apply in the link:

<https://euraxess.ec.europa.eu/jobs/446974> Best regards, Yann Bertrand

Yann Bertrand

Head of the Bioinformatics Dep.

Institute of Botany of the CAS, Zámek 1, 252 43 Pr¹ahonice Czech Republic

+20 271 015 472

yann.bertrand@ibot.cas.cz

Yjk Bertrand <yjk_bertrand@ybertrand.org>

EmoryU 2 TeachingEvolution

The Department of Biology at Emory University, Atlanta, GA, invites applications for two lecture track faculty positions (open rank). We seek candidates with a Ph.D. in the biological sciences and a strong commitment to pedagogy and a specific interest in teaching and advising undergraduates. Applicants having prior experience with evidence-based teaching practices are encouraged to apply; postdoctoral experience is preferred. Faculty appointments will be made at the lecture track rank commensurate with current academic standing and achievement as Lecturer, Senior Lecturer, or Professor of Pedagogy (see description of ranks and terms at http://college.emory.edu/faculty/faculty/Policy-for-Appointment-and-Review-of-LTF_Sept-20-2018.pdf).

Demonstrated ability to teach introductory biology is most important, but we also seek teaching and scientific expertise in upper level lecture and laboratory courses, especially in cellular, molecular, and/or organismal biology. In addition to teaching, commonly four courses per year, successful applicants will be expected to contribute to the academic life and governance of the Department, College of Arts and Sciences, and the University.

The appointee will join a cohesive group of tenure track (24) and lecture track (10) faculty (<http://www.biology.emory.edu/>), working collaboratively in the teaching and service missions of Emory University, a top 20 research university. Emory is located on a beautiful campus in Atlanta (<http://www.atlanta.net/>), one of the United States' most exciting, diverse, and affordable metropolitan areas with sports, natural, and cultural attractions.

Applicants should submit the following: 1) a cover letter; 2) a CV; 3) a reflective statement of your teaching philosophy, experience, and interests (1-3 pages); 4) a statement of your experience and vision for fostering an inclusive learning environment for students of diverse backgrounds (1 page); and 5) if available, sample course materials (e.g. syllabi, assessments, summary of course evaluations; up to 5 documents combined into a single pdf). Applicants should arrange to have three confidential letters of recommendation submitted on their behalf. All files or inquiries should be submitted electronically to: <https://apply.interfolio.com/68250>. Review of applications will start November 1, 2019; to ensure full consideration, all materials should be re-

ceived by December 1. Preliminary interviews will begin in December.

For technical assistance with Interfolio, contact help@interfolio.com or call (877) 977-8807. For questions about the position, please contact LTF-Search@emory.edu. Emory University is an Equal Opportunity/Affirmative Action/Disability/Veteran employer. Women, minorities, people with disabilities, and veterans are strongly encouraged to apply.

Dr. Christopher Beck Department of Biology Emory University Atlanta, GA 30322

christopher.beck@emory.edu

404-712-9012 FAX 404-727-2880

"Beck, Christopher" <cbeck@emory.edu>

GeorgeMasonU Genetics

The George Mason University Department of Biology, within the College of Science (COS), invites applications for a full-time, tenure-track Assistant Professor position in Genetics, beginning August 2020. 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 cultural inclusive environment.

Candidates are expected to develop and maintain a nationally recognized and externally funded research program in their area of expertise, and teach and advise in the department's undergraduate and graduate programs. Teaching responsibilities will include a lecture section of a core course for undergraduates in both fall and spring semesters and graduate courses.

The ideal candidates will have expertise in the one of the following areas: human/medical genetics, genetics related to infectious diseases, quantitative genetics, functional genomics, and genetic engineering

For full consideration, for position number F6219z applicants must apply 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. Deadline for full consideration: September 23, 2019.

For more information about the Department of Biology, visit us on the web at <http://biology.gmu.edu/>

. For more information about the College of Science, visit <https://cos.gmu.edu/> Dr. Ylenia Chiari Assistant Professor

Department of Biology George Mason University Science and Technology Campus 10900 University Boulevard, MSN 4D4 407 Colgan Hall Manassas, 20110 VA USA

Phone: (703) 993-4467 Email ychiari@gmu.edu
Lab Webpage <http://www.yleniachiarit.it> Twitter
https://twitter.com/ylenia_chiari Ylenia Chiari
<yle@yleniachiarit.it>

HarvardU EvoDevo

The MCB Department < <https://www.mcb.harvard.edu/> > at Harvard University is looking to appoint a Full Professor in Developmental Biology. We are interested in ALL types of developmental biology, especially but not limited to ones using quantitative approaches to developmental problems. “Quantitative approaches” could include, but are not limited to, imaging, genomics or computation.

A link to the ad is below - despite the date in this ad, we are still actively seeking and considering applications. Please spread the word widely about this position, and contact me if you would like more information about the position, MCB, or Harvard.

<https://academicpositions.harvard.edu/postings/9093>
Cassandra Extavour

Dr. Cassandra Extavour Professor Department of Organismic and Evolutionary Biology Harvard University 16 Divinity Avenue, BioLabs 2087 Cambridge, MA 02138, USA

Office Tel. 1 617 496 1935 Lab Tel. 1 617 496 1949/1200
Fax. 1 617 496 9507

extavour@oeb.harvard.edu

<http://www.extavourlab.com> Extavour Lab Administration: Rosa Capellan Tel. 1 617 496 2132 rosacapellan@fas.harvard.edu

EDEN: Evo-Devo-Eco Network <http://www.edenrcn.com> edenrcn@fas.harvard.edu

“Extavour, Cassandra” <extavour@oeb.harvard.edu>

IllinoisStateU Evolution

The School of Biological Sciences at Illinois State University in Normal, IL (www.bio.illinoisstate.edu) invites applications for two, nine-month, tenure-track positions, one each in EVOLUTIONARY BIOLOGY and CONSERVATION BIOLOGY at the level of Assistant Professor. The School of Biological Sciences comprises 26 faculty, approximately 65 graduate students (M.S. and Ph.D.), and over 750 undergraduate majors. It offers a collegial environment fostering collaboration among organismal biologists, cell and molecular biologists, physiologists, and neuroscientists.

The School of Biological Sciences is committed to increasing the diversity of the campus community, recognizing that a diverse faculty, staff, and student body enriches the scholarly experiences for the ISU campus and greater community. Candidates who have experience working with a diverse range of faculty, staff, and students, and who can contribute to the climate of inclusivity are encouraged to apply. We are sensitive to the needs of dual career couples.

ASSISTANT PROFESSOR OF EVOLUTIONARY BIOLOGY. We seek candidates whose research addresses fundamental evolutionary questions in the laboratory or field. We are particularly interested in candidates that take an integrative approach to their research, and welcome applicants utilizing quantitative and modern molecular approaches. Candidates should be able to contribute to courses in evolutionary biology at the undergraduate and graduate levels.

ASSISTANT PROFESSOR OF CONSERVATION BIOLOGY. We seek candidates whose research addresses contemporary issues in conservation biology, broadly defined. We are particularly interested in candidates that bridge conservation with related fields such as evolution, ecology, genetics, or physiology, and are able to contribute to course offerings in conservation biology at the undergraduate and graduate levels.

Successful candidates are expected to establish a rigorous, nationally recognized, extramurally funded research program, mentor B.S., M.S. and Ph.D. students in their research groups, and have the ability to provide effective, evidence-based instruction in their discipline. A Ph.D. in the specific field of biology or a closely related field, and post-doctoral experience are required. State law mandates demonstrable oral proficiency in the English

language as a requirement of this position. Salary is competitive and commensurate with qualifications and experience.

Please complete an online faculty application for posting number 0712492 (Evolutionary Biology) or 0712494 (Conservation Biology) at www.jobs.ilstu.edu. Applicants will be instructed to attach: i) a cover letter, ii) curriculum vitae, iii) a two-page research statement, iv) a one-page teaching philosophy, v) PDFs of three representative publications, and vi) names and e-mail addresses for three references. Review of applications will begin on October 14, 2019 and continue until the positions are filled. Intended start date is August 16, 2020. Questions about the Evolutionary Biology search should be directed to Dr. Ben Sadd (bmsadd@ilstu.edu), while questions about the Conservation Biology search should be directed to Dr. Rachel Bowden (rmbowde@ilstu.edu).

Illinois State University is an Equal Opportunity/Affirmative Action employer. Minority/Women/Disability/Veteran.

Dr Ben Sadd Associate Professor of Infectious Disease Ecology Assistant Director of Graduate Studies 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

“bmsadd@ilstu.edu” <bmsadd@ilstu.edu>

IllinoisStateU SchoolDirector

The School of Biological Sciences at Illinois State University invites applications for the position of Director. The position is a 12-month, 5-year (renewable) term with a preferred starting date of July 1, 2020. The Director will provide academic and administrative leadership, manage and secure resources for the School, promote excellence in research and teaching, encourage pursuit of external funding, and foster a collegial atmosphere that supports our mission. Candidates who have experience working with a diverse range of faculty, staff, and students and who can contribute to a climate of inclusivity are especially encouraged to apply.

The successful candidate must have a Ph.D. or equivalent in Biology or a related field, a significant record of research and teaching, demonstrated leadership abilities, and a commitment to shared academic governance. The

Director must be tenured at the rank of associate or full professor. State law mandates demonstrable oral proficiency in the English language as a requirement for this position. This position is security sensitive, and employment is contingent upon the candidate's satisfactory clearance of a criminal background investigation based on University policy. Salary is commensurate with qualifications and experience.

The School of Biological Sciences is home to 26 academically diverse tenured/tenure-track faculty, 9 staff members, approximately 60 graduate students (MS and PhD), and over 750 undergraduate majors. The School has been awarded close to \$11 million in external grants and funding over the past five years from diverse federal agencies (e.g., NIH, NSF, DOE, USDA, Education). Additional information about the School may be found at www.biology.illinoisstate.edu. To assure full consideration, please complete an online faculty application and attach the following documents: 1) Letter of application; 2) Administrative statement of leadership philosophy; 3) Research statement; 4) Teaching statement; 5) Curriculum vita; and 6) List of three or more professional references to posting number 0712516 at www.IllinoisState.edu/jobs. In addition, please arrange for at least three letters of reference to be sent via email to bscdirector@ilstu.edu. Review of applications will begin October 18th and will continue until the position is filled. Questions may be directed to John Kostelnick (jkostelnick@ilstu.edu), Chair of the Search Committee.

Illinois State University is an Equal Opportunity Employer.

If you are having difficulty accessing the system, please call Human Resources at (309) 438-8311.

If you are an individual with a disability and need a reasonable accommodation under the Americans with Disabilities Act (ADA) or other state or federal law you may request an accommodation by contacting the Office of Equal Opportunity and Access at 309-438-3383.

Additional Information: Illinois State University: Illinois State University (<http://www.illinoisstate.edu>) is committed to fostering a small-college atmosphere with large- university opportunities. Founded in 1857, ISU is the oldest public university in Illinois with an enrollment of approximately 21,000 students in its six colleges. The School of Biological Sciences is housed with the College of Arts and Sciences (<http://www.cas.ilstu.edu>) which is home to 18 academic departments and interdisciplinary programs. Please visit the University's points of pride at <https://illinoisstate.edu/points-of-pride/>. Illinois State made U.S. News & World Report's 2016 rankings of America's best public national universities based on academic quality and excellence. The Chronicle of Higher

Education named Illinois State University one of the “Great Colleges to Work For” for a third year in a row.

Bloomington-Normal Community: Illinois State University is located in the growing twin cities of Bloomington and Normal, with a population of approximately 167,000. The community is home to Illinois Wesleyan University, Lincoln College, Heartland Community College, St. Joseph Medical Center, Advocate BroMenn Medical Center, Country Financial, and State Farm Insurance Corporate Headquarters. The community has distinguished itself for its outstanding school systems and educational attainment, parks and recreation, health care, job growth, economic opportunity, and low crime. Forbes magazine ranked Bloomington-Normal the 37th best small places for businesses and careers and 14th best for education (<https://www.forbes.com/places/-il/bloomington/>) Bloomington-Normal is conveniently located about three hours from Indianapolis, two hours from both Chicago and St. Louis and an hour from Peoria,

— / —

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>

IndianaU EvolutionaryBiology

Tenure Track Faculty Position in Evolutionary Biology
Indiana University Bloomington

The Department of Biology at Indiana University Bloomington (IUB) invites applications for an Assistant Professor, tenure-track, in the area of Evolutionary Biology to begin August 2020. The Department of Biology is committed to recruiting and retaining diverse faculty. We especially welcome applicants who use genetic approaches to understanding evolution, including population genetics, phylogenetics, ecological genetics, and quantitative genetics.

Applicants must hold a Ph.D. and have postdoctoral experience in relevant fields, with a strong record of research accomplishments. Successful candidates will be expected to develop a vigorous externally funded research program, and to participate in teaching at the undergraduate and graduate levels. Candidates who have demonstrated a commitment to working with women and underrepresented minority students through

teaching, mentoring, or administration are especially encouraged to apply. The College of Arts and Sciences is committed to building and supporting a diverse, inclusive, and equitable community of students and scholars.

To apply: Submit a cover letter, CV, research statement (past, present, and future), a teaching statement, and names and contact information for three or more references by October 15, 2019 via <http://indiana.peopleadmin.com/postings/8425>. Please address inquiries concerning the search to Jennifer Tarter at 812-856-3984 or jenjones@indiana.edu

The Evolution, Ecology, and Behavior graduate program at Indiana University is top-ranked based on the most recent National Research Council survey: <https://biology.indiana.edu/news-events-newsletters/2011-newsletter/eeb-top-rankings.html>. For information about the Department of Biology and for links to the campus and the Bloomington community, see: <http://www.bio.indiana.edu>. Indiana University is an equal employment and affirmative action employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation, gender identity or expression, genetic information, marital status, national origin, disability status or protected veteran status.

Matthew Hahn Professor Department of Biology & Department of Computer Science 1001 E. 3rd St. Indiana University Bloomington, IN 47405 Phone: (812)856-7001 <http://www.indiana.edu/~hahnlab> “Hahn, Matthew” <mwh@indiana.edu>

JohnInnesCentre UK InsectGenomes

Applications are invited for an individual with knowledge of genetics approaches to join the John Innes Centre as Entomology Facility Manager. Candidates should have experience of handling (invertebrate) genome sequence data and a solid understanding of what knowledge may be gained from analysing these data.

The Entomology Facility:

The John Innes Centre is an independent, international centre of excellence in plant science, genetics and microbiology.

The Entomology Facility provides a unique and specialised service for undertaking and supporting

invertebrate-related studies.

Our skilled and experienced team of entomologists maintain, design, undertake and oversee studies using many different species of invertebrates, including non-native exotic species (held under DEFRA licence), and native plant pest species, within a purpose-built quarantined insectary. Find out more about the Entomology team here: <https://www.jic.ac.uk/research-impact/scientific-facilities/entomology-and-insectary/> The role:

We are seeking an enthusiastic individual to lead and manage the operation of the John Innes Centre Entomology Facility. This will include supporting research on invertebrates and plant/pathogen interactions, as well as developing the facility and its work to ensure future successes.

This diverse role will provide the successful candidate with a broad range of exciting opportunities, including:

- . Collaborating with scientists involved in a diverse range of invertebrate-related research;
- . Developing independent research projects in collaboration with (inter)national industry, charities and research scientists at the John Innes Centre, Norwich Research Park and externally, including industry;
- . Promoting the John Innes Centre's entomological activities through public engagement and local/national media opportunities;
- . Developing the future direction of the Entomology Facility and helping obtain funding to enhance research opportunities.

The ideal candidate:

Candidates should possess a PhD, or equivalent research experience, in Biological Sciences or similar discipline. Previous experience with handling and rearing (invertebrate) organisms, and planning experiments with them, preferably (but not necessarily) in combination with plants/crops, is essential.

Excellent verbal and written communication skills (including in scientific writing) and interpersonal skills are essential, as is with the ability to supervise staff and students. The successful candidate will have entrepreneurial skills or be keen to develop these skills and shows an interest in outreach activities, for example engaging with school children, the general public, journalists and social media.

Additional information:

Salary on appointment will be within the range 39,990 to 48,775 per annum depending on qualifications and experience. This is a fulltime post on a permanent basis.

For further information and details of how to apply, please visit our web site <http://jobs.jic.ac.uk> or contact the Human Resources team on 01603 450462 or

nbi.recruitment@nbi.ac.uk quoting reference 1003770.

We are an equal opportunities employer, actively supporting inclusivity and diversity. As a Disability Confident organisation, we guarantee to offer an interview to all disabled applicants who meet the essential criteria for this vacancy. The John Innes Centre is also proud to hold a Gold Award from Athena SWAN and is a member of Stonewall's Diversity Champions programme.

"Eve Edwards (NBI)" <Eve.Edwards@nbi.ac.uk>

LouisianaStateU QuantitativeBiology

Tenure-track Assistant Professor of Quantitative Biology
Louisiana State University

The Department of Biological Sciences and the Center for Computation and Technology at Louisiana State University jointly invite applications for a tenure-track Assistant Professor in Quantitative Biology. The ideal candidate is a biologist conducting hypothesis-driven research using innovative approaches to large-scale analysis. The position is open to all areas of biology, preference will be given to those candidates who actively develop cutting-edge data science techniques including, but not limited to, informatics, data mining, machine learning, artificial intelligence, statistics, and large-scale data visualization. This hire is part of a larger initiative to establish a university-wide program in Interdisciplinary Data Science.

Job Responsibilities:

50% Develop and maintain an independent and extramurally funded research program at the intersection of data science and biology. 50% Teach undergraduate and/or graduate level courses in a biological sciences discipline, and direct/supervise graduate students. Participate in service activities pertaining to the mission of the Department and the Center, and the advancement of the profession.

Minimum Qualifications:

PhD in biology, data science, computational biology, bioinformatics, computer science, or related field; and a successful track record of independent research..

Preferred Qualifications:

Postdoctoral experience or its equivalent preferred.

Brant Faircloth <brant@faircloth-lab.org>

MasseyU Indigenous Human Genomics

Postdoctoral Fellow in Indigenous Human Genomics

We are looking for a motivated postdoctoral fellow to study the diversity and nature of structural variation in the genomes of Maori and Pasifika Aotearoa New Zealand populations, with the aim of informing future research into the genetic determinants of health in these populations.

The postdoctoral fellow in this purely computational position is expected to help establish the research program over a two year fixed term period, with an emphasis on working towards genomic knowledge and datasets that will benefit Maori and Pasifika via novel health-related research. This research program involves ongoing partnership with Maori and Pasifika communities.

This is a purely analytical position and therefore requires solid quantitative and computational skills, with the ability to apply bioinformatic applications to long-read genome analysis. At a minimum, confidence in bioinformatics and scripting is required. Training in genomics can be provided as needed, and candidates from non-standard research backgrounds with a clear fit to the position are encouraged to apply.

We offer a comprehensive package reflective of the candidate's research and skills, with starting salaries that are considerably more competitive than postdoctoral positions in the US and Europe.

Our team is firmly embedded in the international scientific community, with extensive collaborative links to Europe, the United States, Asia and Australia. We have strong connections with Indigenous researchers and communities. Ongoing training is a key focus for postdocs. As a computational biology group, we offer a supportive environment for quantitatively-inclined postdocs to work towards independence.

This position is based in the computational biology research group at Massey University in the city of Palmerston North, New Zealand. The position offers a rare opportunity to experience New Zealand's unique natural and cultural environment while undertaking world leading research. Palmerston North, a university town with a diverse community, offers a full range of social and cultural amenities. The city is located between mountains and the sea, and presents regular opportunities

for hiking, skiing, surfing and adventure sports. It also has a good café scene for those of a more cosmopolitan bent (<https://www.manawatu.nz.co.nz/live-work/>).

Our research group aims to achieve work-life balance within a productive scientific environment. The group is highly international and family friendly, and applicants from all countries and backgrounds are actively encouraged to apply.

For further information, please visit my group's website (<https://www.genomicus.com>) and the website of our funder, Genomics Aotearoa (<https://www.genomics-aotearoa.org.nz>).

For preliminary enquiries about this position, please contact Murray Cox (m.p.cox@massey.ac.nz).

In your application please include:

§A brief statement of research experience and research interests relevant to the project, focusing on short to mid-term career goals. §A CV including qualifications and scientific publications. §The names and contact details of three referees willing to provide a confidential letter of recommendation upon request.

Apply here: <https://tinyurl.com/y3butm7v> Prof Murray Cox Massey University, New Zealand

Murray Cox <murray.p.cox@gmail.com>

MBL ResAssist Microbial Protein Evolution

Research Assistant I 'V Investigating Microbial Protein Evolution with Functional Genomics

Position Summary: The Paul Lab at the MBL seeks a highly motivated individual to join the Josephine Bay Paul Center for Comparative Molecular Biology and Evolution as a Research Assistant (Level I). The successful candidate will be responsible for carrying out routine laboratory work as outlined below. Our research group is looking at the processes that diversify microbial genes, to better understand the functional significance of protein variation in cells and viruses from a variety of biomes. This is a year-round, full time, non-exempt position.

Additional Information: The primary aim of the position is to maintain the molecular lab facilities and to assist in developing genetic experiments with bacteria/archaea primarily derived from marine and freshwa-

ter ecosystems. Responsibilities will include establishing and monitoring cell cultures, maintaining lab equipment, ordering lab supplies, and conducting basic molecular experiments.

Basic Qualifications: A Bachelor's degree in biology, molecular biology or a related discipline is required. This position requires an independent, organized, and self-motivated individual with strong problem-solving skills and the ability to multitask. Prior experience in a research lab and applying basic molecular biology techniques is required. Excellent written, verbal, and interpersonal skills; attention to detail; and a strong work ethic are essential. Position level and salary will depend upon education and experience.

Preferred Qualifications: The ideal candidate will have prior experience with nucleic acid purification, PCR, and maintaining (bacterial/archaeal) cell cultures. An understanding of basic molecular biology concepts is important.

Physical Requirements: Minimal exposure to biohazardous chemicals. Occasional lifting of heavy objects.

Instructions: Please apply on the MBL website and provide the following required documents: cover letter, resume/CV, copies of most recent transcripts (unofficial is acceptable), and contact details of 3 references. No request for reference letters at this time. <https://recruiting.ultipro.com/MAR1033MBL/JobBoard/4c3007c3-6354-41de-a13f-d95be60d91e9/OpportunityDetail?opportunityId=-d752b441-dd94-4718-b0ab-eac6f8c80da1> Jennifer Larkum <jlarkum@mbledu>

Melbourne Computational Plant Breeding

Dear All,

We have a Senior Research Scientist position in Computational Plant Breeding currently advertised in our group in Melbourne, Australia. The successful applicant will develop tools enabling faster genetic gain for important crop species through research on genomic selection, with a focus on developing genomic prediction approaches that link with crop biophysical models underpinning breeding programs within Agriculture Victoria and multi-national commercial partners.

If necessary, assistance with VISA applications will be provided.

More information can be found here <https://jobs.careers.vic.gov.au/jobs/VG-026416> Please feel free to contact me for a confidential discussion or to distribute this email further in your networks.

Best wishes,

Hans

Dr. Hans Daetwyler | Research Leader Computational Biology Agriculture Victoria Research | Agriculture Victoria | DJPR Senior Research Fellow | School of Applied Systems Biology | La Trobe University AgriBio Centre, 5 Ring Rd., Bundoora 3083, Victoria T: 03 9032 7037 | E: hans.daetwyler@agriculture.vic.gov.au <https://scholar.google.com/citations?hl=en&user=-kxaT928AAAAJ> "Hans D Daetwyler (DEDJTR)" <hans.daetwyler@agriculture.vic.gov.au>

NTNU Norway WolfPopGenomics

Application deadline: 29 September, 2019.

The Department of Natural History, NTNU University Museum, Norwegian University of Science and Technology, invites applications for a Researcher position within the field of population genomics of wolves (*Canis lupus*). The position is for two years. Questions about the position can be directed to Head of Department, Hans K. Stenøien, phone number: +47 91897592, e-mail: hans.stenoien@ntnu.no. Please submit your application electronically (website: jobb norge.no) with your CV, diplomas and certificates. Applicants invited for interview must include certified copies of transcripts and reference letters. Please refer to the application number 2019/26584 when applying.

The position is part of an ongoing project to investigate biogeographical and genetic origin of the wolves that have established the present south-Scandinavian wolf population. We aim also to investigate questions related to hybridisation between wolves and dogs.

The project is initiated by the Norwegian Parliament and is financed by the Norwegian Environmental Agency. It is a collaborative project between the NTNU University Museum and the University of Copenhagen.

Main duties and responsibilities The person hired will perform bioinformatic and population-genomic analyses on several hundreds of sequenced wolf genomes derived from samples taken throughout the species distribution range, as well as published and unpublished dog genomes.

The principal research focus will be to improve our understanding of the relationship of the current Norwegian wolf population to both other Eurasian populations, as well as the historic Norwegian wolf population.

The person will: - Assist with data mapping and organisation of the dataset - Compile relevant, publicly available reference genome and genome-scale (e.g. SNP) data - Undertake the population genomic analyses described above - Help to compile the results into formal reports, and help present them in-person to the Norwegian Environment Agency - Prepare academic papers on the results - Engage in outreach with the general public in the context of the ongoing wolf debate

Qualification requirements - PhD in biology, with a focus on computational and/or population genomics - PhD degree must be obtained by position start date. - Prior experience manipulating and analyzing genome-scale datasets in the context of population/evolutionary genetics and phylogenomics - Advanced computational genomics knowledge, including scripting (e.g. python, perl) and UNIX command-line experience - Experience writing and contributing to the publication of academic papers

- Fluency in English (written, reading, spoken)

Desired qualifications - Experience with palaeo-genomic datasets (ancient DNA) - Experience working with genotype likelihoods rather than discrete genotypes - Good publication track record

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability, as well as motivation, in terms of the qualification requirements specified in the advertisement.

We offer - exciting and stimulating tasks in a strong international academic environment - an open and inclusive work environment with dedicated colleagues - favourable terms in the Norwegian Public Service Pension Fund - employee benefits

Salary and conditions The gross salary for the position of researcher code 1109 is normally remunerated at gross from NOK 523.200 - 627.700 before tax per year, depending on qualifications and seniority. From the salary, 2 % is deducted as a contribution to the Norwegian Public Service Pension Fund.

About the application: Publications and other academic works that the applicant would like to be considered in the evaluation must accompany the application. Joint works will be considered. If it is difficult to identify the individual applicant's contribution to joint works, the applicant must include a brief description of his or her

contribution.

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

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

Mike Martin <sameoldmike@gmail.com>

OklahomaStateU 2 GenomicsEvolPhysiology

ASSISTANT PROFESSORSHIP IN GENOMICS

The Department of Integrative Biology at Oklahoma State University invites applications for a tenure-track Assistant Professorship in the field of genomics. We seek a colleague who brings novel approaches to generating and analyzing genomic data from natural animal populations to test and refine theory in any of the following broadly defined sub-disciplines in biology: behavior, development, ecology, evolution, or physiology. Applicants should have a Ph.D. and demonstrated excellence in research and scholarship.

The Department of Integrative Biology comprises 24 faculty, numerous active adjunct and emeritus members, 66 graduate students, and nearly 900 undergraduates majoring in biology, zoology, and physiology. Faculty members actively collaborate on three main research themes: ecology, evolution, and environmental stress. Our research is supported by external grants, and the successful applicant will be expected to establish an extramurally funded research program. Teaching loads generally include one graduate or undergraduate course per semester.

Oklahoma State University is a Carnegie Tier 1 research university with excellent facilities for research and instruction, including a high-performance computing center. Because of its mid-continent location that spans a broad expanse of habitats, from deciduous forest to semi-arid grasslands, Oklahoma offers a rich tapestry of prairie and forest ecosystems that support an exceptional level of biodiversity.

The University is located in Stillwater, Oklahoma, which rightfully has earned the reputation of being the friendli-

est college town in America. The town offers an exceptionally high quality of life'Xa thriving college community with a low cost of living, and a local airport served by several daily commercial flights. Not far away, two major metropolitan areas (Tulsa and Oklahoma City) offer numerous trendy shopping, dining, and cultural activities.

To apply, please submit the following items via Interfolio (<https://apply.interfolio.com/67854>): cover letter; curriculum vita; separate research, teaching, and diversity statements; and contact information for three professional references. Application review will begin October 15, 2019, with employment starting August 2020 or as negotiated.

Oklahoma State University, as an equal opportunity employer, complies with all applicable federal and state laws regarding non-discrimination and affirmative action. Oklahoma State University is committed to a policy of equal opportunity for all individuals and does not discriminate based on race, religion, age, sex, color, national origin, marital status, sexual orientation, gender identity/expression, disability, or veteran status with regard to employment, educational programs and activities, and/or admissions. For more information, visit <https://eeo.okstate.edu> . "Moen, Daniel" <daniel.moen@okstate.edu>

ASSISTANT PROFESSORSHIP IN PHYSIOLOGY

The Department of Integrative Biology at Oklahoma State University invites applications for a tenure-track Assistant Professorship in the field of animal physiology. Candidates with experience in comparative, developmental, environmental, or evolutionary physiology are particularly encouraged to apply. Applicants should have a Ph.D. and demonstrated excellence in research and scholarship.

The Department of Integrative Biology comprises 24 faculty, numerous active adjunct and emeritus members, 66 graduate students, and nearly 900 undergraduates majoring in biology, zoology, and physiology. Faculty members actively collaborate on three main research themes: ecology, evolution, and environmental stress. Our research is supported by external grants, and the successful applicant will be expected to establish an extramurally funded research program. Teaching loads generally include one graduate or undergraduate course per semester.

Oklahoma State University is a Carnegie Tier 1 research university with excellent facilities for research and instruction, including a high-performance computing center. Because of its mid-continent location that

spans a broad expanse of habitats, from deciduous forest to semi-arid grasslands, Oklahoma offers a rich tapestry of prairie and forest ecosystems that support an exceptional level of biodiversity.

The University is located in Stillwater, Oklahoma, which rightfully has earned the reputation of being the friendliest college town in America. The town offers an exceptionally high quality of life'Xa thriving college community with a low cost of living, and a local airport served by several daily commercial flights. Not far away, two major metropolitan areas (Tulsa and Oklahoma City) offer numerous trendy shopping, dining, and cultural activities.

To apply, please submit the following items via Interfolio

— / —

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>

PrincetonU LabTech MammalianEvoDevo

Overview

A technician/lab manager position is available in the laboratory led by Ricardo Mallarino, Department of Molecular Biology, Princeton University (www.mallarinelab.org). The lab focuses on uncovering the genetic and developmental mechanisms by which form and structure are generated during vertebrate embryogenesis. We combine the study of emerging and traditional model organisms to explore questions relating to patterning and evolution of novelty in the mammalian skin. The lab uses a variety of approaches, including experimental embryology, genetics, genomics, imaging, and mathematical modelling to uncover gene function and understand mechanisms of evolutionary change.

Responsibilities The successful candidate will manage essential operating procedures for the lab and work with the PI and other lab members to design and perform experiments. Specifically, the candidate will develop in vivo functional and genome editing approaches in non-traditional model species and perform cell-culture based enhancer screens. Other duties will include molecular cloning, histology, in situ hybridization, nucleic acid extraction and library preparation, tissue culture and

media preparation, as well as lab maintenance, organization, safety and ordering.

Essential Qualifications Bachelor's or Master's degree in the biological sciences plus previous laboratory experience is required. Previous experience in cell culture techniques and rodent model systems is necessary (colony management, genotyping and dissections). Basic molecular biology methods and computer literacy are essential. Must be highly motivated and have demonstrated ability to plan, coordinate and carry out independent research. Excellent organization skills, ability to communicate effectively and willingness to learn new techniques are necessary traits. Applicants should be willing to commit to the position for at least two/three years.

Preferred Qualifications A strong background in molecular biology and/or genetics is preferred. Knowledge of rodent reproductive biology and surgical skills are a plus. Rank and salary are dependent upon qualifications and experience. â€

To apply for this position please submit a CV and a cover letter describing research interests to mallarino@princeton.edu.

—
Ricardo Mallarino, Ph.D.

Assistant Professor Department of Molecular Biology,
Princeton University

119 Washington Road, Princeton, NJ 08544-1014 Tel:
609-258-8964; <http://www.mallarinelab.org/> Ricardo
Mallarino <rmallarino@princeton.edu>

PrincetonU ResSpecialist EvolutionaryBiol

Research Specialist Position Akey Lab

Lewis-Sigler Institute for Integrative Genomics
Princeton University

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

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

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

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

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

Specific duties may include:

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

Essential Knowledge, Skills and Abilities:

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

Preferred Qualifications:

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

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

The final candidate will be required to pass a background check. Princeton University is an Equal Opportunity/Affirmative Action Employer and all qualified

applicants will receive consideration for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity or expression, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Laura Gallagher-Katz <lgallagh@Princeton.EDU>

ProvidenceCollege EnvBiolEvolution

Full-Time, Tenure-Track Assistant Professor in Environmental Biology and Evolution available August 2020.

The Department of Biology at Providence College invites applications for a tenure-track Assistant Professor position beginning fall 2020 to support a recently developed Environmental Biology Major. We seek outstanding candidates who hold a Ph.D. (post-doctoral experience preferred) in Environmental Science or a closely related discipline, such as Biology, Ecology, Evolutionary Biology, Marine Science, Conservation Biology and Geoscience.

Successful candidates are expected to develop and maintain an active, highly visible, extramurally funded research program with outstanding scholarship and to demonstrate excellence in teaching and mentoring of undergraduate students. We are open to considering candidates in any area of relevant expertise in the environment and who may foster collaborations among the diverse faculty at Providence College. Examples of areas of interest: community response to climate change; conservation; surface and ground water hydrology; effects of contaminants, such as marine and coastal plastics; biological sequestration of carbon; and organismal responses to ocean warming and acidification.

Review of applications will begin by November 2019. Applicants should submit on-line a curriculum vitae, graduate transcripts, statements of teaching philosophy and research interests, and three letters of reference. Complete details on this position are available on the College web site at: <https://careers.providence.edu>. For additional information please contact: Dr. Patrick J. Ewanchuk, Assistant Chair, Biology Department, Providence College, Providence, RI 02918-0001 or ewanchuk@providence.edu.

Providence College is a Roman Catholic four-year liberal arts institution conducted under the auspices of the Dominican Friars and seeks candidates who can affirm and contribute to its mission. Providence College is com-

mitted to upholding an academic culture and campus community that attracts and supports the development of a stellar and diverse faculty reflecting the global environment in which we live and work. The Biology Department places a high value on hiring individuals who are dedicated to teaching and mentoring students of diverse backgrounds to help promote an equitable and inclusive learning experience. An AA/EOE, the College especially encourages the applications of women and persons of color.

Elisabeth Arévalo

Elisabeth Arévalo, Ph.D. Department of Biology Providence College 1 Cunningham Square Providence, RI— 02918-0001 USA Email—earevalo@providence.edu

“Arevalo, Elisabeth” <EAREVALO@providence.edu>

RhodesCollege InvertebrateEvolution

Link: <https://jobs.rhodes.edu/postings/3376> The Department of Biology at Rhodes College seeks qualified applicants for a tenure-track faculty position as an Invertebrate Biologist to begin in August of 2020. Rhodes College believes that diversity and inclusion are critical to our success as an institution, and we seek to recruit, develop, and retain the most talented people from a diverse candidate pool. Candidates must have a Ph.D., research experience in invertebrate biology, and a commitment to undergraduate teaching and research. Laboratory start-up funds will be provided to support the expected development of a productive research program. The teaching responsibility of five courses per year (labs are counted as a full course) will normally include a course with laboratory for Biology majors that is related to the candidate's area of specialty, plus participation in the introductory biology course and laboratory covering organismal/ecological biology. Other teaching opportunities may include Senior Seminar, a course for non-science majors, or an additional course in the candidate's area of specialty. The successful applicant will need to show an interest in contributing to the interdisciplinary environmental science program of the College, and we encourage applications from individuals whose interests go beyond traditional disciplinary boundaries. Rhodes' location provides opportunities for research collaboration with investigators at several institutions, including the Memphis Zoo, the

Wolf River Conservancy, U.S. Department of Agriculture, St. Jude Children's Research Hospital, and the University of Tennessee Health Science Center.

Rhodes is a nationally ranked residential college committed to the liberal arts and sciences. Our highest priorities are intellectual engagement, service to others, commitment to diversity and inclusion, and honor among ourselves. Our students live and learn on one of the country's most beautiful campuses, located in the heart of Memphis, an economic, medical, and cultural center, making Rhodes one of a handful of prominent liberal arts colleges in a major metropolitan area. (<http://www.rhodes.edu/content/liberal-arts-city>)

Rhodes College prides itself on being a diverse, inclusive, and welcoming environment. We are an equal opportunity employer committed to diversity and anti-discrimination. (<https://handbook.rhodes.edu/-employee-handbook/employment-policies/anti-discrimination-and-harassment-policy>)

Please apply online at job.rhodes.edu. A complete application will include 1) a cover letter that addresses the strengths the candidate will bring as a teacher and scholar to a liberal arts college environment; 2) a curriculum vitae; 3) copy of graduate transcript, 4) the names and contact information for three references; 5) a statement of teaching philosophy, 6) a research plan, and 7) a separate statement that addresses how your experiences with teaching, scholarship, and/or service will contribute to a college community that includes a commitment to diversity and inclusion as one of its core values. Review of completed applications will begin October 9, 2019 and will continue until the position is filled. The online application system will solicit letters electronically from the candidate's recommenders, once their contact information has been entered by the candidate and all other required application materials have been submitted. Candidates from backgrounds typically underrepresented in higher education are strongly encouraged to apply. Background checks are required before candidates can be brought to campus for interviews.

Laport_Robert <laportr@rhodes.edu>

Rhodes College Microbiology Evolution

Link: <https://jobs.rhodes.edu/postings/3360> The Department of Biology at Rhodes College seeks qualified applicants for a tenure-track assistant professor position in Microbiology to begin in August of 2020. Rhodes College believes that diversity and inclusion are critical to our success as an institution, and we seek to recruit, develop, and retain the most talented people from a diverse candidate pool. Candidates must have a Ph.D., research experience in microbiology, and a commitment to undergraduate teaching and research. Laboratory start-up funds will be provided to support the expected development of a productive research program. The teaching responsibility of five courses per year (labs are counted as a full course) will normally include Microbiology and Microbiology Laboratory for Biology majors, plus participation in the introductory biology course covering cellular and molecular biology. Other teaching opportunities may include Senior Seminar, a course for non-science majors, or an additional course in the candidate's area of specialty. Rhodes' location provides opportunities for research collaboration with investigators at several institutions, including St. Jude Children's Research Hospital, the University of Tennessee Health Science Center, the Memphis Zoo, and the Wolf River Conservancy. The successful applicant will have the opportunity to participate in the interdisciplinary programs of the College, and we encourage applications from individuals whose interests go beyond traditional disciplinary boundaries.

Rhodes is a nationally ranked residential college committed to the liberal arts and sciences. Our highest priorities are intellectual engagement, service to others, commitment to diversity and inclusion, and honor among ourselves. Our students live and learn on one of the country's most beautiful campuses, located in the heart of Memphis, an economic, medical, and cultural center, making Rhodes one of a handful of prominent liberal arts colleges in a major metropolitan area. (<http://www.rhodes.edu/content/liberal-arts-city>)

Rhodes College prides itself on being a diverse, inclusive, and welcoming environment. We are an equal opportunity employer committed to diversity and anti-discrimination. ([https://handbook.rhodes.edu/-employee-handbook/employment-policies/anti-](https://handbook.rhodes.edu/-employee-handbook/employment-policies/anti-discrimination-and-harassment-policy)

discrimination-and-harassment-policy)

Please apply online at jobs.rhodes.edu. A complete application will include 1) a cover letter that addresses the strengths the candidate will bring as a teacher and scholar to a liberal arts college environment; 2) a curriculum vitae; 3) copy of graduate transcript, 4) the names and contact information for three references; 5) a statement of teaching philosophy, 6) a research plan, and 7) a separate statement that addresses how your experiences with teaching, scholarship, and/or service will contribute to a college community that includes a commitment to diversity and inclusion as one of its core values. Review of completed applications will begin October 7, 2019 and will continue until the position is filled. The online application system will solicit letters electronically from the candidate's recommenders, once their contact information has been entered by the candidate and all other required application materials have been submitted. Candidates from backgrounds typically underrepresented in higher education are strongly encouraged to apply. Background checks are required before candidates can be brought to campus for interviews.

Laport_Robert <laportr@rhodes.edu>

RockefellerU OrganismalBiologyAndEvolution

The Rockefeller University seeks exceptional, creative scientists to join its faculty. We invite applications from outstanding junior candidates for tenure-track positions and also welcome applications from tenured scientists at an early stage of their career.

The University has a laboratory, rather than department-based organizational structure that fosters interdisciplinary research. We encourage applications in the following areas:

Biochemistry, Biophysics, Chemical Biology, and Structural Biology Cancer Biology Cell Biology Genetics and Genomics Immunology, Virology, and Microbiology Mechanisms of Human Disease Neurosciences and Behavior Organismal Biology and Evolution Physical, Mathematical, and Computational Biology Stem Cells, Development, Regeneration, and Aging

The Rockefeller University provides strong support for the work of its faculty including competitive salary, a range of work-life employee benefits, start-up funds, ren-

ovated laboratory space and state-of-the-art core facilities. There are extensive opportunities for collaboration within the University and with neighboring institutions.

Visit <http://www.rockefeller.edu/facultysearch> to submit your application online and view further information about the positions.

Application deadline is October 1, 2019.

Address questions to facultysearch@rockefeller.edu.

Rockefeller University is an equal opportunity employer and will consider all qualified applicants for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

“Jill C. Benz” <benzj@mail.rockefeller.edu>

RutgersU EvolutionaryEcol

Position Information

Recruitment/Posting Title Assistant Professor

Department SASN - Biological Sciences

Salary Open

Posting Summary

The Department of Biological Sciences (Ecology and Evolution cluster), Rutgers University-Newark, seeks to hire a tenure-track assistant professor to begin September 2020. We seek applicants who will augment the department's existing strengths and be potential collaborators (please see <https://sasn.rutgers.edu/academics-admissions/-academic-departments/biological-sciences> for current faculty research). We are looking especially for organismally-focused field ecologists and/or evolutionary ecologists who are working with or use any of the following in their research program, including any combination of: field studies, soil ecology, microbes, plant biology, evolutionary genomics, transcriptomics, and/or evolutionary ecology. However, all strong applicants in the fields of organismal ecology and evolution will be considered. Responsibilities: The successful applicant will be expected to maintain a dynamic and competitive research program, advise graduate students, include undergraduates in their labs, apply for external funding, and teach both undergraduate and graduate courses. A competitive salary and startup funds will be provided. Requirements: PhD focused in Ecology or Evolutionary

Biology, at least one year of Postdoctoral experience, a strong publication record, teaching experience, and successful grant writing. Review of applications will begin November 1, 2019, and position will remain open until filled.

Posting Number 19FA2007

Posting Open Date 08/05/2019

Posting Close Date

Qualifications

Minimum Education and Experience

Ph.D. focused in Ecology or Evolutionary Biology, at least one year of postdoctoral experience, a strong publication record, teaching experience, and successful grant writing.

Required Knowledge, Skills, and Abilities

Equipment Utilized

Physical Demands and Work Environment

Overview

Rutgers University-Newark (RU-N) is an extremely diverse and vibrant university located in Newark, NJ. The department is well integrated into a large, highly collaborative ecology and evolutionary biology community across Rutgers University as well as our federated/joint biology department with The New Jersey of Technology. We have strong connections to many other programs (Rutgers Medical Schools, and Departments of Ecology, Evolution & Natural Resources and Entomology at Rutgers University-New Brunswick, the American Museum of Natural History, as well as the myriad of other nearby universities in NJ and NYC). RU-N offers outstanding core facilities including a high-powered computer cluster, genomics, proteomics, transgenic animals, confocal microscopy and cryo-EM. Rutgers has a field station in the NJ Pine Barrens, an excellent place for running field courses and local research, and access to long term field sites in Liberty State Park, the Meadowlands and other parks.

Statement

The School of Arts and Sciences-Newark (SASN) is a place where exploration, discovery, and imagination come together to form the core of a liberal arts education. We serve all undergraduates at Rutgers University-Newark (RU-N); and offer a broad selection of more than 2,000 undergraduate and graduate courses a year in more than 40 subjects. SASN combines the best of a large research university with a small liberal arts college. RU-N is a remarkably diverse, urban, public research university that is not just in Newark but of Newark-an anchor

of our home city. RU-N is located in a transportation hub with easy access to New York City, Philadelphia, and Washington, D.C. New Jersey offers vibrant and varied cultural activities, excellent schools, and opportunities to live in culturally diverse urban, suburban, or small-town settings within a short distance of campus. RU-N is consistently ranked one of the most diverse universities in the country by US News & World Report and is located minutes from New York City. For more information about RU-N: newark.rutgers.edu.

Posting Details

Special Instructions to Applicants

Job applicants should provide a cover letter of intent, curriculum vitae, statement of research plans, statement of teaching philosophy and the names and contact information of three references.

Quick Link to Posting

<http://jobs.rutgers.edu/postings/100181> Campus Rutgers University-Newark

Home Location Campus Rutgers University-Newark

Location Details

Pre-employment Screenings All offers of employment are contingent upon successful completion of all pre-employment screenings.

Affirmative Action/Equal Employment Opportunity Statement It is university policy to provide equal employment opportunity to all its employees and applicants for employment regardless of their race,

— / —

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>

SanFranciscoStateU EvolutionaryPhysiologist

Our fall search in Biology at San Francisco State is for a climate change focused physiologist, and is open to folks with evolutionary foci and approaches.

Assistant Professor in Animal Physiology, with a climate change focus

The Department of Biology at San Francisco State University offers an exciting opportunity for a Tenure-Track

Assistant Professorship in Animal Physiology beginning August 2020. We seek to hire a new colleague whose research emphasizes comparative, environmental or ecological physiology in vertebrates or invertebrates, who addresses questions central to adaptations and responses to climate change, and who will synergize with existing Departmental faculty. Applicants must demonstrate a successful history of research and strong potential for external support of their research, as the development of an externally funded research program is expected of new faculty hires. The successful hire will contribute to undergraduate and graduate teaching and mentorship of student research. Teaching responsibilities will include physiology courses for majors and non-majors. We are particularly interested in candidates who can teach a lower division human anatomy course for non-majors, as well as in candidates who have a demonstrated commitment to increase the access and success of underrepresented students in Biology, or who have detailed plans to accomplish such goals. A Ph.D. is required and post-doctoral experience is strongly preferred. Salary commensurate with qualifications. Position description available at biology.sfsu.edu. Please submit the following materials online to Academic Jobs Online by 10/07/2019: 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 as needed). Review of applications will continue until the position is filled.

SFSU is a comprehensive, urban university that serves the ethnically and socioeconomically 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. For additional information, visit the Biology Department web site at <http://biology.sfsu.edu> Katharyn Boyer, PhD - Professor of Biology - Estuary & Ocean Science Center San Francisco State Romberg Tiburon Campus - 3150 Paradise Drive - Tiburon, CA 94920 Phone 415-338-3751 - katboyer@sfsu.edu - <http://online.sfsu.edu/~katboyer/-Boyer.Lab> Katharyn E Boyer <katboyer@sfsu.edu>

SyracuseU LabTech Drosophila Genetics

The Ahmed-Braimah laboratory at the Department of Biology at Syracuse University is seeking a laboratory technician with experience and interests in molecular biology and/or genetics/genomics. The successful candidate will work on various problems relating to *Drosophila* reproductive genetics, evolutionary biology, and high-throughput genomics, transcriptomics, and proteomics. Projects will deploy a diverse array of techniques (for which training will be provided where necessary), including, but not limited to, genome editing using CRISPR/Cas9 in a variety of *Drosophila* species, molecular cloning, next-gen library preparation, fluorescence microscopy, high-throughput genotyping-by-sequencing, and bioinformatics. The successful candidate will also have the opportunity to develop independent research project(s) if they wish. This appointment consists of an initial one-year term and the possibility of a one-year extension pending satisfactory performance, and further extensions depending on availability of funds.

For more details, or to apply for this position, please visit <http://www.sujobopps.com/postings/81672>. For additional enquiries, please email Yasir Ahmed-Braimah (yahmed@syr.edu).

Yasir Ahmed-Braimah Assistant Professor Department of Biology Syracuse University

Yasir Ahmed <yahmed@syr.edu>

TexasAMU Theoretical Evolutionary Biology

The Department of Biology at Texas A&M University (TAMU) invites applications for three tenure-track, assistant professor positions in microbiology, neurobiology, and theoretical evolutionary biology.

We will consider candidates pursuing innovative research in any subarea of these fields. The criteria for selection are uniqueness, creativity, and excellence in research

and scholarship. We require all candidates to have a Ph.D. in biology or a related field, and we strongly encourage applications from candidates who will increase the exposure of our students to a diverse culture.

Expectations for the successful candidate will be to develop an externally funded research program and to teach undergraduate and graduate courses. We offer an interactive and collegial research environment, a modern infrastructure, and a competitive startup package. Please go to www.bio.tamu.edu to find more information about our department and eeb.tamu.edu to find out about ecology and evolutionary biology on campus, including a PhD program in EEB. For full consideration, applicants should email a letter of intent, curriculum vitae, statement of research and teaching interests, and three letters of recommendation by October 15, 2019 to facultysearch@bio.tamu.edu.

If you have questions about this search, please direct e-mails to Dr. Bruce Riley, Chair of the Search Committee, at facultysearch@bio.tamu.edu.

Texas A&M University is committed to enriching the learning and working environment for all visitors, students, faculty, and staff by promoting a culture that embraces inclusion, diversity, equity, and accountability. Diverse perspectives, talents, and identities are vital to accomplishing our mission and living our core values.

The Texas A&M System is an equal opportunity/affirmative action/veterans/disability employer committed to diversity. The College of Science and the Department of Biology are dedicated to the goal of building an inclusive and culturally diverse faculty and staff who are committed to teaching and working in an environment of academic freedom and equality of opportunity.

Gil Rosenthal <grosenthal@bio.tamu.edu>

TexasStateU ParasitologyImmunology

Evolutionary parasitologists are encouraged to apply.

Brian

Assistant Professor Parasitology and Immunology

Review Date: 10/15/2019 Proposed Start Date: Fall 2020

The Department of Biology at Texas State University (<https://nam04.safelinks.protection.outlook.com/?url=www.bio.txstate.edu&data=02%7C01%7Cdrdz%40txstate.edu%7Cbe0bc338fdb84207207b08d73586D10wWVn%2BS1dGGsYyXFfD10cSkLlTtc8sGNqpM4ou5tw%3D&rese>) invites applications for a tenure-track assistant professor position specializing in parasitology with a strong emphasis in immunology. The successful candidate will be expected to teach courses in parasitology and in host-parasite immunology. In addition, the successful candidate will be expected to develop an externally funded research program involving graduate and undergraduate students that complements the strengths of our 50-member faculty. Salary and start-up package are competitive and negotiable.

Required Qualifications: Earned Ph.D. with a research emphasis in the biological sciences or related field and a record of peer-reviewed publications on parasites and immunology.

Preferred Qualifications: Postdoctoral experience, a record of grant funding to support research, and research experience in parasite biology and immunology, such as immune response and host-parasite dynamics associated with infections by metazoan parasites.

Application Procedures: Only applications submitted through the Texas State University website will be accepted and considered (<https://jobs.hr.txstate.edu/postings/26076>).

To ensure full consideration for the position, online applications must be received by October 15, 2019. Interested applicants should submit the following materials: 1. Letter of application 2. Current curriculum vitae 3. Research statement 4. Statement of teaching philosophy that addresses teaching at a large public university with a diverse student body 5. Pdfs of up to five relevant publications; and 6. contact information for five individuals willing to serve as references

The selected candidate will be required to provide official transcripts from all degree granting universities.

Questions regarding this position should be addressed to Shannon Weigum, sweigum@txstate.edu, (512) 245-1774, Texas State University, 601 University Drive, San Marcos, TX 78666.

Why Work at Texas State? Texas State University is home to more than 38,000 students and 2,000 faculty members in the growing Austin-San Antonio corridor. A member of the Doctoral Universities: Higher Research Activity Carnegie classification, the university creates new knowledge, fosters cultural and economic development, and prepares its growing population of diverse students for the endless possibilities that await them as

citizens of Texas, the nation, and the world. Bolstered by research with relevance and innovation in creative and scholarly work in a full range of academic disciplines and a spirit of inclusiveness, Texas State seeks outstanding candidates for a variety of faculty positions.

“Rodriguez, David” <drdz@txstate.edu>

TuftsU ComparativeGenomics

Position description: The Department of Biology at Tufts University is seeking a tenure-track assistant professor in Computational Biology within the fields of bioinformatics and comparative genomics for September 2020. We seek candidates who will maintain vigorous research programs with an emphasis on the analysis of diverse organisms (including non-model species) to study fundamental problems in biology. The successful applicant will have broad interests in applying bioinformatics tools to problems relevant to multiple levels of biological organization (molecular, population, species, etc.). This assistant professor will be expected to develop and implement novel approaches for analyzing large-scale genomic datasets, potentially combined with other large-scale data sources (e.g., geospatial, developmental, metabolomic). Preference will be given to candidates who complement and build on existing departmental strengths in evolutionary genetics, population ecology, as well as development and molecular genetics. The person who holds this position will also have an affiliation with an interdisciplinary center dedicated to data-intensive research and pedagogy across Tufts, the Data Intensive Studies Center (DISC). Instructional duties will include teaching an undergraduate Computational Genomics/Bioinformatics laboratory course, an advanced graduate seminar course in their area of expertise, and research training of undergraduate and graduate students.

Qualifications: A doctoral degree in an appropriate field, postdoctoral experience, and a record of excellence in research are required. An ability to engage with diverse students with different pedagogies and a clear commitment to teaching excellence at the undergraduate and graduate levels are essential. The successful candidate will demonstrate strong potential for extramural funding and the ability to mentor research students at the graduate and undergraduate levels.

Application requirements: All applications are submitted via Interfolio, at apply.interfolio.com/67115. Mini-

imum application materials include: 1) cover letter, 2) CV, 3) teaching statement, 4) research statement, 5) names and contact information of references. Submission of up to three select reprints in pdf format is encouraged, but not required. Both references and reprints may be uploaded as Additional Documents. Letters of recommendation from references will be requested from selected applicants. Questions about the position can be directed to Geneva Frank (Geneva.Frank@tufts.edu), staff assistant to the chair and faculty. Review of applications begins November 1, 2019, and continues until the position is filled.

Tufts University is a private, coeducational institution, whose main campus serves approximately 4,600 undergraduates and over 1,500 graduate students in a broad spectrum of programs. We are located in the towns of Medford and Somerville, within the Greater Boston metropolitan area.

The Biology Department has 26 full time faculty members working in diverse specialties spanning molecular to community biology. We maintain an active graduate training program at the master’s and doctoral levels. We are strongly committed to quality research and education in basic and applied biology. The department is closely allied with other programs including Biomedical Engineering, Chemistry, Environmental Studies, Psychology and Computer Science. Individual members of the department also maintain active collaborations with colleagues at the Tufts Schools of Engineering, Medicine and Veterinary Medicine.

Tufts University, founded in 1852, prioritizes quality teaching, highly competitive basic and applied research, and a commitment to active citizenship locally, regionally, and globally. Tufts University also prides itself on creating a diverse, equitable, and inclusive community. Current and prospective employees of the university are expected to have and continuously develop skill in, and disposition for, positively engaging with a diverse population of faculty, staff, and students.

Tufts University is an Equal Opportunity/Affirmative Action Employer. We are committed to increasing the diversity of our faculty and staff and fostering their success when hired. Members of underrepresented groups are welcome and strongly encouraged to apply. If you are an applicant with a disability who is unable to use our online tools to search and apply for jobs, please contact us by calling Johny Laine in the Office of Equal Opportunity (OEO) at 617-627-3298 or at johny.laine@tufts.edu. Applicants can learn more about requesting reasonable accommodations at <http://oeo.tufts.edu>. “Dopman, Erik” <Erik.Dopman@tufts.edu>

UBath Teaching Evolution short term

We are recruiting a teaching fellow to cover a series of topics in evolutionary biology:

<https://www.bath.ac.uk/jobs/Vacancy.aspx?id719> We are especially interested in applicants who can cover aspects of quantitative and population genetics.

This is a fixed term position starting in October and ending 31st July 2019. Keep in mind that the position is at 60% FTE (full time equivalent), so the salary is prorated at 0.6x (so actually starts from 20,278 up to potentially 24,193 when the listed salaries are prorated). The person in this position would have an opportunity to spend their time in the Milner Centre for Evolution and interact with the academic community, so it is a great opportunity for a newly minted PhD to gain experience over the coming academic year or for someone to fill a gap in the coming year.

Formal contact details are in the link above, but for informal information you can email me directly.

Note that the closing date is the Sunday the 22nd of September! (sorry to anyone interested for the very late notice!).

Jason Wolf (Jason@EvolutionaryGenetics.org)

UCaliforniaIrvine 2 MicrobiomeEvolution

Assistant Professorships in Microbiome Research

The Departments of Molecular Biology and Biochemistry (MBB) and of Ecology and Evolutionary Biology (EEB) at the University of California, Irvine, invite applications for two tenure-track assistant professorships in microbiome research.

Host-microbiome interactions. The additive and synergistic factors influencing the host environment have important consequences for human health and disease. Our goal is to hire a researcher who is not focused on a particular disease, but rather investigates how to disentangle host-microbiome interactions broadly across

diseases or animal hosts. Potential research areas for the position include (but are not limited to) investigating how the microbiome mediates host responses to pathogen infection, chemical challenge or injury, altering host metabolism or influencing host development or homeostasis. The home department of this faculty member would be in the MBB department, with the possibility of an additional appointment in EEB.

*Evolution of microbiomes. *Microbes adapt rapidly, even over several days. Microbial evolution within a community context is therefore key to understanding how microbiomes respond to disturbance. Within humans or other hosts, a disturbance might be a change in diet, disease progression, or administration of a treatment or probiotic. In the environment, disturbances can include environmental changes in nutrients and climate driven by anthropogenic activities. Potential research areas for the position include (but are not limited to) the evolution of antibiotic resistance in a community context, the evolution of microbiomes in response to global change, the evolution of drug metabolism, host-microbiome coevolution, or the comparative evolution of microbiomes across hosts. The home department of this researcher would be in EEB, with the possibility of an additional appointment in MBB.

The successful candidate is expected to develop an independent, externally funded research program leading to innovations in microbiome research. Building synergistic connections with existing research programs is encouraged. The candidate will also contribute to teaching and mentoring at the graduate and undergraduate levels and to university and professional service.

The researchers would join an actively growing and collaborative group of campus faculty studying the microbiomes of hosts and the environment, organized and facilitated by the UCI Microbiome Initiative. EEB and MBB are part of the School of Biological Sciences, a vibrant community of scholars comprised of over 120 faculty members including Fellows of the National Academy of Sciences, the American Academy of Arts and Sciences, and the Royal Society. Biological Sciences at UCI is highly interdisciplinary with many connections to the Schools of Medicine, Physical Sciences, Information and Computer Sciences, and Engineering, among others.

UCI is a Minority Serving Institution (MSI), designated as a Hispanic-Serving Institution (HSI) and as an Asian American and Native American Pacific Islander-Serving Institution (AANAPISI). These federal designations align with UCI's aspiration to be a national leader and global model of inclusive excellence. UCI is a top ten public research university that excels at improving outcomes for students from economically disadvantaged

backgrounds and as a consequence has consistently been ranked as the best university in the nation in promoting upward mobility of its graduates.

Review of applications will begin November 1, 2019 with applications and will remain open until the position is filled.

For application instructions for the Department of Molecular Biology and Biochemistry's tenure-track assistant professorship in microbiome research, please go to <https://recruit.ap.uci.edu/JPF05519>. For application instructions for the Department of Ecology and Evolutionary Biology's tenure-track assistant professorship in evolution of microbiomes, please go to <https://recruit.ap.uci.edu/JPF05626>. *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. As an inaugural recipient of an NSF ADVANCE award for gender equity, UCI is responsive to the needs of dual career couples, supports work-life integration through an array of family-friendly policies, and is dedicated to broadening participation in higher education. Salary is commensurate with qualifications and based on University of California pay scales.*

Alejandra Rodriguez Verdugo <alejandr1@uci.edu>

UCalifornia SanDiego 2 EvoDevo EvolNeurology

Assistant, Associate, or Full Professor: Biological Sciences

The Division of Biological Sciences at the University of California, San Diego (www.biology.ucsd.edu) invites applications from outstanding candidates for the following faculty positions. 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. Associate and Full Professor candidates must possess strong leadership skills. 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.

Developmental Evolutionary Biology: The Section of Ecology, Behavior & Evolution invites applications for a tenure-track faculty position at the Assistant, Associate, and Full Professor levels. Competitive candidates will investigate evolutionary questions through mechanistic studies of the developmental or physiological processes that produce phenotypic variation. Research topics could include, but are not limited to: evolutionary innovation; developmental constraints; phenotypic plasticity and genetic accommodation; and the evolution of genotype-phenotype maps. We welcome applicants incorporating laboratory, field, and/or theoretical components in their research.

Applications must be submitted through the University of California San Diego's Academic Personnel RECRUIT System: Assistant Rank: <https://apol-recruit.ucsd.edu/JPF02235> Associate or Full Rank: <https://apol-recruit.ucsd.edu/JPF02236> —

Neuroethology: The Sections of Ecology, Behavior & Evolution and Neurobiology invite applications for a jointly-appointed faculty position at the tenure-track Assistant, Associate, and Full Professor levels. Candidates who use cutting edge molecular and neural approaches to investigate the neural bases of animal behavior in whole organisms with a strong focus on the natural ecological or evolutionary context of these behaviors are encouraged to apply. We welcome researchers who combine field and lab-based organismal approaches.

Applications must be submitted through the University of California San Diego's Academic Personnel RECRUIT System: Assistant Rank: <https://apol-recruit.ucsd.edu/JPF02237> Associate or Full Rank: <https://apol-recruit.ucsd.edu/JPF02238> Review of applications will commence on October 28, 2019 and will continue until positions are filled. Interested applicants must submit a cover letter, curriculum vitae, 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. Applicants at the Assistant Professor level need to submit 3-5 references, and applicants at the Associate or Full Professor level need to provide contact information for 3-5 references.

The Division of Biological Sciences at UC San Diego 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.

“Graves, Kim” <kjgraves@ucsd.edu>

UCLA Biodiversity Informatics

Biodiversity Informatics Researcher

We are seeking a Biodiversity Informatics Researcher (BIR) to develop new scientific software to make specimen-based data (phenotypic, genetic, spatial) easily accessible and ready to use for downstream taxonomic analyses. The BIR will develop a computational workflow to integrate data and analyses via modular pipelines, automate “data wrangling”, generate data-driven interfaces to interact with “big data”, and create dynamic/reactive documents native to the Web. This is a great opportunity to work in a small research group that uses computational biology to support research and training in quantitative taxonomy and evolutionary biology.

The ideal candidate will be comfortable with databases (relational or graph) and experienced in writing efficient code and documentation in at least one commonly used programming language (Python, R, Julia, Ruby, C/C++, etc). The BIR will be familiar with standard practices in scientific computing and software engineering including version control, continuous integration, test-driven development, and a focus on minimum viable products.

The BIR will be part of a research group in the Department of Ecology & Evolutionary Biology at the University of California, Los Angeles. The BIR will work and report to the principal investigator and other team members, participate in the organization and management of data sets, and ensure the integrity of complex data sets.

Qualifications:

Required: * At least 2 years of related Biodiversity Informatics experience * Strong background in databases * Programming and scripting experience (e.g. bash, Python, JavaScript, Julia, Ruby, C/C++) * Experience with version control technology such as Git * Excellent verbal, written, and interpersonal communication skills

Preferred: * Experience using HPC and parallel systems * Experience with continuous integration technology such as Travis CI * Experience with JavaScript * Experience creating technical documentation * Experience

with cloud technologies including: AWS, Azure, Docker Application:

Please send a cover letter and a CV. Make sure to include links to your repositories (e.g. GitHub, GitLab, BitBucket). Include name of 2 references who will be contacted if needed.

If you have any questions and to apply to the position, please email fzapata@ucla.edu with the subject line ‘Biodiversity Informatics Researcher’. The position will remain open until filled.

Job Location:

Los Angeles, CA

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: UC Nondiscrimination & Affirmative Action Policy. (<http://policy.ucop.edu/doc/4000376/-NondiscrimAffirmAct>)

“fzapata@g.ucla.edu” <fzapata@g.ucla.edu>

UConnecticut GenomeBiology

The Department of Molecular and Cell Biology at the University of Connecticut’s main campus in Storrs invites applications for a tenure-track position at the rank of Assistant or Associate professor in the area of Genetics and Genomics with an anticipated start date in August 2020. We are interested in candidates who address important questions in the broad area of genome biology using innovative and/or interdisciplinary approaches. For details on the position, qualifications, and application instructions please visit <https://academicjobsonline.org/ajo/jobs/14774> (Search #2020163). Questions about the position can be addressed to Dr. Barbara Mellone (barbara.mellone@uconn.edu) The University of Connecticut is an EEO/AA Employer.

Thank you! Maggie

MARGARET RYAN McDONNELL Department Administrator Molecular and Cellular Biology University of Connecticut Phone: 860.486.9481

“McDonnell, Maggie” <maggie.mcdonnell@uconn.edu>

UEastAnglia EvolutionaryBiology

Lecturer in Evolutionary Biology/Genetics/Genomics -
Ref: ATR1486

Link: <https://myview.uea.ac.uk/webrecruitment/-pages/vacancy.jsf?vacancyRef=ATR1486> 42,792 to 49,533 per annum.

As part of our continued investment in the School of Biological Sciences (BIO) at UEA, we seek to recruit a talented, enthusiastic and dynamic lecturer. This appointment will add to a thriving research area within BIO, and foster interdisciplinary collaborative work across the Faculty of Science, the Faculty of Health and our partner institutes on the Norwich Research Park. The successful candidate will be expected to develop an internationally competitive research programme that builds on and complements existing research strengths within the School.

The research areas for this particular post include but are not limited to evolution in health and disease, population genetics/genomics, biology of ageing, biology of reproduction, sexual selection and conflict, social evolution.

You must have a PhD (or equivalent experience) in evolutionary biology, genetics, genomics or other relevant discipline, evidence of successful research activity in these fields, experience of independent research and publications in international scientific journals that demonstrate excellence and world leading impact. You will be expected to meet all the essential criteria stated in the Person Specification for this post.

More information about our Research Themes can be found at: <https://www.uea.ac.uk/biological-sciences/-research/research-themes> Applications from candidates whose research is interdisciplinary across these themes are very welcome.

The School is an equal opportunities employer and we welcome applicants from all sections of the community regardless of ethnicity, disability, sexual orientation or gender status.— All appointments are made on merit. Our policies and practices are designed to encourage talented people, whatever their background, to work and study here.— Family friendly policies and staff benefits are described at <https://www.uea.ac.uk/hr/-joining-uea/staff-benefits> This post is available from 1 January 2020 on a full-time indefinite basis.

Closing date: 7 October 2019

The University is a Bronze Athena Swan Award holder, currently working towards Silver

The School of Biological Sciences is a Silver Athena Swan Award holder

Prof. Alexei A. Maklakov Professorial Fellow of Evolutionary Biology Organisms and the Environment Theme Leader School of Biological Sciences University of East Anglia Norwich Research Park Norwich, NR4 7TJ UK

Tel: +44 1603 591150

Web page: <http://alexeimaklakov.com> “Alexei Maklakov (BIO - Staff)” <A.Maklakov@uea.ac.uk>

UKentucky 2 EvolutionaryBiology

As part of a continuing campaign to grow and enhance the Department of Biology at the University of Kentucky (<http://bio.as.uky.edu/>) in Lexington, Kentucky, we seek to hire two tenure-track Assistant Professors in any area of Integrative Biology.

The Department of Biology has developed strengths in evolutionary biology, behavioral ecology, development and regeneration, and biological clocks, and uses a diverse array of model systems (e.g., *Drosophila*, lampreys, zebrafish, birds, salamanders, a variety of mammals, microbes, and plants). Our current effort to enhance our research portfolio includes building strength in the following areas: (1) biological timing systems and (2) responses to environmental change. For example, faculty hired recently in these areas study interactions of energy balance and circadian clocks, and the evolution of host-pathogen interactions. However, we are interested in any exciting area of Biology that enhances or complements facets of our departmental research. Research in the Department uses empirical, computational, and theoretical perspectives, and we invite prospective research programs that use any combination of these approaches.

With more than 500 life sciences faculty on one contiguous campus, there are excellent opportunities for scientific interaction and collaboration with programs in the Colleges of Medicine, Pharmacy, Engineering, Agriculture, and Arts & Sciences, the Markey Cancer Center, the Sanders Brown Center on Aging, and the Center for Clinical and Translational Science, among others. Applicants for both positions must have a Ph.D.

or equivalent degree with postdoctoral experience (minimum 6 months) demonstrating excellence in their field. Evidence of an ability to obtain extramural grant support and/or some teaching experience is encouraged. Responsibilities for the successful candidates include (1) establishment of an independent research program that is supported by awards from extramural agencies; (2) contribution to the teaching mission of the undergraduate program; (3) teaching and mentoring for graduate students and postdoctoral fellows; and (4) service for the department, university, and profession. Competitive start-up funds and renovated laboratory space will be provided.

Applicants should submit the following: 1) a cover letter, 2) curriculum vitae, 3) two-page description of the prospective research program (upload under Specific Request 1), 4) one-page description of teaching interests (upload under Specific Request 2), and 5) one-page statement of contributions to diversity and inclusion (upload under Specific Request 3). Also provide the names and contact information for three references when prompted in the application. This information will be utilized to solicit recommendation letters from your references within the employment system. Questions about the Department and/or these searches should be addressed to Dr. Vincent Cassone, Chair, Department of Biology, University of Kentucky, 101D Thomas Hunt Morgan Building, Lexington, KY 40506; email: vincent.cassone@uky.edu.

Review of applications will begin immediately and continue until the position is filled. Applications received before October 15, 2019 are assured full consideration.

The University of Kentucky is committed to a diverse and inclusive workforce by ensuring all our students, faculty, and staff work in an environment of openness and acceptance. We strive to foster a community where people of all backgrounds, identities, and perspectives can feel secure and welcome. We also value the well-being of each of our employees and are dedicated to creating a healthy place to work, learn and live. In the interest of maintaining a safe and healthy environment for our students, employees, patients and visitors the University of Kentucky is a Tobacco & Drug Free campus.

As an Equal Opportunity Employer, we strongly encourage veterans, individuals with disabilities, women, and all minorities to consider our employment opportunities.

David Weisrock Department of Biology University of Kentucky dweis2@uky.edu weisrocklab.com

“Weisrock, David W.” <david.weisrock@uky.edu>

UMassachusetts Lowell Bioinformatics

Job: UMassLowell.AssistantProfessorCompBiolBioinformatics

The University of Massachusetts Lowell Department of Biological Sciences invites applications to fill a full-time tenure-track faculty position in Computational Biology/Bioinformatics, at the Assistant Professor level, to start September 2020. We seek an individual developing computational tools or statistical and theoretical models for the analysis of complex large-scale datasets to address quantitative and fundamental biological questions at any scale from molecular to organismal to ecosystems. In addition to the broad research strengths within the Biological Sciences Department (<https://www.uml.edu/sciences/biology/faculty/>), UMass Lowell has a diverse and collaborative faculty representing fields such as computer science and engineering, environmental, earth and atmospheric sciences, biomedical and civil engineering, and public health. The successful candidate will be expected to establish a vigorous, collaborative, externally funded research program that involves trainees at all levels, and to incorporate their research expertise into new undergraduate and graduate level courses, thereby fulfilling the department's teaching and student engagement missions.

The University of Massachusetts Lowell is located in the heart of the life sciences supercluster of the northeast region of Massachusetts, which is home to more than 100 life science companies. UMass Lowell offers access to the Massachusetts Green High Performance Computing Center, a world-class computational infrastructure, and has extensive core research facilities on campus with state-of-the-art equipment for molecular analysis. Together with its proximity to the biotechnology and biomedical hub around Boston/Cambridge, the ideal candidate would leverage the ample opportunities that exist for scientific interaction, exchange, and collaboration on campus as well as across the UMass system.

Minimum Qualifications (Required): Earned doctorate and postdoctoral experience (required at the time of application) The ability to work effectively with diverse student and faculty groups Demonstrated teaching and mentoring abilities at the undergraduate and graduate levels Potential to establish a sustainable externally funded research program Demonstrated publi-

cation record in scholarly journals Excellent communication and interpersonal skills Special Instructions to Applicants:

Review of applications will begin immediately and continue until the position is filled. However, the position may close once an adequate number of qualified applications are received.

Please submit a CV, cover letter, teaching philosophy and research statement with your application. Names and email addresses of three references will also be required during the application process. The referees will be notified and should upload recommendation letters. Only recommendation letters that are uploaded to the system by the referee will be accepted. Emailed or hard-copy letters will not be accepted. <https://explorejobs.uml.edu/lowell/en-us/job/502983/-assistant-professor-computational-biologybioinformatics> “Chain, Frederic J” <Frederic.Chain@uml.edu>

UMemphis Evolutionary Animal Physiology

Assistant Professor: Evolutionary Animal Physiology

The Department of Biological Sciences at the University of Memphis (www.memphis.edu/biology) welcomes applications for a nine-month, tenure-track position in animal physiology (research and teaching) at the Assistant Professor level to begin August 2020. The ideal candidate will be broadly trained, with expertise in animal physiology, and their research will have a significant field component. We seek applications from researchers using innovative approaches and non-model organisms to test evolutionary hypotheses in contemporary animal physiology. Topics of study might include, but are not limited to, the physiological basis of phenotypic variation and adaptation, the functional ecology and natural history of whole organisms, and mechanisms underlying trade-offs or constraints in the evolution of behavior.

Candidates must have a Ph.D. in a relevant discipline 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. The successful candidate will develop an extramurally funded research program that advances their field of study while training graduate (M.S. & Ph.D.) and undergraduate students. Teaching assignments will depend on the

candidate’s expertise and departmental needs. Faculty members are also expected to engage in service activities at the department, college, and university levels. Competitive salary and startup funds are available.

The University of Memphis is a leading metropolitan research institution. The Department of Biological Sciences has 25 faculty members specializing in diverse sub-disciplines of the biological sciences. With an exceptionally collaborative and supportive faculty, the Department of Biological Sciences serves approximately 500 undergraduate majors and over 50 graduate students. The department administers several centers and programs that offer outstanding opportunities for research, collaboration, and teaching. These include the Center for Biodiversity Research, a collaborative, multidisciplinary research center; the Meeman Biological Station; the Integrated Microscopy Center; and the W. Harry Feinstone Center for Genomic Research.

Applications must be submitted online at <https://workforum.memphis.edu/> (position number 002818). To apply, candidates should upload (i) a cover letter, (ii) CV including contact information for three references (letters will be solicited for short-listed candidates), (iii) research statement (listed as “other document” in the application system), and (iv) teaching philosophy. Up to three representative publications may also be uploaded as a single pdf (optional). Review of applications will begin 10/07/2019, the closing date for application. Inquiries can be directed to E. Keith Bowers, Chair, Animal Physiology Faculty Position, Department of Biological Sciences, University of Memphis, Memphis, TN 38152, USA (email: ekbowers@memphis.edu).

The University of Memphis is an Equal Opportunity/Affirmative Action employer. 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)”
<ekbowers@memphis.edu>

UOklahoma EvolutionBehavior

The University of Oklahoma College of Arts and Sciences is excited to announce three open faculty positions at any rank in the Department of Biology. As part of our Biology of Behavior strategic initiative, the department continues to build an internationally recognized center of excellence in studying mechanisms of organismal

behavior. We are searching for creative, collaborative thinkers to join us in taking an integrative and multifaceted approach to understanding the ultimate and proximate causes of behavior. The Department of Biology already has a strong focus on the study of animal behavior, including 16 complementary faculty research programs that investigate the neurobiological, developmental, and evolutionary processes that underlie how animals behave.

We seek to enhance the collaborative momentum of this initiative by inviting individuals with creative, innovative, and dynamic research programs who are interested in joining a strong group of researchers to apply for these faculty positions:

- A Geneticist who uses integrative molecular approaches to understand the evolution, specification, and/or regulation of how genes affect organismal behavior.
- A Physiologist who studies the endocrine regulation and modulation of behavior.
- An Evolutionary Developmental Biologist who studies how developmental processes give rise to organismal morphology, nervous system structures, and/or physiology that lay the foundation for the generation of behavior.

The anticipated start date for these positions is August 2020. For additional details, please visit <http://ou.edu/-bb> and <http://www.ou.edu/cas/biology>. **QUALIFICATIONS**

Candidates must have a Ph.D. degree and a record of outstanding achievement as evidenced by publications. Preferred candidates will have a promising (Assistant professor) or externally funded (Associate/Full professor) research program. Successful candidates will be expected to provide excellent research training for students and postdocs and contribute to undergraduate and graduate teaching (one course per semester) in areas such as animal behavior, genetics, physiology, neurobiology, cell biology, genomics, or bioinformatics.

APPLICATION INSTRUCTIONS

Applicants should submit a cover letter describing their interest in a position, a full curriculum vitae, research and teaching statements, and up to five selected reprints/preprints as PDF files to the website for the appropriate position:

Geneticist: <https://apply.interfolio.com/67539> Behavioral Physiologist: <https://apply.interfolio.com/67562> Evolutionary Developmental Biologist: <https://apply.interfolio.com/67569> Applicants at the rank of Assistant Professor should also arrange to have three signed letters of reference uploaded to the appropriate

website. Applicants at the rank of Associate Professor or Professor may submit names and contact information for three references in lieu of letters.

Screening of candidates will begin October 15, 2019 and will continue until the positions are filled.

The University of Oklahoma is an EO/Affirmative Action institution <http://www.ou.edu/eoo/>. Individuals with disabilities and protected veterans are encouraged to apply. In compliance with all applicable federal and state laws and regulations, the University of Oklahoma does not discriminate on the basis of race, color, national origin, sex, sexual orientation, genetic information, gender identity, gender expression, age, religion, disability, political beliefs, or status as a veteran in any of its policies, practices, or procedures. This includes, but is not limited to admissions, employment, financial aid, and educational services.

“Masly, John P.” <masly@ou.edu>

UOklahoma Tech Genomics

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

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

Earliest start date: Open until filled

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

Required Attachments: Cover Letter, Curriculum Vitae

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

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

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

Supervision: 1-5 Staff

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

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

focusing on the role of microbiota in cancer development and therapy.

Minimum qualifications include a Ph.D. in Biology or related discipline or M.D. and post-doctoral research experience in a relevant area of molecular or biomedical sciences that will intersect with and complement our departmental interests in cancer biology, inflammation, development, aging, and disease mechanisms. The successful candidate will be responsible for teaching courses relevant to his/her area of expertise, as well as mentoring research training for undergraduate and graduate students. Additional information on the position and the Department of Biological Sciences can be found at <http://www.biol.sc.edu/>. The Department of Biological Sciences is a multidisciplinary unit of approximately 1,600 Undergraduates, 60 Graduate Students and 38 Faculty from various research areas including Biochemistry, Cell and Molecular Biology, Genetics, Ecology and Evolution, Cancer Biology, Neurobiology, and Plant Sciences. The Department has ready access to strong core technical support facilities including a Mouse Core Facility that houses a Gnotobiotic Core Facility, and is complemented by strong research programs in other science departments, the UofSC School of Medicine, the Arnold School of Public Health, the South Carolina School of Pharmacy as well as the Center for Colon Cancer Research, the Center for Targeted Therapeutics, the Belle W. Baruch Institute for Marine and Coastal Sciences, the UofSC Environment and Sustainability Program, and the UofSC Neuroscience Community.

The UofSC system comprised of the state’s flagship university in Columbia (founded in 1801 and currently one of the top 50 “Best Colleges” according to U.S. News and World Report), three regional comprehensive universities (UofSC Aiken, UofSC Beaufort and UofSC Upstate), and Palmetto College consisting of four two-year campuses (UofSC Lancaster, UofSC Salkehatchie, UofSC Sumter, UofSC Union and Fort Jackson/Extended University). Together, the UofSC System institutions offer more than 450 degree programs on campus and online and are uniquely positioned to meet the state’s educational, cultural, health and research needs. Our diverse engaged faculty and staff enjoy a dynamic and intellectually stimulating work environment.

Review of applications will begin November 16, 2019. To ensure full consideration, applications must be received by November 30, 2019. The review process will continue until the position is filled. All applicants must fill out an online application at the UofSC employment website at: <http://uscjobs.sc.edu/postings/67526>. Applications should include a complete curriculum vita, statement of research accomplishments and goals (3 pages), statement of teaching philosophy and interests

USouthCarolina EvolutionMicrobiome

UNIVERSITY OF SOUTH CAROLINA DEPARTMENT OF BIOLOGICAL SCIENCES, COLUMBIA, SC TENURE-TRACK ASSISTANT PROFESSOR FACULTY POSITION IN MOLECULAR AND CELLULAR BIOLOGY - MICROBIOME IN HEALTH AND DISEASE

The Department of Biological Sciences at the University of South Carolina (UofSC) invites applications for a tenure-track Assistant Professor position in Molecular and Cellular Biology. The successful candidate is expected to establish an independent, extramurally funded research program on the role of microbiome in health and disease. We are interested in individuals who use metagenomic and metabolomics approaches to understand microbial communities and how they shape health and susceptibility to disease, and who will carry out microbiome research at the challenging interphase of transitioning from descriptive associative studies towards mechanistic studies to understand the basis of causality and application towards therapeutic translation. This position will interact with investigators in Biological Sciences and in collaborative initiatives among multiple departments across the USC campus

(1 page), and the names, email addresses, and telephone numbers of at least three references. Questions may be directed to Dr. Marj Peña, Search Committee Chair at mpena@biol.sc.edu (put “Microbiome Search” in the subject title).

The University of South Carolina is an affirmative action, equal opportunity employer. Minorities and women are encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities on the basis of race, color, religion, national origin, sex, sexual orientation, gender, age, disability, veteran status or genetics.

Thank you very much for your help.

All the best, Marj Pena

Maria Marjorette O. Pena, PhD Associate Professor - Department of Biological Sciences Director, Mouse Experimentation Core - Center for Colon Cancer Research

University of South Carolina Rm. 622, Jones Physical Sciences Bldg. 712 Main St. Columbia, SC 29208 Tel. Nos: (803) 777-1060 - Office (803) 777-6985 - Lab

— / —

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>

USouthernCalifornia SystemsBiology

The Molecular and Computational Biology Section of the Department of Biological Sciences, Dana and David Dornsife College of Letters, Arts and Sciences, the University of Southern California, in Los Angeles, California, intends to hire a tenure-track Assistant Professor. We are seeking an accomplished and innovative scientist that combines experimental and in silico approaches to pursue large-scale cellular, genomic and proteomic research. Specifically, we aim to broaden our scope in systems biology, synthetic biology, developmental genomics, and the innovation of novel genomics techniques. However, we will also consider other related areas in which combined use of computational and experimental approaches is required. Candidates should have a Ph.D. and have demonstrated the ability or potential to conduct independent research in the aforementioned areas and to attract external research funding. Review

of applications will begin December 1, 2019. Applicants should submit, in a single pdf file, a curriculum vita, a cover letter, research and teaching statements, and the contact information of three references. We request that the cover letter discusses how your research, teaching, mentoring, or service addresses USC’s commitment to diversity and inclusion in the STEM fields (<https://-diversity.usc.edu/>). In order to be considered for this position, all candidates must apply via the “Apply” link at the top or bottom of this page. For more information, please contact Ian Ehrenreich (*ian.ehrenreich@usc.edu <ian.ehrenreich@usc.edu>).*

USC is an equal opportunity, affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, disability, or any other characteristic protected by law or USC policy. USC will consider for employment all qualified applicants with criminal histories in a manner consistent with the requirements of the Los Angeles Fair Chance Initiative for Hiring ordinance.

Ian Ehrenreich <ehrenrei@usc.edu>

USouthernCal MarineGenomics

UNIVERSITY OF SOUTHERN CALIFORNIA 'V Assistant Professor in Marine Organismal Biology

The Marine & Environmental Biology (MEB) section of the Department of Biological Sciences in the Dana and David Dornsife College of Letters, Arts and Sciences at the University of Southern California (Los Angeles, California) invites applications for a tenure-track Assistant Professor in Marine Organismal Biology with an anticipated start date of August 2020. We seek a junior scholar with expertise in the biology of multicellular marine organisms, with particular emphasis on genetics/genomics. The ideal candidate will use an experimental genetics approach to understanding mechanisms linking genotype to phenotype. The position involves active participation in both undergraduate and graduate teaching, the establishment of a vigorous externally funded research program, and the opportunity to conduct research at our marine station on Catalina Island.

Applicants should have a doctoral degree in a relevant field of study. Further information about the MEB program and faculty can be found at

<https://dornsife.usc.edu/bisc/meb/> Applicants should submit a cover letter, curriculum vitae, teaching and research statement, along with the names of three individuals who will be contacted by USC for references. In order to be considered for this position, applicants are required to submit an electronic USC application; follow this job link or paste in a browser: <https://usccareers.usc.edu/job/los-angeles/assistant-professor-in-marine-organismal-biology/1209/13050615> . For full consideration, applications must be received by October 15, 2019.

USC is an equal opportunity, affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, disability, or any other characteristic protected by law or USC policy. USC will consider for employment all qualified applicants with criminal histories in a manner consistent with the requirements of the Los Angeles Fair Chance Initiative for Hiring ordinance.

Suzanne Edmands Gabilan Distinguished Professor in Science and Engineering Department of Biological Sciences 3616 Trousdale Parkway, AHF 130 University of Southern California Los Angeles, CA 90089 (213)740-5548 <http://dornsife.usc.edu/labs/edmands/> Suzanne Edmands <sedmands@usc.edu>

UTexas ElPaso EvolutionaryBiology

The University of Texas at El Paso College of Science Department of Biological Sciences Assistant Professor V Evolutionary Biologist

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 an Evolutionary Biologist. We are seeking highly collaborative candidates with expertise in the evolution of any non-model, multi-cellular animal organism, including vertebrates or insects. The department has excellent biodiversity collections offering significant opportunities for individuals who wish to serve in a curatorial role.

The anticipated appointment date is fall 2020 or earlier. The successful candidate is expected to (1) establish an extramurally funded research program; (2) teach

and mentor undergraduate, masters, and doctoral students; and (3) have a strong potential for collaboration across ecology and evolutionary biology (EEB). **ABOUT THE DEPARTMENT:** The Department of Biological Sciences, with doctoral programs in EEB and Bioscience, is among the most productive departments at UTEP and contributes to interdisciplinary programs in Environmental Science and Engineering, Bioinformatics, and Computational Science. Additional collaborator research and training opportunities will become available with the establishment of the new Data Science PhD in Math. Core facilities in the NIH sponsored Border Biomedical Research Center include capacities for DNA Next-Gen sequencing, bioinformatics, and statistics; Biodiversity Collections, a new state-of-the-art insectarium and multiple vivariums, and Indio Mountains Research Station provide further research opportunities. More information is available at the Department of Biological Sciences website (<https://www.utep.edu/science-biology/>) and the UTEP Biodiversity Collections website (www.utep.edu/biodiversity/).

ABOUT UTEP: The University of Texas at El Paso is a Carnegie R1 and Community Engaged doctoral research university located in one of the largest binational communities in the world. The University enrolls more than 25,000 students, invests \$91 million in research annually, and offers 170 bachelor's, master's and doctoral degree programs in 10 colleges and schools. The University maintains an operating budget of \$450 million and employs approximately 4,000 people. It has one of the lowest out-of-pocket costs of any research university in the U.S., underscoring its commitment to make education accessible to all.

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 will continue until the position is filled. Candidates must submit a letter of interest, curriculum vitae, statement of research interests, a brief description of teaching philosophy, and complete contact information for at least three references.

To apply, please visit www.utep.edu/employment Hiring decisions are based upon 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 is an Equal Opportunity/Affirmative Action employer. The University does

not discriminate on the basis of race, color, national origin, sex, religion, age, disability, genetic information, veteran status, sexual orientation, or gender identity in employment or the provision of services.

Eli Greenbaum, Ph.D. Associate Professor, Department of Biological Sciences Director, UTEP Biodiversity Collections University of Texas at El Paso 500 West University Avenue El Paso, TX 79968* Biology Bldg. #301/329 Office/Lab: (915) 747-5553/5645 FAX: (915) 747-5808 E-mail: egreenbaum2@utep.edu *zip code 79902 for FEDEX/UPS deliveries

Website: <http://eligreenbaum.utep.edu/>
 National Geographic blog: <https://openexplorer.nationalgeographic.com/-expedition/congoquest> “Greenbaum, Eli B”
[<egreenbaum2@utep.edu>](mailto:egreenbaum2@utep.edu)

UToronto Mississauga MicrobialEvolution

The Department of Biology at the University of Toronto Mississauga (UTM) invites applications for a tenure-stream appointment in Microbial Ecology and Evolution, at the rank of Assistant Professor, commencing July 1, 2020, or shortly thereafter.

Applicants must have a Ph.D. in Biology or closely related field and demonstrated excellence in research and teaching. Post-doctoral experience is preferred.

We are searching for an outstanding scientist who addresses fundamental questions in the ecology, evolution or systematics of viral, prokaryotic (bacteria and cyanobacteria) or eukaryotic (e.g. fungi, simple algae) microbes. The department is particularly interested in an individual whose research, teaching and technical experience would complement our existing departmental strengths. Topics of interest include, but are not limited to:

* genetics, ecology, or evolution of chemical or antibiotic resistance * ecology and evolution of microbiomes and metagenomes * host-symbiont coevolution * ecology, evolution, genetics of microbial diseases * ecology, evolution, genetics of microbially-mediated mutualisms * population genetics and genomics of microbes * systematics (fungal, algal, or protozoan)

The successful candidate must demonstrate excellence in research with a record of publications in top-ranked, peer reviewed and field-relevant academic journals, pre-

sentations at significant conferences, awards/accolades, and the submitted research statement, as well as strong endorsements by referees of top international stature. The successful candidate must also have demonstrated excellence in teaching related activities that can include performance as a teaching assistant or a course instructor, experience leading successful workshops or seminars, student mentorship, or conference presentations or posters.

The successful applicant is expected to develop and maintain an active, independent, innovative and externally funded program of research 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 www.utm.utoronto.ca/biology. Information on the graduate unit can be found at 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. 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 a teaching statement with evidence supporting excellence in teaching.

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 statement 2) Publications.

Applicants must arrange for three 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 (letters must be printed on letterhead, signed, dated and scanned) to: biology.utm@utoronto.ca.

If you have any questions regarding this position, please contact Prof. Joel Levine at biology.utm@utoronto.ca. All application materials, including reference letters, must be received by the closing date, October 12, 2019

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>. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

— / —

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>

UTulsa ComparativeNeurobiology

We are particularly interested in candidates whose research is comparative, providing a link between the evol/ecol and cell & molec faculty.

Full-time, Tenure-Track Position in Neurobiology

The Department of Biological Science at The University of Tulsa invites applications for a tenure-track Assistant Professor position with demonstrated interests and expertise in Neurobiology. We seek a creative and interactive individual working on fundamental problems in neurobiology, including, but not limited to, the areas of neuroanatomy, neuroendocrinology, and/or neurophysiology. We are particularly interested in individuals whose research is comparative, and addresses questions at a mechanistic level.

The Faculty of Biological Science is in the College of Engineering and Natural Sciences of The University of Tulsa (www.utulsa.edu) and offers BS, MS and PhD degrees (<https://engineering.utulsa.edu/academics/biological-science/>). At present, there are 14 full-time faculty members, approximately 25 MS/PhD students and 180 undergraduate Biology majors. The

department houses complete genomics/transcriptomics, animal facilities and microscopy core facilities that include TEM, SEM, and a confocal microscope.

The University of Tulsa is private Carnegie National-Doctoral institution. The fall 2018 enrollment for the university was 4,433 students in its four academic colleges (3,343 undergraduates and 1,090 graduate or law students).

The city of Tulsa, located in the rolling Osage Hills of northeastern Oklahoma, is one of the most livable and affordable cities in the United States with a lively arts and cultural scene, a metropolitan population of almost 1 million people and a cost of living index of 85% of the national average. Tulsa is also home to the Laureate Institute for Brain Research (LIBR), and LIBR scientists have faculty appointments at The University of Tulsa.

Minimum Qualifications We anticipate August 15, 2020 start date for this position. The successful applicant is expected to have a Ph.D. and post-doctoral experience in a neurobiology field. At The University of Tulsa, the faculty member will be expected to establish a vigorous extramurally funded research program involving both undergraduate and graduate students, and participate in undergraduate and graduate teaching in neuroanatomy, advanced cellular biology, and developmental anatomy or other specialized course in his or her area of expertise.

Application Information Review of applications will commence immediately and continue until the position is filled.

Interested parties should submit a cover letter, current curriculum vitae, statements of research and teaching interests (max. two pages each), and names and complete contact information for three references. Applications should be submitted electronically to Neurobiology Search Committee Chair, Dr. Warren Booth (warrenbooth@utulsa.edu). For full consideration, applications should be received by 17 October 2019.

The University of Tulsa seeks to recruit and retain talented students, faculty and staff from diverse backgrounds. The University of Tulsa is an affirmative action/equal opportunity employer and encourages qualified candidates across all group demographics to apply. The University does not discriminate on the basis of personal status or group characteristics including, but not limited to race, color, religion, national or ethnic origin, age, sex, disability, veteran status, sexual orientation, gender identity or expression, genetic information, ancestry, or marital status. A goal of this search is to increase the diversity of the faculty in the Department of Biological Science, and we therefore welcome applicants who come from groups that are underrepresented

in science, such as women, Black/African American, Hispanic/Latino, American Indian or Alaskan Native.

The University of Tulsa is an Equal Opportunity Employer Disabled/ Veteran.

Dr. Warren Booth Associate Professor Department of Biological Science The University of Tulsa 315 Oliphant Hall Tulsa, OK74104

“Booth, Warren” <warren-booth@utulsa.edu>

UVienna BioinformaticsCompBiol

Job: UVienna.SeniorScientistBioinformaticsCompBiol

A permanent, full-time Senior Scientist position is available in the Department of Botany and Biodiversity Research, Faculty of Life Sciences, University of Vienna, Austria. The position is initially for 6 years with the possibility of subsequent unlimited employment. You will take the lead role in the implementation of research activities and approaches in bioinformatics and computational biology in our group. Our research focus is on the ecological & evolutionary genomics of adaptation to changing environments, speciation, and species diversification / radiation in plants and associated organisms. We address these topics using the latest DNA / RNA sequencing technologies in combination with spatial, ecological, and phenome data at different hierarchical levels of biological diversity.

University of Vienna offers an attractive and dynamic research location in a city with exceptional quality of life and in a country with excellent research infrastructure and funding provision.

Extent of Employment: 40 hours/week. Salary grading in accordance with relevant work experience.

Job Description: Participation in cutting-edge research projects involving bioinformatics and computational biology, including the development / validation of new bioinformatic pipelines - Responsibility for the operation and maintenance of high performance computing resources - Liaison point for collaboration with external high performance computing centres - Participation in international publication and presentation activities - Supervision / mentoring of students engaged in bioinformatics and computational biology projects - Assistance with teaching in the department.

Profile: MSc or doctoral (or equivalent) degree in the natural or computer sciences - Experience with the anal-

ysis of so-called Next Generation Sequencing (NGS) data, i.e. second or third generation DNA / RNA sequence datasets - Extensive experience with computational work within a Unix / Linux based environment - Programming skills (bash scripting; R; basic skills in either Python or Perl) - Excellent written and oral communication skills in English - A keen interest to keep abreast with ongoing developments in bioinformatics and computational biology - Ability to work in teams - If from an educational path other than biology: basic understanding of biology including evolution.

To apply: Your application must include the following documents: 1-page motivation letter - Educational and scientific CV - List of publications - Contact details of three references. Please see full job description and submit your application via the website of the Job Center at the University of Vienna (<http://jobcenter.univie.ac.at>; email: jobcenter@univie.ac.at) no later than 20 Oct 2019, mentioning job reference no. 10073. For more information please contact: Christian Lexer, christian.lexer@univie.ac.at

Christian <christian.lexer@univie.ac.at>

UWashington MarineGenomics

Postdoctoral Scholar in Metagenomics of Chemosynthetic Communities <https://apply.interfolio.com/66656>
Location Seattle, WA

Deadline Nov 2, 2019 at 11:59 PM Eastern Time
Description The University of Washington (UW) is proud to be one of the nation's premier educational and research institutions. Our people are the most important asset in our pursuit of achieving excellence in education, research, and community service. Our staff not only enjoys outstanding benefits and professional growth opportunities, but also an environment noted for diversity, community involvement, intellectual excitement, artistic pursuits, and natural beauty. The University of Washington is located in the greater Seattle metropolitan area, with a dynamic, multicultural community of 3.7 million people and a range of ecosystems from mountains to ocean. The UW serves a diverse population of 80,000 students, faculty and staff including 25% first-generation college students, over 25% Pell Grant student and faculty from over 70 countries. The UW is a recipient of a National Science Foundation ADVANCE Institutional Transformation Award to increase the advancement of women in science, engineering, and math (see <https://>

advance.washington.edu/). The Joint Institute for the Study of the Atmosphere and Ocean at the University of Washington has a position for a Postdoctoral Scholar working on marine microbial, invertebrate and fish environmental DNA genetics/genomics/bioinformatics of hydrothermal vent and methane seep chemosynthetic communities in the G3 lab (Genetics and Genomics Group) at NOAA Pacific Marine Environmental Laboratory. Dr. Carol Stepien and Dr. David Butterfield, affiliate faculty in Oceanography, are co-mentors for this position. This is a 12-month, full-time (100% FTE) appointment, renewable for a second year, subject to approval, satisfactory performance, and availability of funding. The G3 lab uses multi-locus metabarcoding and RADseq to study oceanic biological community responses to physical and chemical oceanographic parameters. We identify, quantify, and assess component species and population genetic relationships for microbes, invertebrates and fishes using environmental DNA (eDNA), plankton, and sediment samples collected with plankton tows, CTD casts, ROVs, and sediment core sampling. Our study regions include the North American West Coast, Salish Sea, Gulf of Alaska, Bering Sea, and U.S. Arctic ecosystems, as well as deep sea vents and seeps across the Pacific; the latter will be the focus for this position. We compare biological, physical, and chemical oceanographic parameters to study connectivity among systems and predict the effects of environmental change, including potential deep sea mining, volcanic eruptions, and other disturbances. The new postdoctoral researcher will have the opportunity to design and undertake an independent investigation of hydrothermal vent and methane seep biological community diversity, with significant opportunities for field work. We are particularly interested in understanding the connection between the geochemical environment and chemosynthetic ecosystems, and in using microbial and environmental DNA in the ocean water column to link seafloor hydrothermal and cold seep processes to benthic vent and seep fauna.

The duties and research responsibilities include: - Conducts bioinformatics and next-generation sequencing DNA assays and analyses - Collects and statistically analyzes data, ensuring accuracy and data security - Co-authors and writes peer-reviewed scientific publications - Presents papers at scientific conferences; participates in external seminars, workshops, professional societies and committees - Updates website on progress of projects - Manages regulatory documentation/paperwork - Writes or assists with grant proposals - Helps graduate and undergraduate student researchers with lab work - Conducts work requiring judgment in the evaluation, selection, and adaptation/modification of standard tech-

niques, procedures and criteria - Uses a wide application of complex principles, theories and concepts in the fields of genetics and genomics - Possesses and applies knowledge of genetics, genomics, and bioinformatics, and advances state-of-the-art research in these areas

For detailed information on Benefits for this position click here. Qualifications REQUIREMENTS: ??Excellent verbal and written skills. - Strong research skills. - Ability to work independently. - Effective problem solving/critical thinking skills. - Strong technical communication and collaboration skills.

Educational requirement: PhD in Biology, Ecology, or Biological Oceanography or closely related field with specialization in Molecular Genetics. Research Associate is considered a junior rank and requires recent completion of professional training (in many fields marked by a PhD)

— / —

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>

UWashington Natural History Conservation

Description The Center for Ecosystem Sentinels, within the Department of Biology at the University of Washington (UW), is searching for an Assistant Professor with experience in conducting field research that informs conservation actions. Applicants may work on any group of organisms, complementing the taxonomic breadth of our department, while also fostering collaboration across disciplines. The successful applicant will hold the Boersma Endowed Chair in Natural History and Conservation, and contribute to the growth, administration, and financing of the Center for Ecosystem Sentinels. We invite applications for a full-time (100% FTE, 9-month), tenure-track faculty position at the Assistant Professor level with an anticipated start date of 16 September 2020.

The UW Department of Biology provides a supportive research environment, with a long-term faculty hiring plan and a new Life Sciences Building. Our faculty members use quantitative approaches to investigate the evolution and function of biological systems from molecules to ecosystems. Within UW Biology, the Center for

Ecosystem Sentinels is concerned with how environmental change is impacting the health and well-being of species that comprise ecosystems upon which we all depend. The Center's existing data sets include long-term records of demography, physiology and behavior of Magellanic and Galapagos penguins. Applicants interested in working with these data are welcome, as are those developing or using other long-term data sets. The overarching goal is outcomes that inform critical conservation policy decisions.

All UW faculty members engage in teaching, research, and service. The successful applicant is expected to develop an original, independent, extramurally-funded research program, teach and train undergraduate and graduate students, promote diversity and equity in their research and teaching, and involve the community in their conservation efforts.

Please contact Professor Jennifer Ruesink at ruesink@uw.edu, Chair of the UW Biology Faculty Search Committee for this position, with any questions.

Qualifications Applicants must have earned a doctorate in conservation biology or related field, or foreign equivalent, by the date of appointment. Applicants must have expertise in conducting field research.

We seek applicants who combine natural history, ecology, and organismal expertise with the use of modern research and analytical approaches.

Application Instructions Applications must be received by 1 October 2019. Late applications will not be considered.

A complete application will include:

A single PDF file containing your cover letter, CV (including your full publication list), research statement (up to three pages), teaching statement (one page), and diversity statement (one page) (Note: all but the cover letter are mandatory). Please insert a page break between sections. Focus your teaching statement on experience with teaching and mentoring in the classroom/lab/ field, teaching methodology, and philosophy, rather than a list of classes you could teach. For the diversity statement, please explain how you have promoted equity and diversity in the past, and how you will promote inclusion in your research and class environments.

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>).

Adam Leache <leache@uw.edu>

UWisconsin Madison 2 Genetics

Tenure-track Faculty Positions in Genetics

The Department of Genetics in the College of Agricultural and Life Sciences at the University of Wisconsin - Madison invites applications for two tenure track positions at the rank of Assistant Professor in Genetics.

One position is in the area of plant genetics (PVL # 99730), and the other is open more broadly to model-organism genetics (PVL # 99731). The Department seeks scientists who study the genetic and molecular basis of fundamental aspects of inheritance or its phenotypic manifestations at the molecular, cellular and/or organismal levels. These new faculty positions are part of a larger expansion of the Department of Genetics and the college to understand basic biological systems and discover applications of this knowledge in agriculture and human health.

The successful applicant will develop a vibrant, independent, extramurally funded research program in genetics. Other responsibilities will include teaching courses in genetics and mentoring of undergraduate and graduate students.

The position carries a commitment to the three functions of resident instruction, research, and outreach/service, as well as professional and university service as appropriate to the position and rank.

Applications must be submitted through to <https://jobs.wisc.edu> by October 15, 2019 to ensure consideration, though review will continue until the positions

are filled. Applicants should click on the “Apply Now” button and upload the following five items: (1) cover letter, (2) curriculum vitae, (3) 3-page statement of research interests (3 pages), (4) statement of teaching interests (1 page) and (5) statement describing past efforts and future plans to advance diversity, equity and inclusion (up to 1 page). Contact information for three references will be requested at the time of application and references will be contacted to submit a letter of recommendation.

Questions about the position can be directed to Patrick Masson: 608-265-2312; phmasson@wisc.edu.

The Department of Genetics seeks candidates who embrace diversity in the broadest sense. 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. UW-Madison is a VEVRAA Federal Contractor. The UW-Madison College of Agricultural and Life Sciences is committed to maintaining and growing a culture that embraces diversity, inclusion, and equity, believing that these values are foundational elements of our excellence and essential components of a positive and enriching learning and working environment for all students, faculty, and staff. Applications from candidates who foster and promote the values of diversity and inclusion are strongly encouraged.

Thanks,

Matt Hahne Payroll and Benefits Specialist - Advanced Room 1434 425 Henry Mall Madison, WI 53706-1580 Phone: 608-262-7729 Fax: 608-262-2976

MATTHEW D HAHNE <mdhahne@wisc.edu>

UWisconsin Madison Evolutionary Biology

Assistant or Associate Professor of Evolutionary Biology, University of Wisconsin-Madison

The Department of Integrative Biology at the University of Wisconsin-Madison is accepting applications for an Assistant Professor (tenure-track) position, or Associate level for exceptional candidates, beginning August 2020. We seek a candidate to develop an internationally-recognized research program in Evolutionary Biology. We are particularly interested in candidates who can address fundamental questions in evolutionary biology

using data-rich genomics, computational, statistical, and/or mathematical approaches. Potential areas of expertise might include, but are not limited to, population genetics, population genomics, molecular evolution, physiological genomics, phylogenomics, functional genomics, computational genomics, conservation genomics, evo-devo, and eco-evolutionary genomics. Exceptional candidates outside these areas will also be considered. The candidate’s research program may focus on any taxon or domain of life.

A Ph.D. in biology or related field and postdoc experience in evolutionary biology or related field is required prior to the start of the appointment. Expectations of the successful candidate include excellence in research and graduate training, engagement in collaborative research, establishment of an extramurally funded research program, University and professional service, public outreach, and skilled teaching at undergraduate and graduate levels. Our goal is to hire an outstanding and collaborative individual with broad research interests and promise for intellectual growth.

The position is based in the Department of Integrative Biology, which has 19 regular faculty members and 62 graduate students, drawn from multiple interdepartmental graduate programs on campus. The department brings together faculty and research programs that span a wide range of interests, including behavioral neuroscience, developmental and cellular neuroscience, cell biology, developmental biology, animal behavior, ecology and evolution. The department offers a stimulating research environment as well as opportunities for collaborative research in other departments. Located at the nexus of four beautiful lakes, Madison, the state capital, consistently ranks among the top American cities for its quality of life. Additional information regarding the Department of Integrative Biology is available at <http://integrativebiology.wisc.edu>. The University of Wisconsin has an active and vibrant research community with ~37 biology departments and several biological research institutes. Faculty members conducting research in Evolutionary Biology across campus are listed here: <http://www.evolution.wisc.edu/>. Interested candidates can apply for Job (PVL100601) here: <https://jobs.hr.wisc.edu/en-us/job/502884/-assistant-or-associate-professor-of-evolutionary-biology>. To ensure consideration, applications should be received by December 1, 2019.

Diversity is a source of strength, creativity, and innovation. UW-Madison aims to fulfill its public mission by creating a welcoming and inclusive community for people from every background. Candidates from under-represented groups are especially encouraged to apply.

Carol Eunmi Lee, Ph.D. Professor Department of Integrative Biology

430 Lincoln Drive, Birge Hall University of Wisconsin Madison, WI 53706 carollee@wisc.edu

<http://carollee.labs.wisc.edu> Carol Eunmi Lee
<carollee@wisc.edu>

UWisconsin Oshkosh PlantEvolution

Tenure-Track Assistant Professor of Biology University of Wisconsin Oshkosh

The Department of Biology at the University of Wisconsin Oshkosh invites applications for an Assistant Professor (tenure-track) position beginning September 2020. This position involves teaching undergraduate and graduate courses, establishing a research program, advising students, performing scholarship and service, overseeing the Neil A. Harriman Herbarium, and participation in governance of the department.

Responsibilities include: Share in teaching introductory biology, introductory plant biology; teach Plant Taxonomy or upper level plant biology elective in the candidate's area of expertise; develop a research program that involves undergraduate and graduate students; pursue extramural funding; supervise M.S. theses, supervise growth and development of the Neil A. Harriman Herbarium (currently fourth largest collection in the state of Wisconsin), and participate in governance of the department.

Required qualifications: 1. Ph.D. in Biology or related field. ABDs with a reasonable likelihood of degree completion prior to hiring may also apply. 2. Combination of coursework and or experience sufficient to teach courses in: introductory biology, botany, and advanced coursework in plant biology.

Preferred qualifications: 1. Teaching experience in higher education. 2. At least one year of post-doctoral experience. 3. A combination of coursework and or experience sufficient to teach courses in either plant taxonomy, plant systematics, or plant conservation. 4. Herbarium curatorial experience. 5. Strong record of publication in peer-reviewed journals. 6. Evidence of ability to procure grant funding.

To apply, applicants must submit the following documents using the online application (<https://careers.uwosh.edu/cw/en-us/job/497247>):

(1) Letter of application, (2) brief statements of teaching philosophy and research interests, (3) CV, (4) electronic copies of a maximum of 3 publications, (5) list of 3 professional references who may be contacted for letters of recommendation (at least one must be from the candidate's current institution), and (6) transcripts from all post-secondary institutions attended (official or copy).— UWO is committed to building a culturally diverse employee workforce and strongly encourages women, minorities, individuals with disabilities, and veterans to apply.

TO ENSURE CONSIDERATION: Applications received by October 4, 2019 are ensured full consideration. Applications received after that date may be given consideration at the discretion of the search committee. Application materials will be evaluated and the most qualified applicants will be invited to participate in the next step of the selection process. Incomplete and/or late application materials may not receive consideration.

For questions regarding your application and additional options to apply, contact Human Resources at recruitment@uwosh.edu or 920-424-1166.

mitchellr@uwosh.edu

VanderbiltU EvolutionaryGenomics

TENURE TRACK ASSISTANT PROFESSOR - EVOLUTIONARY GENOMICS DEPARTMENT OF BIOLOGICAL SCIENCES, VANDERBILT UNIVERSITY

Vanderbilt University invites applications for a tenure-track, faculty position in evolutionary genomics, including population genomics and human evolution, at the Assistant Professor rank. The selected candidate will join the Department of Biological Sciences (<https://as.vanderbilt.edu/biosci/>), and will interact closely with colleagues in the Department of Anthropology (<https://as.vanderbilt.edu/anthropology/>), the Vanderbilt Genetics Institute (<https://www.vumc.org/vgi/>) and the Vanderbilt Evolutionary Studies Initiative (<https://www.vanderbilt.edu/evolution/>).

The candidate will be expected to develop an independent laboratory research program using computational and/or experimental approaches complementing current departmental and institutional strengths in evolution, genetics and genomics, biological anthropology, human population genetics, epigenetics, host-microbe interactions, chemical biology, cell and molecular biology, and

neurobiology.

As a new faculty member, the candidate will play an integral role within the trans-institutional Vanderbilt Evolutionary Studies Initiative and will benefit from collaborations with diverse internationally recognized programs, centers, and institutes. Top candidates will demonstrate excellence in research, highly effective teaching and mentoring to undergraduate and graduate students, and a desire to contribute to a collaborative academic community.

Applicants must have a Ph.D. and preferably one or more years of postdoctoral research experience.

Applicants should submit: (a) a letter of interest, (b) full curriculum vitae, (c) a statement of research interests, (d) a statement of teaching philosophy, and (e) a statement of equity, diversity, and inclusion directly to <http://apply.interfolio.com/67098>. Applicants should arrange for at least three letters of recommendation to be sent to the same link.

Completed applications must be received no later than October 25, 2019.

Vanderbilt University is an Equal Opportunity/ Affirmative Action employer, embraces diversity and inclusion, and has a strong institutional commitment to recruiting and retaining an academically and culturally diverse community of faculty and to teaching students who are diversified by gender, race/ethnicity, and other social locations. Minorities, women, individuals with disabilities, and members of other underrepresented groups are strongly encouraged to apply. Vanderbilt University ranks in the top 15 National Universities and is located in the heart of Music City, Nashville, TN. Nashville is consistently rated as a great place to live (<https://www.vanderbilt.edu/nashville/>).

Antonis Rokas Cornelius Vanderbilt Chair in Biological Sciences Professor of Biological Sciences and Biomedical Informatics Director, Vanderbilt Evolution-

ary Studies Initiative Department of Biological Sciences, Vanderbilt University VU Station B 351634, Nashville, TN 37235 antonis.rokas@Vanderbilt.Edu; +1-615-936-3892 (tel) <http://www.rokaslab.org> (lab) <http://www.vanderbilt.edu/evolution> (Evolutionary Studies Initiative)

“Rokas, Antonis” <antonis.rokas@Vanderbilt.Edu>

YorkU LabManager BeeGenetics

Lab Tech Position, York University, Toronto, Canada

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

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

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

Degree: MSc or PhD in Biology

Salary: \$45,000 per year

Please submit your cover letter, CV, and contact information for 3 referees to honeybee@yorku.ca We will continue to receive applications until a suitable candidate is hired.

Ida Conflitti <iconflitti@gmail.com>

Other

ArizonaStateU Biorepository	89
EcoEvoRxiv	89
ESEB OpportunitiesFund	90
FrontiersInGenetics ThermalAdaptation Issue	90
Grants for ArcticResearch	91
Rad-Seqvs Tag-Seq	91
TEM imaging service	92
UWisconsin Madison EarlyCareerScientistSeminars	92

ArizonaStateU Biorepository

NEON Biorepository at Arizona State University as a resource for NSF Postdoctoral Research Fellowship in Biology (PRFB) applicants

NSF solicitation link: https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=3D503622 (submission deadline: November 2019)

NEON Biorepository data portal: <https://biorepo.neonscience.org/portal/index.php> Arizona State University's Biocollections and Biodiversity Knowledge Integration Center are, as of late-2018, home to National Ecological Observatory Network (NEON) Biorepository. We encourage potential applicants to the NSF Postdoctoral Research Fellowship in Biology (PRFB) to consider including the unique biological samples at the NEON Biorepository in their proposals. We are open to considering a wide range of forms of engagement with NEON samples for proposal development, both on- and off-site. PRFB areas 1, 2, and 4 can all potentially align with this opportunity; with area (2) "Interdisciplinary Research Using Biological Collections" being a particularly unique match.

NEON Biorepository samples are directly tied to the research design and purpose of the NEON project, i.e., to facilitate long-term monitoring/forecasting of ecological and evolutionary processes on a continental scale. Therefore, the available specimens are representative of populations and communities in the field and associated with high-resolution environmental and organismal data. Samples received to date are appropriate for answering a wide variety of scientific questions related to community/population/phylogenetics, population/community structure, microbiomes, disease/microbial/ecosystem/macro-ecology, etc.

The NEON Biorepository currently consists of more than 88,000 biological and environmental samples. Samples are collected from all 81 NEON terrestrial and

freshwater aquatic sites located across the continental US, Hawaii, and Puerto Rico. The Biorepository is growing at a rate >100,000 samples/year of more than 60 classes representing a variety of taxonomic groups. In addition to whole organism voucher specimens, the Biorepository archives a variety of less conventional samples, including genomic, microbial, blood, fecal, leaf litter, soil, and bulk community-level samples.

A partial list of sample classes can be found on the NEON website here: <https://www.neonscience.org/-data/archival-samples-specimens/archival-samples-catalog>.

Please contact us at biorepo@asu.edu for more information about opportunities and sample availability. To explore available samples, visit the NEON Biorepository data portal at <https://biorepo.neonscience.org/>, and contact us if potential NEON samples of interest are not yet listed on the portal.

– Kelsey Yule, PhD NEON Biorepository Biodiversity Knowledge Integration Center School of Life Sciences Arizona State University

website < <http://kelseyyule.com> > NEON Biorepository Data Portal < <https://biorepo.neonscience.org/portal/index.php> >

"kmyule@asu.edu" <kmyule@asu.edu>

EcoEvoRxiv

EcoEvoRxiv(EcoEvo"archive") is a not-for-profit, online repository for research papers related to ecology, evolution and conservation, hosted on the Open Science Framework. EcoEvoRxiv accepts all types of articles (including empirical, theoretical, reviews and commentaries). The server can be used for freely and legally sharing preprints (manuscripts before submissions to journals), postprints, reports, and datasets. Browse over 100 articles hosted so far: <https://ecoevorxiv.org/>. For more details about EcoEvoRxiv: <https://ecoevorxiv.org/>. Fol-

low us on twitter: @EcoEvoRxiv.
 rose.eleanor.o.dea@gmail.com

ESEB OpportunitiesFund

** ESEB EQUAL OPPORTUNITIES INITIATIVE FUND **

The European Society for Evolutionary Biology is pleased to announce the open call for proposals for activities that increase knowledge and awareness of unequal opportunities. Such proposals can include, but are not limited to, short workshops (for instance, on unconscious bias) and/or seminars (with invited speakers) at your home organization, data collection, publication activities and similar events. It must be clear from the proposal how the activity will improve our knowledge and awareness of unequal opportunities, or how the activity will improve equal opportunities directly, in the ESEB specifically, or Evolutionary Biology as a field in general. There are two calls per year, with the next upcoming deadline being the 31st of October 2019. More information about the Equal Opportunities (EO) Initiative is available at <https://eseb.org/prizes-funding/equal-opportunities-initiative/equal-opportunities-initiative-fund/>. *ELIGIBILITY*

- The main applicant must be ESEB member (to become a member of ESEB, please visit <https://eseb.org/society/membership/>) - Applications can be submitted by scientists at any stage of a professional career (e.g., undergraduate, Masters and PhD students, postdocs, and lecturers). - Applicants must provide proof of support of the host institution where the activity should take place, if applicable (letter from head of department) - Applicants must explain explicitly how their activity will improve our knowledge, awareness of unequal opportunities, or how the activity will improve equal opportunities directly, in ESEB specifically, or Evolutionary Biology as a field in general. - Applicants must detail which group of people, and how many, will benefit from this activity (for instance, 50 undergraduates, 10 graduate students, 15 faculty members) - Budgets should be reasonable (usually not exceeding 1000 EUR, if more is required, please contact EO committee first), and, if applicable, detail costs per person (that benefit from this event).

HOW TO APPLY

The application should be no more than 3 pages long

(excluding CV and support letter) and include: - Name of the applicant(s), please indicate the main applicant if appropriate. - A proposal of the activity - A justification of how the activity will improve our knowledge, awareness of unequal opportunities, or how the activity will improve equal opportunities directly, in ESEB specifically, or Evolutionary Biology as a field in general. - Which group of people will benefit (students, staff, general public), and how many - A detailed, justified budget (including cost per beneficiary) - A time schedule - A short summary to be published on the website (100-150 words) - CVs of the applicants (1-2 pages) - A letter of support of the host institution's head of the department

Please submit the application as a single PDF-file by email to Ute Moniatte (office@eseb.org; Subject: EO Fund) at the ESEB Office at the ESEB Office and take care to limit the size of attachments (total < 10 MB) in any one email.

Deadline 31 October, 2019

Successful applications must hand in a report about the activity, including details of how funds were spent, within 3 months of the event.

Dr. Ute Moniatte | ESEB Office Manager Postfach 910225 | 90260 Nuernberg | Germany | office@eseb.org

European Society for Evolutionary Biology | www.eseb.org office@eseb.org

FrontiersInGenetics ThermalAdaptation Issue

Call for contributions to the Research Topic 'with Climate Change: A genomic perspective on Thermal Adaptation'

Margarida Matos, Pedro Simoes, Ines Fragata, Ana Quina, Torsten Kristensen and Mauro Santos are preparing an article collection titled 'with Climate Change: A Genomic Perspective on Thermal Adaptation' ([frontiers.in\9TVy](https://www.frontiersin.org/journal/10.3389/fgene)) as a Research Topic in Frontiers in Genetics section Evolutionary and Population Genetics.

The goal of this Research Topic is to bring together studies on thermal biology using genomic approaches. By doing this we aim to contribute to a better understanding of the genomic basis of thermal adaptation pinpointing if and how different species and populations

cope with challenges in the face of climate change.

We welcome different article types addressing, but not limited to the following questions: - Do populations present enough genetic variability to cope with climate change via evolutionary changes? - Is (genomic) evolutionary potential to adapt to climate changes more limited in some species or populations than others? - What are the genomic differences between populations that adapt to contrasting temporal thermal patterns? - How much do populations differ in the genetic pathways that underly thermal adaptation? - Are there common genes underlying thermal adaptation? What is their variation across species? - What is the genetic basis of plastic thermal responses? - What is the relative role of regulation of gene expression versus evolutionary genetic changes in how populations respond to climate change? - What is the impact of temperature on microbiome-host evolution?

Submissions of abstracts (in the Topic webpage - frontiersin.org) are open until 15th of September 2019. Manuscript submission deadline is the 28th of February 2020.

Please feel free to contact Margarida Matos (mmmatos@fc.ul.pt) for any doubts. The abstract is not mandatory but we would appreciate that you communicate your interest as soon as possible!

We would also much appreciate if you could help disseminate this initiative.

Margarida Matos On behalf of all guest editors

Note: As an open-access journal, Frontiers charges article processing fees (<https://bit.ly/2B9b75I>). Frontiers also has a waivers program and many institutional agreements. If your institution does not provide any grants for open access publishing, please contact the Editorial Office at genetics@frontiersin.org and they will endeavour to find a fee cover.

Margarida Matos <mmmatos@fc.ul.pt> Margarida Matos <mmmatos@fc.ul.pt>

Grants for Arctic Research

Dear All,

Just a short note that the EU-funded INTERACT network (<https://eu-interact.org>) has a call for Transnational Access visitation grants that cover travel and housing costs at 43 research stations located across the

Arctic. The call description is available at <https://eu-interact.org/accessing-the-arctic/tacall>, and the deadline for applications is October 8, 2019.

In this context it is worth mentioning that the NIBIO Svanhovd research station in northern Norway offers possibilities for conducting field work in diverse sub-arctic and arctic aquatic and terrestrial environments. Unlike most field stations, Svanhovd also has a modern molecular genetics lab that can be used during visits. Also note that Remote Access funding can be used to cover field work done by the station's technical staff.

Svanhovd's website is currently under construction, but some information on facilities and the local environment is already available at www.svanhovd-molecol.no.

Best wishes, Tommi Nyman

Tommi Nyman

Norwegian Institute of Bioeconomy Research Department of Ecosystems in the Barents Region Svanhovd Research Station 9925 Svanvik Norway

E-mail: Tommi.Nyman@nibio.no Phone: +47 902 84 254 / +47 358 40 520 6540 Homepages: www.svanhovd-molecol.no / www.jmeg.fi

Tommi Nyman <tommi.nyman@nibio.no>

Rad-Seq vs Tag-Seq

Hello all,

My name is Lucia and I am a Biology PhD student from University of Buenos Aires, Argentina. For my thesis I am exploring the changes the bacteria *Wolbachia pipientis* induces in the weevil *Pantomorus postfasciatus* in order to make infected females parthenogenetic. We know there is a bacterial density threshold necessary to cause such a radical change in the weevil's reproductive system and one of my objectives is to identify differentially expressed genes in ovarian tissue from sexual females, infected females and "cured" females (females treated with antibiotics to reduce the bacterial density below the threshold) in order to shed some light on how *Wolbachia* affects the reproductive system of infected weevils.

Two paths lay ahead of me: standard RNASeq or TagSeq. From what I have been reading, TagSeq is a low-cost but still reliable alternative (Meyer et al., 2011) Vdoi: 10.1111/j.1365-294X.2011.05205.x'V;

Lohman et. al., 2016 (Vdoi: 10.1111/1755-0998.12529) and Matz, 2018 (Vdoi: 10.1016/j.tig.2017.11.002), the problem is that I do not know anyone who has personally used it so I am cautious.

On the other hand, there are two main issues to take into consideration upon making this decision. Firstly, the weevils cannot be bred in laboratory conditions and are quite hard to find in the wild, therefore, the amount of RNA that will be available is still unknown and I will need to make at least 3 replicates. Also, funding is incredible low: in a year the price of an American dollar has gone from 23 Argentinian pesos to 60 which means our ability to pay (in US dollars) for the libraries and sequencing has plummeted and that situation is not likely to change in the near future.

From this transpires the fact that we will to maximize the RNA extracted per ovary (on that topic I have found this protocol based on Matz (2002) and would be very grateful for your thoughts about it: <http://evrogen.com/technologies/RNA-isolation.shtml>), but the minimum amount of RNA per sample will also be important in choosing which method to use: for RNAseq we will need at least 500 ng of RNA per sample while for TagSeq protocols, some companies can go as low as needing 10 ng of RNA per sample.

What do you think about the two methods? Is one truly better or worthier than the other for detecting differential gene expression? What would your approach be if you were in my shoes?

Thank you all in advance! I am willing to post all replies...

Lucia

Lucia Fernandez Goya PhD Candidate Universidad de Buenos Aires Buenos Aires, Argentina luluf.goya@gmail.com

rodriguero@ege.fcen.uba.ar

TEM imaging service

Dear Evoldir community,

I'm looking for either service provider or collaborator for a project where I consider imaging 50-100 feather samples using TEM microscopy. Apart from browsing available services I'm wondering if the Evoldir community may also link me to relevant collaborators. On request I can provide more details of the project.

Szymon Drobnik

Institute of Environmental Sciences Jagiellonian University, Kraków, Poland

School of Biological, Environmental and Earth Sciences University of New South Wales, Sydney, Australia

Szymek Drobnik JU <szymek.drobnik@uj.edu.pl>

UW Wisconsin Madison Early Career Scientist Seminars

Call for Applicants: J.F. Crow Institute Early-Career Scientist Seminars

The J.F. Crow Institute for the Study of Evolution at the University of Wisconsin-Madison is inviting early-career evolutionary biologists from outside UW-Madison to apply to participate in an early-career scientist seminar series in spring 2020. For more information about our Institute, please visit our website (evolution.wisc.edu). Please come share your science with our community!

The 3-5 speakers selected for the series will be invited to visit UW-Madison. The speaker will present a 50-minute seminar, ideally aimed at evolutionary biologists with a broad range of backgrounds. The speaker will also participate in a 45-minute discussion after the seminar with undergraduate evolution majors. For the day of the seminar we will schedule meetings with faculty and students working in evolutionary biology. The speaker would be responsible for their own travel to Madison, but would receive a \$150 honorarium to offset travel costs. If an overnight stay is required, arrangements could be made to stay with a member of the Crow Institute. If any other accommodations are required, we are happy to work with speakers to make sure their needs are met.

Eligibility: Non-UW-Madison graduate students and postdoctoral fellows who received a Ph.D. no longer than 5 years ago.

Applications for a spring seminar are due by November 1st.

The application is available at <https://evolution.wisc.edu/seminars/early-career-seminars/>. If you have any questions please contact Jered Stratton (jstratton2@wisc.edu) or Tiago Ribeiro (tribeiro@wisc.edu).

Megan Frayer <mfrayer@wisc.edu>

PostDocs

Bogota Colombia HeliconiusGenomics 93	UCalifornia Berkeley HumanEvolGenetics 107
Cambridge QuantGenetics 93	UCalifornia Davis PopulationBiology 107
CornellU BeeMicrobeInteractions 94	UCalifornia LosAngeles BiodiversityInformatics . . 108
DelawareStateU EvolutionaryNeuroscience 95	UColodaroBoulder SymbiosisFunctionalGenomics 109
EMBL Europe PopgenDevelopment 95	UCopenhagen PopulationGenomics 109
ETH Zurich FungalEvolution 95	UEdinburgh HostPathogenEvolution 109
France EvolutionaryEnvironmentalGenomics 96	UKentucky EvolutionaryTheory 110
FreeUBerlin MicrobialEvolution 97	UManchester EvolutionAntibioticResistance 111
GeorgiaTech HumanPopulationGenomics 97	UMaryland ComparativePhylogenomicsPollination 112
GeorgiaTech VirusMicrobeDynamics 97	UMaryland EvolutionPlantDisease 112
Hawaii InsectFunctionalGenomics GeneEditing . . . 98	UNorthCarolina Charlotte MarineInvertAdaptation 113
Hawaii InsectPhylogenomics 99	UNotreDame BaboonEvolutionBehavior 114
Helsinki EvolutionarySequenceAnalysis 100	UOslo Biomathematics 114
IGS UMaryland BigDataEvolutionaryGenomics . . 100	UReading PhylogeneticTrees 115
JohnsHopkinsU HumanGenomics 101	USaintJoseph Macao FunctionalGenomics 115
Lausanne MicrobialEvolution 102	USaoCarlos MammalianMetabarcoding 115
Oxford InfectiousDiseaseModelling 103	UTennessee TeachingEvolution 116
ParisSorbonneU BiophysicalPopulationDynamics . 103	UTurku PhDPDF PaternalEffectsProject 117
PrincetonU ConservationImmunology 104	UWisconsin Madison YeastEvolution 118
StockholmU UppsalaU MarineEndosymbiosis 105	
UCalifornia Berkeley HumanEvolGenetics 2 106	

Bogota Colombia HeliconiusGenomics

The Evolutionary Genetics group at Universidad del Rosario (Bogota-Colombia) is recruiting a Postdoctoral researcher to investigate the genomics of convergent mimicry patterns between closely related *Heliconius* butterflies. The researcher will be based in Bogota but will collaborate with Dr. Chris Jiggins (University of Cambridge).

Required qualifications:

- Ph.D. in genomics, biology, computer science or related fields
- Programming skills (e.g. Python and R)
- Experience analysing large-scale genomic data

Interested applicants should send a CV and the contact information of 2 references to camilo.salazar@urosario.edu.co cc

geimy.pardo@urosario.edu.co by October 20, 2019. Informal inquiries are welcome.

Carolina Pardo-Diaz, Ph.D. Directora Departamento de Biología Profesora Asociada Facultad de Ciencias Naturales y Matemáticas Universidad del Rosario Bogotá, Colombia Tel. (+571) 2970200 ext. 4032

Geimy Carolina Pardo Diaz
<geimy.pardo@urosario.edu.co>

Cambridge QuantGenetics

Post-Doctoral Research Associate in Quantitative Genetics - 18 month fixed term contract

We are looking for an enthusiastic and talented quantitative geneticist to work on several wheat genetics research projects at NIAB in Cambridge, UK, funded by UK research councils and the European Union. NIAB is the UK's fastest growing crop science organisation, with

rapidly expanding research capabilities in plant genetics, agronomy, farming systems and data science, the largest national field trials capability, and strong research links with industry, government and academia. The NIAB Genetics and Breeding team, based at Cambridge, carries out leading-edge crop genetics research, with direct translation to plant breeding programmes in the UK and elsewhere. Several ongoing projects are generating large genetic data sets for gene discovery via QTL mapping and GWAS. The successful applicant will play a leading role in the curation, analysis and interpretation of these data, including data QC, model fitting and statistical analysis, as well as dissemination and publication of results. A main focus will be on QTL mapping in wheat multi-founder (“MAGIC”) and association mapping populations. The position offers an excellent opportunity to work on translational research at the academic-commercial interface through involvement in multiple applied genetic mapping projects. Opportunities will be available to develop and grow research interests within the overall NIAB genetics and breeding research portfolio, with possible availability of an extension to the contract.

The essential requirements for this role are:

- Relevant BSc; - PhD in quantitative genetics, plant genetics, or a related subject area, with evidence of specialisation in statistical analysis
- Experience of statistical and genetic data analysis;
- Experience of curation and analysis of large data sets;
- Demonstrable attention to detail for data QC and analysis workflows, combined with high scientific rigour for data interpretation;
- Good knowledge of R statistical package;
- Excellent organisational and prioritisation skills;
- Proven ability to routinely and fully meet research deadlines;
- Ability to work independently, once given adequate training.
- Ability to work in a team;
- Excellent presentation skills (both written and verbal).

The desirable requirements for this role are:

- Experience in advanced genetic mapping skills;
- Good knowledge of experimental design;
- Experience in programming skills eg. python;
- Knowledge of plant breeding and crop science;
- Specialist training in quantitative genetics or statistics;
- Positive attitude to challenges - views problems when they arise with creativity;
- Enthusiasm for developing new ideas.

The position will also require travel within the UK and internationally.

Starting salary is in the range of 30,342 to 40,036 per annum depending on qualifications, skills and experience. Further details and an application form are available at: <http://www.niab.com/vacancies/index/> or from the HR

Office, NIAB, Huntingdon Road, Cambridge CB3 0LE, Tel No. 01223 342282, Email: jobs@niab.com, quoting Ref No. T/356.

Closing date for applications: 29 September 2019

Keith Gardner <Keith.Gardner@niab.com>

CornellU BeeMicrobeInteractions

POSITION: Postdoctoral Associate (bee-microbe interactions)

STARTING DATE: January 2020 (approximately)

LOCATION: Comstock Hall, Cornell University, Ithaca, NY 14850

SUMMARY: We seek a post-doc to work on the characterization of bacterial and fungal communities in the pollen provisions of solitary bees. The brood cell microbiome forms an important component of bee larval nutrition and recent studies have indicated that disruptions to the brood cell microbiome can have significant negative impacts on larval growth and development. We seek a candidate with a strong background in molecular characterization of microbial communities who can apply a variety of methods, including amplicon sequencing, shotgun metagenomics, and culture-based techniques to explore the native microbial communities of ground and stem-nesting bees and how perturbations to these microbial communities impact bee health. We are working largely with mason bees (*Osmia cornifrons*). Expertise in wet-lab techniques of DNA and RNA extraction, Next-gen library development, and downstream bioinformatics analyses is essential. The successful candidate should have excellent oral and written communication skills, should be capable of independently writing research articles arising from the research, and should be comfortable communicating with collaborators at other institutions. The successful candidate will be expected to contribute to lab management and supervision of graduate and undergraduate students in the lab.

Background and full details on the project can be found at:

<http://www.danforthlab.entomology.cornell.edu/-research/microbial-ecology/> To apply, go to Academic Jobs online (posting #14494): <https://academicjobsonline.org/ajo/jobs/14494> For more information on this post-doctoral job, please contact Bryan Danforth:

Bryan N. Danforth Department of Entomology 3124
Comstock Hall Cornell University Ithaca, NY 14853-
2601

phone: 607-255-3563/FAX: 607-255-0939

email: bnd1@cornell.edu

Lab website:
www.danforthlab.entomology.cornell.edu/
Nicholas Danforth <bnd1@cornell.edu>

<http://->
Bryan

DelawareStateU EvolutionaryNeuroscience

The Center for Neuroscience and the Department of Psychology at Delaware State University is pleased to announce that a Postdoctoral Research Associate position is available in the Charvet lab. The post-doctoral Associate will work with a diverse team to study the evolution and development of human and non-human brains. The goal of this research is to integrate from genetics to neuroimaging to enhance translational work from model organisms to humans. The successful candidate will be highly motivated with a solid record of publication. Previous experience with a programming language is preferred. A PhD degree in Psychology, Neuroscience, or related field is required. For more information, please contact Dr. Christine Charvet at ccharvet@desu.edu. Apply here < <https://chu.tbe.taleo.net/chu01/ats/careers/-requisition.jsp?org=DESU&cws=1&rid=2432> >

Christine Charvet Assistant Professor of Psychology
Delaware State University

Christine Charvet <ccharvet@gmail.com>

EMBL Europe PopgenDevelopment

A postdoc position is available in Eileen Furlong's lab to use population genetics to dissect cis and trans regulation in developmental networks, using *Drosophila* as a model. The study will dissect robustness and canalisation in developmental programs. If interested please contact furlong@embl.de Our two recent studies provide a proof of principle of using *Drosophila* populations

for this purpose (Cannavo et al, Nature 2017; Schor et al, Nature Genetics 2017). Due to the very small blocks of LD, we could get to the causal SNP in over 50% of the cases. This allowed us to functionally link enhancers to promoters. The current project will first scale up and perform a large scale eQTL study during *Drosophila* embryogenesis in two conditions and then use this information to uncover new regulatory principles of development networks. The project will be done in collaboration with Trudy Mackay and Oliver Stegle, two outstanding leaders in their fields. EMBL is a truly international and interdisciplinary institute - with a very open, interactive and supportive culture making it a fun place to work (great day care onsite). We are located in lovely Heidelberg, a gorgeous old town with cobble stones and a castle on the hill, with lots of outdoor activities (rock climbing, trail biking, hiking). This is an excellent central location to explore Europe and international science. I take mentoring seriously - Post-docs from my lab have done very well in finding faculty positions - see <http://furlonglab.embl.de/members#alumni> The lab is a mixture between experimental and computational scientists where we work at the interface of chromatin biology and developmental biology using genetics, genomics (single cell approaches), imaging and computational approaches.

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>

ETH Zurich FungalEvolution

Two Postdoctoral Positions Available at ETH Zurich in the Plant Pathology Group of the Institute of Integrative Biology

Evolutionary Ecology of Plant Pathogenic Fungi

We seek applicants with expertise in Evolutionary Biology, Quantitative Genetics, Microbiology, Population Genetics, Molecular Plant-Microbe Interactions, or Fungal Ecology to lead a research group oriented around the evolutionary ecology of plant pathogenic fungi. Applicants should be able to work independently and to

publish their research in excellent peer-reviewed journals. Applicants should have effective communication skills, both oral and written, and be able to lead and coordinate a research team of 2-3 people. A good publication record is essential.

Applicants should possess demonstrated experience in research topics related to pathogen evolutionary ecology, including expertise in one or more of the following areas: quantitative biology, population genetics, population genomics, quantitative genetics, quantitative genomics, host-parasite molecular interactions, trade-offs among traits, pathogen competition during mixed infections. Experience with fungi or plant pathogens is desirable, though not required, but applicants who already have experience with plant pathogens and fungi will have an advantage. Experience with population and quantitative genomics is also desirable. The ability to manage and analyze extensive phenotype datasets containing millions of data points is essential. The successful applicant will be granted a high degree of flexibility in research direction and approach. The position is renewable annually for up to six years. Female scientists are especially encouraged to apply.

Our major areas of research are population genetics and genomics, evolutionary biology, evolutionary ecology, experimental evolution, and phylogeography. Our primary experimental organisms are the plant pathogenic fungi *Zymoseptoria tritici* (aka *Mycosphaerella graminicola*), *Parastagonospora nodorum* (aka *Phaeosphaeria nodorum*), and *Rhynchosporium commune* (aka *Rhynchosporium secalis*). Genome sequences are available for all three fungi, including multiple finished reference genomes for *Z. tritici* and *P. nodorum*. We have already acquired complete genome sequences (>20X depth) for globally distributed field populations for all three fungi, with an average of ~130 high quality genome sequences already analysed for each pathogen. We have developed and implemented high throughput phenotyping methods oriented around automated image analysis to acquire millions of phenotype data points for a variety of important traits, including virulence, reproduction, fungicide sensitivity, and growth at different temperatures and under different stresses.

As a result of earlier projects centered around QTL mapping, GWAS, RNA seq and population genomics, we have identified many candidate genes that contribute to virulence, fungicide resistance, thermal adaptation, and host responses. Several of these genes have already been functionally validated, with more functional validations underway. The successful candidate will lead a research program that integrates the knowledge obtained from these genomic and phenomic datasets to understand trade-offs among pathogen traits and iden-

tify new candidate genes that play important roles in the evolutionary ecology of these pathogens.

The ETH and the Institute of Integrative Biology possess advanced infrastructure including the Genetic Diversity Center (<http://www.gdc.ethz.ch/>) and the Functional Genomics Center Zurich (<http://www.fgc.ethz.ch/>). Zurich is consistently rated as one of the most livable cities in the world. The Plant Pathology Group (<http://www.path.ethz.ch/>) is currently composed of ~20 people from 11 countries, and English is the working language of the group. But knowledge of German or French is useful outside of the university.

Applications consisting of a CV, publication list and a detailed statement of research interests, with names and contact information for 3 references should be prepared as a single pdf file and sent by email before 1 December 2019 to Prof. Bruce A. McDonald at bruce.mcdonald@usys.ethz.ch. Applications will be processed as they are received, so it is possible that both positions will be offered to excellent candidates before 1 December 2019. The positions can be filled beginning 1 January 2020 but will remain open until suitable scientists have been found.

McDonald Bruce <bruce.mcdonald@usys.ethz.ch>

France Evolutionary Environmental Genomics

A postdoc position in Comparative and Environmental Genomics of Eukaryotes is available in the Laboratory of Genomics of Eukaryotes led by Patrick Wincker at Genoscope in France near Paris. The position is for 2 years and will start before 2020. The applicant must have French nationality and must currently work in a non-French lab.

The project aims to analyze genomic resources for Marine Plankton linked to the Tara Oceans expedition. The project also aims to contribute to marine microbial ecology and evolution, and the candidate will have prime access to novel and curated marine genomic databases encompassing Bacteria, Archaea, Eukarya and giant viruses. The candidate should be independent and have acquired an expertise in comparative genomics, phylogenomics or population genetics.

Please contact Tom Delmont (tomodelmont@gmail.com) or Olivier Jaillon (ojaillon@genoscope.cns.fr) for more details.

Olivier Jaillon <ojaillon@genoscope.cns.fr>

FreeUBerlin MicrobialEvolution

A postdoc in microbial biospherics (Level: E13100%, 2yr ? salary ca. EU 45K) Microbial biospherics (see Rillig & Antonovics 2019, PNAS; doi:10.1073/pnas.1904326116) is the study of matter-closed, energy-open microbial microcosms. The successful candidate is interested in establishing such systems in the lab for experimental work, and could have a background in biology, ecology, microbiology, physics or other fields. We will also consider candidates with a background in ecological modeling to work on issues of microbial biospherics. Excellent English skills are necessary, and candidates must have a Ph.D. degree. Tasks include development of a research project on microbial biospherics, collaborate widely within the lab (and beyond), and teaching (4 credits a semester, for example on microbial biospherics). How to apply: send your cv, list of publications and cover letter in one pdf to matthias.rillig@fu-berlin.de quoting the position code 21223700 / 30 / 19 in the email title.

Applications received by 21.8.2019 will receive full consideration. This position is still open at time of posting.

“Antonovics, Janis (ja8n)” <ja8n@virginia.edu>

GeorgiaTech HumanPopulationGenomics

Multiple Postdoctoral Positions in Human Population Genomics

Description: The Lachance Lab at Georgia Institute of Technology is recruiting two postdocs in human population genomics. Our lab uses computational approaches to understand how genetic disease risks have evolved over recent human history. Additional projects include improving the generalizability of polygenic risk scores. The first postdoctoral position will focus on evolutionary medicine and anthropological genetics. The second postdoctoral position will focus on genetic epidemiology and public health genomics. Both of these positions are NIH funded: https://projectreporter.nih.gov/project_info_description.cfm?aid=9797924&icde=-

46593968&ddparam=&ddvalue=&ddsub=&cr=-

1&csb=default&cs=ASC&pball Environment: The Lachance Lab contains a diverse set of scientists and we foster an inclusive research environment. Our lab is part of the Center for Integrated Genomics at Georgia Tech - which includes the labs of Greg Gibson, Soojin Yi, and King Jordan. Opportunities to develop collaborations with African colleagues will also be available.

Qualifications: - PhD in evolutionary biology, genetics, genetic epidemiology, bioinformatics, or anthropology - Evidence of research productivity - Ability to work independently - Strong writing skills - Coding skills (R, Python) and previous experience working with large genome-scale datasets - A desire to mentor graduate and undergraduate students

Salary and duration: As per NIH guidelines, salaries will be commensurate with qualifications and experience. Subject to yearly review, both appointments are renewable. Funding is available for multiple (3+) years.

Informal inquiries are welcome. Please contact joseph.lachance@biology.gatech.edu if you have any questions.

Joseph Lachance Assistant Professor School of Biological Sciences Georgia Institute of Technology <https://popgen.gatech.edu> “Lachance, Joseph L” <joseph.lachance@biology.gatech.edu>

GeorgiaTech VirusMicrobeDynamics

Title: Postdoctoral Position in Virus-Microbe Dynamics, Georgia Tech

A postdoctoral scientist position (2+ years) is available in Prof. Joshua Weitz’s group in the School of Biological Sciences at the Georgia Institute of Technology.

The postdoc will lead efforts to develop analytic and computational models of virus-microbe interactions with an emphasis on viral control of microbial population and evolutionary dynamics, both in an environmental and therapeutic context. Requirements include: (1) PhD in quantitative biosciences, ecology, evolutionary biology, physics, applied mathematics, or related area; (2) Strong quantitative & computational skills; (3) Excellent communication skills; (4) Interest and experience in model-data integration.

Position to start approximately January 2020; start date negotiable, includes competitive salary, benefits, collab-

orative opportunities in the USA/France, and travel budget. Screening of applicants will begin immediately and applications will be considered until position is filled.

To apply, please e-mail Joshua Weitz (jswnitz@gatech.edu) with a curriculum vitae (CV), a one page statement of how your research interests are related to this position, and contact information for 3 references. More information on the group's research can be found at <http://ecothery.biology.gatech.edu>. Georgia Tech is located in Atlanta, GA in the Midtown neighborhood - a vibrant, urban community: <http://www.midtownatl.com/>. Georgia Tech is a unit of the University System of Georgia and an Affirmative Action/Equal Opportunity Employer.

Joshua S. Weitz Professor, School of Biological Sciences
Courtesy Professor, School of Physics Director, Interdisciplinary Graduate Program in Quantitative Biosciences
Georgia Institute of Technology 310 Ferst Dr. Atlanta, GA 30332

email: jswnitz@gatech.edu phone: 404-385-6169
office: Cherry Emerson 219 group: <http://ecothery.biology.gatech.edu/> web: <http://www.biology.gatech.edu/people/joshua-weitz> twitter: @joshuasweitz & @QBios_GT QBios PhD: <http://qbios.gatech.edu> viral ecology book: <http://press.princeton.edu/titles/10642.html> "Joshua S. Weitz" <jswnitz@gatech.edu>

Hawaii InsectFunctionalGenomics GeneEditing

Postdoc position: Insect Functional Genomics and Bioinformatics, Hawaii

Aloha! The USDA-ARS Pacific Basin Agricultural Research Center has funding for a postdoc in the area of insect functional genomics and bioinformatics. This research project is focused on 1) utilizing genomic and genetic tools to characterize existing genetic sexing systems used in tephritid fruit fly sterile insect technique programs (e.g. Mexfly, medfly, oriental fruit fly); and 2) utilize gene editing technologies to support emerging SIT programs in *Bactrocera* fruit flies. The duties include analysis of NGS data, focusing on QTL analysis, generation of linkage maps, whole genome sequencing, and SNP genotyping as well as wet-lab techniques in CRISPR/Cas9 gene editing and other transformation

methods, library preparation for high-throughput sequencing, genotyping, and insect colony and strain maintenance. We have advanced computing resources and a very active research program. Salary is ~\$63k/year with benefits, hired through the ORISE program, and the job will be stationed at the USDA-ARS Pacific Basin Agricultural Research Center in Hilo, Hawaii. Funding is guaranteed for 1 year, with possibility of extension based on performance. PhD is required. If interested, please contact Dr. Scott Geib at scott.geib@ars.usda.gov and apply for the job online at:

<https://www.zintellect.com/Opportunity/Details/-USDA-ARS-2019-0166> More information about the lab: <https://youtu.be/dU2kFhI6bYI> A selection of relevant publications:

1. Sim SB, Kauwe A, Ruano RE, Rendon P, Geib SM: The ABCs of CRISPR in Tephritidae: developing methods for inducing heritable mutations in the genera *Anastrepha*, *Bactrocera* and *Ceratitis*. *Insect molecular biology* 2019, 28:277-289.
2. Kingan SB, Urban J, Lambert CC, Baybayan P, Childers AK, Coates BS, Scheffler B, Hackett K, Korfach J, Geib SM: A High-Quality Genome Assembly from a Single, Field-collected Spotted Lanternfly (*Lycorma delicatula*) using the PacBio Sequel II System. *BioRxiv* 2019:627679.
3. Sim SB, Ruiz-Arce R, Barr NB, Geib SM: A new diagnostic resource for *Ceratitis capitata* strain identification based on QTL mapping. *G3: Genes, Genomes, Genetics* 2017, 7:3637-3647.
4. Sim SB, Geib SM: A chromosome-scale assembly of the *Bactrocera cucurbitae* genome provides insight to the genetic basis of white pupae. *G3: Genes, Genomes, Genetics* 2017, 7:1927-1940.
5. Papanicolaou A, Schetelig MF, Arensburger P, Atkinson PW, Benoit JB, Bourtzis K, Castañera P, Cavanaugh JP, Chao H, Childers C: The whole genome sequence of the Mediterranean fruit fly, *Ceratitis capitata* (Wiedemann), reveals insights into the biology and adaptive evolution of a highly invasive pest species. *Genome biology* 2016, 17:192.
6. Sim SB, Calla B, Hall B, DeRego T, Geib SM: Reconstructing a comprehensive transcriptome assembly of a white-pupal translocated strain of the pest fruit fly *Bactrocera cucurbitae*. *GigaScience* 2015, 4:14.
7. Calla B, Geib SM: MicroRNAs in the oriental fruit fly, *Bactrocera dorsalis*: extending *Drosophilid* miRNA conservation to the Tephritidae. *BMC genomics* 2015, 16:740.
8. Geib SM, Calla B, Hall B, Hou S, Manoukis NC: Characterizing the developmental transcriptome of the oriental fruit fly, *Bactrocera dorsalis* (Diptera: Tephritidae) through comparative genomic analysis with *Drosophila melanogaster* utilizing modENCODE datasets. *BMC genomics* 2014, 15:942.
9. Calla B, Hall B, Hou S, Geib SM: A genomic perspective to assessing quality of mass-reared SIT flies used in

Mediterranean fruit fly (*Ceratitis capitata*) eradication in California. *BMC genomics* 2014, 15:98.

Scott Geib, PhD Research Entomologist USDA Pacific Basin Agricultural Research Center Tropical Crop and Commodity Protection Research Unit 64 Nowelo Street Hilo HI, 96720 808-959-4335 (office) 808-959-5470 (fax) Scott.Geib@USDA.GOV

“scott.geib@usda.gov” <scott.geib@usda.gov>

Hawaii InsectPhylogenomics

Junior Researcher (Postdoc) position: Population genetics/phylogenomics, Hawaii

Aloha! The University of Hawaii Manoa and USDA-ARS Pacific Basin Agricultural Research Center have funding for a Junior Researcher (postdoc) in the area of population genetics/phylogenomics/bioinformatics. This research project is focused on 1) applying genomic tools towards resolving phylogenetics and population structure of tephritid fruit flies, a group of pestiferous flies including many species groups that exhibit cryptic diversity and hybridization; and 2) developing novel genomic tools or methods that can be applied in diagnostic or biosurveillance programs for invasive tephritid species. The duties include analysis of NGS data, focusing on QTL analysis, generation of linkage maps, whole genome sequencing, and SNP genotyping. Strong background in population genomics and phylogenetics is required. Knowledge of linux/unix, scripting, and light programming is required. Our approaches include RAD-Seq, GBS (genotyping by sequencing), multi-gene sequencing, and whole-genome sequencing. We have advanced computing resources and a very active research program. Salary is ~\$63k/year with benefits, hired through University of Hawaii Manoa, and the job will be stationed at the USDA-ARS Pacific Basin Agricultural Research Center in Hilo, Hawaii. Funding is guaranteed for 1 year, with possibility of extension based on performance. PhD or Masters with extensive experience is required. If interested, please contact Dr. Scott Geib at scott.geib@ars.usda.gov and apply for the job online at:

<https://www.governmentjobs.com/careers/hawaiiiedu/-jobs/2582937/jr-researcher-85382t> More information about the lab: <https://youtu.be/dU2kFhI6bYI> Software tools developed as part of this project: <https://popphylo.tools.github.io/> A selection of relevant

tephritid publications resulting from this collaborative research group: - Garzón-Orduña IJ, Geib SM, Barr NB: The Genetic Diversity of *Bactrocera dorsalis* (Diptera: Tephritidae) in China and Neighboring Countries: A Review From Published Studies. *Journal of Economic Entomology* 2019. - Dupuis JR, RuizâR, Barr NB, Thomas DB, Geib SM: Rangeâpopulation genomics of the Mexican fruit fly: Toward development of pathway analysis tools. *Evolutionary Applications* 2019, 12:1641-1660. - San Jose M, Doorenweerd C, Leblanc L, Barr N, Geib S, Rubinoff D: Tracking the origins of fly invasions; using mitochondrial haplotype diversity to identify potential source populations in two genetically intertwined fruit fly species (*Bactrocera carambolae* and *Bactrocera dorsalis* [Diptera: Tephritidae]). *Journal of Economic Entomology* 2018, 111:2914-2926. - San Jose M, Doorenweerd C, Leblanc L, Barr N, Geib S, Rubinoff D: Incongruence between molecules and morphology: A seven-gene phylogeny of Dacini fruit flies paves the way for reclassification (Diptera: Tephritidae). *Molecular Phylogenetics and Evolution* 2018, 121:139-149. - Dupuis JR, Sim SB, San Jose M, Leblanc L, Hoassain MA, Rubinoff D, Geib SM: Population genomics and comparisons of selective signatures in two invasions of melon fly, *Bactrocera cucurbitae* (Diptera: Tephritidae). *Biological Invasions* 2018, 20:1211-1228. - Dupuis JR, Bremer FT, Kauwe A, San Jose M, Leblanc L, Rubinoff D, Geib SM: HiMAP: Robust phylogenomics from highly multiplexed amplicon sequencing. *Molecular Ecology Resources* 2018, 18:1000-1019. - Dupuis JR, Bremer FT, Jombart T, Sim SB, Geib SM: mvmapper: Interactive spatial mapping of genetic structures. *Molecular Ecology Resources* 2018, 18:362-367. - Sim SB, Ruiz-Arce R, Barr NB, Geib SM: A new diagnostic resource for *Ceratitis capitata* strain identification based on QTL mapping. *G3: Genes, Genomes, Genetics* 2017, 7:3637-3647.

Scott Geib, PhD Research Entomologist USDA Pacific Basin Agricultural Research Center Tropical Crop and Commodity Protection Research Unit 64 Nowelo Street Hilo HI, 96720 808-959-4335 (office) 808-959-5470 (fax) Scott.Geib@USDA.GOV

scott.geib@usda.gov scott.geib@usda.gov

Helsinki EvolutionarySequenceAnalysis

As many people have been on holidays/travelling in August, the application deadline has been extended by one week.

Best regards, Ari Löytynoja

A postdoc position in evolutionary sequence analysis is available in the research group of Dr. Ari Löytynoja at the Institute of Biotechnology, University of Helsinki, Finland. The position is for three years and will start in October 2019, or later by agreement.

Project: Template switching is a poorly known mutational mechanism that copies short stretches of sequence from the opposite strand and causes clusters of differences between homologous sequences. The mechanism has previously been studied in microbes and we recently showed (<https://genome.cshlp.org/content/27/6/1039>) that mutation patterns consistent with it are polymorphic also in humans. The role and significance of template switching in evolution of genes and organisms is not known.

We are now looking for a dedicated and enthusiastic post-doctoral fellow to join in a project studying this mechanism in more detail. The applicant is required to hold PhD in evolutionary biology, bioinformatics, computer science, or a related field, as well as strong written and oral communication skills. The working language of the lab is English; knowledge of the Finnish language is not necessary. Strong experience in computer programming and Linux systems is required, prior experience in evolutionary sequence analysis is an advantage.

See the links below for more information and instructions for applying the position:

<http://loytynojalab.biocenter.helsinki.fi> <https://www.helsinki.fi/en/open-positions/postdoctoral-researcher-in-evolutionary-sequence-analysis> The deadline for submitting applications is September 8, 2019.

“ari.loytynoja@helsinki.fi” <ari.loytynoja@helsinki.fi>

IGS UMaryland BigDataEvolutionaryGenomics

What our group is looking for: Are you a collaborative scientist with an interest in working on large-scale international genomics consortium? Do you have bioinformatics skills and a desire to expand them? Do you work well with others and want to enjoy your science while making a cutting edge impact on the fields of genomics and evolution? We are seeking a postdoctoral fellow to work on a project funded under the new NHGRI R35 Genomic Innovator Award recently given to Dr. Tim O’Connor (<http://tiny.cc/-TDOGoogleScholar>; <http://tiny.cc/TDO-CV>).

What we have: We are a dynamic group of scientists in the O’Connor Evolutionary Genetics Group (<https://sites.google.com/view/oconnorgroup/home>) and with key collaborators, we have access to a deluge of genomic data. We will be leading a number of studies within the Trans-Omics for Precision Medicine (TOPMed) Project (www.nhlbiwgs.org) to integrate multi-omics data for deeply phenotyped and ancestrally diverse individuals. We have already sequenced over 140K genomes and are generating metabolomics, transcriptomics, and proteomics data for some of these individuals. We are also working to explore health disparities in outcomes for cancer patients by combining proteomics and genomics.

At the Institute for Genome Sciences at the University of Maryland School of Medicine (<http://igs.umaryland.edu/>), you will also benefit from a community of interactive research groups, bioinformatics programmers, and a variety of sequencing and computational resources available in a world-class institute dedicated to genomic, basic, and translational research to improve human health.

Qualifications: -PhD with expertise in the areas of Bioinformatics, Evolutionary and Population Genetics, Computer Science, or related fields. -Publication record commensurate with experience -Strong computational and programming skills (Python/R) -Demonstrated ability to work with others -Potential to lead your own scientific project -Experience working with large data sets is preferred -A desire to learn and have fun

What we need from you: Please send a CV (with all papers and pre-prints), a cover letter detailing your scientific goals for this position (2 pages), and contact for

three references to timothydoconnor@gmail.com

If you are attending, Dr. O'ÁConnor will be at ASHG in Houston, TX and would be happy to meet with you and discuss this opportunity further. Let him know when you contact him.

Recent Key Pre-prints and Papers from the group: Taliun, D.*, Harris, D. N.*, Kessler, M. D.*, [...], Hernandez, R. D., O'Connor, T. D.***, Abecasis, G. R.** Sequencing of 53,831 diverse genomes from the NHLBI TOPMed Program. <https://www.biorxiv.org/content/10.1101/563866v1> Harris, D. N., Kessler, M. D., Shetty, A. C., Weeks, D. E., Minster, R., Browning, S., Cochrane, E. E., Deka, R., Hawley, N. L., Reupena, M. S., Naseri, T., Trans-Omics for Precision Medicine (TOPMed) Consortium, TOPMed Population Genetics Working Group, McGarvey, S. T., O'ÁConnor, T. D. Evolutionary genomics of Samoans. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3329885 Kessler, M. D., Loesch, D. P., Perry, J., Heard-Costa, N. L., Cade, B., Wang, H., Daya, M., Ziniti, J., Datta, S., CeledÁAn , J. C., Soto-Quiros, M. E., Avila, L., Weiss, S. T., Barnes, K., Redline, S., Vasani, R. S., Johnson, A. D., Mathias, R. A., Hernandez, R., Wilson, J. G., Nickerson, D. A., Abecasis, G., Browning, S., Zoellner, S., O'ÁConnell, J., Mitchell, B., TOPMed, Consortium, TOPMed Population Genetics Working Group, O'ÁConnor, T. D. de novo mutations across 1,465 ancestrally diverse genomes reveal novel mutational insights and reductions in the Amish founder population. <http://biorxiv.org/cgi/content/short/553214v1> Kessler, M. D., Bateman, N. W., Conrads, T. P., Maxwell, G. L., Dunning Hotopp, J. C., O'ÁConnor, T. D. (2019) Ancestral characterization of 1018 cancer cell lines highlights disparities, and reveals gene expression and mutational differences. *Cancer*. 125(12):2076-2088. <https://www.ncbi.nlm.nih.gov/pubmed/30865299> Updated Ad can be found here: <https://docs.google.com/document/d/1D7nqC8RHgrxfpgDF6PMQVchoA34eh82s0la6hlwD4ew/edit?usp=sharing> Timothy D. O'Connor, PhD Assistant Professor Institute for Genome Sciences and the Department of Medicine University of Maryland School of Medicine 670 W. Baltimore Street, Rm. 3181

— / —

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>

JohnsHopkinsU HumanGenomics

Applications are invited for a postdoctoral 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'Xpotential hidden sources 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 (Neanderthal 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 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 - Record of research productivity and publication - 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 re-

cruitment 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>

Lausanne MicrobialEvolution

Work description: Our laboratory works on social bees to address current questions about the evolution, function, and ecology of specialized gut microbial communities. We are looking for an outstanding and highly motivated candidate to join our research group. The postdoctoral candidate will take the lead in studying eco-evolutionary processes governing the composition of gut microbial communities at the strain/genomic level. The candidate will use a combination of computational and experimental approaches to (i) study the evolution of the gut microbiota across a wide range hosts and/or (ii) test different ecological processes that govern community assembly and resilience. The applicant will work in close collaboration with a PhD student and get the opportunity to supervise Master students and participate in teaching. A wide range of bioinformatics and experimental methods will be applied, providing an excellent training for the prospective applicant. We are part of the Department of Fundamental Microbiology, a highly collaborative, multidisciplinary, and team-oriented scientific environment. Our group consists of a good mix of bioinformaticians and wet-lab biologists from all over the world, funded through the University of Lausanne, the Swiss National Science Foundation and the European Union (ERC-STG, Marie Skłodowska-Curie Actions). We are equipped with state-of-the-art infrastructures enabling cutting-edge research with access to many core facilities located on campus (including platforms for microscopy, proteomics, and metabolomics, and sequencing and high performance computing facilities). Our group has strong ties to other

Departments within the University, such as the Department of Ecology and Evolution, and we also actively collaborate with other research teams within and outside of Switzerland. Last but not least, our Department is situated on a beautiful campus at the shore of Lake Geneva with a great view of the Alps and with plenty of opportunities for outdoor activities.

For recent publications from the lab, please visit the lab webpage at <http://wp.unil.ch/engellab>. Qualification: Postdoc position applicants should have a PhD degree in microbial genomics, bioinformatics, or microbiology. Prior research experience in large-scale sequence data analysis, evolutionary genomics, bioinformatics, or shotgun metagenomics are desirable. A good command of the English language, a high personal motivation to excel in science and a curious mind for addressing standing questions in evolutionary bacterial genomics and microbiome research are required. We offer a stimulating environment in a young international research group combining computational and experimental approaches to study microbiota-host interactions.

How to apply: Please submit your full application including motivation letter, CV, list of publications, copy of the PhD thesis (if available) and the names and addresses of two referees via the official UNIL career portal. Only applications through the official website will be taken into account. Link to the application form can be found here: <https://wp.unil.ch/engellab/open-positions/> For questions concerning the application, position, or research topic, or in case of problems with accessing the UNIL career portal using the above link, please do not hesitate to contact us: Philipp.Engel@unil.ch.

The application should be written in English.

Application deadline: 30.11.2019 (Note: We will start to evaluate applications mid of October.)

Philipp Engel Associate Professor Department of Fundamental Microbiology University of Lausanne Biophore Building CH-1015 Lausanne Switzerland

Phone: +41 (0)21 692 56 32 Mobile: +41 (0)78 879 96 36 <mailto:philipp.engel@unil.ch> Web page: <http://www.unil.ch/engellab> Philipp Engel <philipp.engel@unil.ch>

Oxford InfectiousDiseaseModelling

DEADLINE EXTENDED

Dear all,

We are looking for a Senior Researcher in Infectious Disease Modelling at the Li Ka Shing Centre for Health Information and Discovery, Big Data Institute, Oxford, UK. The position will be grade 8, 40,792 - 48,677 per annum. The closing date is 12 noon on 18th September 2019.

This is an exciting opportunity to join a team trialling an intervention to tackle the HIV epidemic in Zambia and South Africa. You will report to Professor Christophe Fraser, and be based in the Pathogen Dynamics group at the Big Data Institute in Oxford. You will join a modelling team based at Oxford and Imperial College, developing a new highly computationally efficient individual based simulation for use in interpreting the trial. This work involves developing new algorithms for simulation and inference, analysis of complex data from a range of sources, and communication with a wide variety of stakeholders involved in the trial. The researcher will be an integral member of the Pathogen Dynamics group based at Oxford, led by Christophe Fraser. Members of the group study the dynamics of several human infectious diseases using both modelling and pathogen genetics, and the post offers substantial opportunities for career development. You will provide guidance to less experienced members of the research group, including postdocs, research assistants, and PhD and project students.

You will develop and adapt statistical analysis methods, simulation methods, computer code and error-checking methods for use in the project as well as actively manage collaboration with colleagues working on the modelling and health economic analysis of the trial, and more broadly with colleagues involved in the trial as a whole. You will raise research funds through grant applications, and manage own area of a larger research budget and develop research questions within a specific contact and conduct individual research.

You must have a PhD in infectious disease modelling, applied computing, applied mathematics, statistics, epidemiology or relevant quantitative science, together with relevant experience in modelling or simulation science. You will also possess sufficient specialist knowledge in

infectious disease modelling, epidemiology or simulation science to work within established research programmes. A strong publication record and familiarity with the existing literature and research in the field is also essential.

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

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

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

https://my.corehr.com/pls/uoxrecruit/-erq_jobspec_version_4.display_form?p_company=-10&p_internal_external=E&p_display_in_irish=-N&p_process_type=&p_applicant_no=-&p_form_profile_detail=&p_display_apply_ind=-Y&p_refresh_search=Y&p_recruitment_id=142094

The closing date for applications is 12.00 noon on Wednesday 18 September 2019.

Best wishes, Lucie

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

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

ParisSorbonneU BiophysicalPopulationDynamics

Postdoctoral Fellowship in Biophysical Ecology and Mechanistic Niche Modeling Paris Institute of Ecology and Environmental Sciences, Sorbonne University

Description A postdoctoral position is offered to model the thermo-hydroregulation behavior and physiology at the organismal level and predict consequences for population dynamics and climate niche of terrestrial ectotherms. The postdoc will be employed in Jean-Francois Le Galliard's laboratory in Paris and will interact closely with Olivier Lourdaï at CNRS Chize and Jean Clobert at CNRS Moulis. The project is part of a four-years long ANR-funded research program to improve general understanding of the interactive effects

of temperature and water constraints on the ecology of squamate reptiles. This program currently involves 4 partner institutions, 9 permanent researchers, 3 post-docs and 2 PhD students.

The postdoc will engage in modeling activities of the thermo-hydroregulation behavior and physiology of a general ectotherm species. He/she will subsequently use methods from biophysical ecology to construct mechanistic models of the population dynamics and climate niche of lizard and snake species investigated in our labs. The mechanistic models will be used to investigate the ecological consequences of trade-offs between hydroregulation and thermoregulation, of acclimation responses and of geographic variation in functional traits, but ambition and capacity to address independent questions is welcome. The postdoc will also be encouraged to join laboratory and field studies of thermo-hydroregulation strategies with other collaborators of this project.

The successful candidate will be recruited by Sorbonne University at Paris Institute of Ecology and Environmental Sciences for a 2 years long period starting from November 2019. He/she will be supervised by CNRS Researcher Jean-Francois Le Galliard in one of the most prestigious ecology lab from France and a vibrant campus and city. Our research program also involves the CEREEP-Ecotron IleDeFrance research center, CEBC laboratory and SETE Moulis research center. The postdoctoral fellow is thus expected to work in an interdisciplinary and lively research environment and will contribute to a national collaborative program.

Requirements Candidates should meet the following requirements (1) have a PhD in ecology, ecophysiology, or a related field; (2) demonstrated experience in theoretical ecology and programming, (3) a background in biophysical ecology, (4) a successful publication record and (5) be creative and independent. Candidates are welcome to come with their own ideas provided they are feasible during the time frame of the project.

Terms and salary The position is available for a period of two years starting preferably in November-December 2019. Gross salary is ca. 2,900 euros per month. Review of applications will begin as soon as candidates are applying and continue until the position is filled. The initial appointment is for 24 months with potential renewal contingent on additional funding.

How to proceed Applications should be sent to galliard@biologie.ens.fr. Applications should include a single pdf file with a curriculum vitae including a full list of publications, a cover letter with a brief description of skills and research interests, and contact details and recommendation letters from 1 to 3 referees. Sorbonne University is an equal opportunity/affirmative

action employer committed to excellence through diversity. Women and minorities are encouraged to apply.

galliard <galliard@biologie.ens.fr>

PrincetonU ConservationImmunology

Postdoctoral Research Associate Position in Conservation Immunology

Labs of Bridgett von Holdt and Andrea L. Graham, Princeton University In collaboration with Frances Gulland, UC-Davis

Applications are invited for a Postdoctoral Research Associate position for a project at the crossroads of immunology and conservation: to discover how northern elephant seals (*Mirounga angustirostris*) defend themselves against infection despite immunogenetic depletion caused by a severe population bottleneck in the early 1900s. We are especially keen to explain why elephant seals succumb to a particular species of nematode (*Otostrongylus circumlitus*) but readily fend off other helminths as well as viruses and bacteria that fell other marine mammals. However, we also expect that the successful candidate will strongly shape the direction of the project according to the candidate's own vision, creativity, and skill set.

The postdoctoral researcher will be an intrinsic part of the seasonal field sampling team on the California coast, will lead laboratory work in parasitology, cell culture, and molecular biology, and will then have primary responsibility for bioinformatic analysis.

Ph.D. and/or D.V.M required, as is experience in field work with large mammals. Furthermore, the successful candidate will be experienced at basic DNA techniques (e.g. DNA extraction and purification, quantification, etc.) as well as library preparation methods for RNA-seq and BS-seq, and have a strong background in bioinformatic analyses or computational genomics. Familiarity with R, Python or Perl or a comparable language, and bash/shell scripting is needed, as is experience with aligners, assemblers, and other whole genome-based utilities. We also expect experience with genome annotation tools, databases, and other public repositories. The postdoctoral researcher will also be responsible for detailed and careful curation of the samples and related genomic libraries.

Experience in cellular immunology, helminth parasitol-

ogy, carnivore conservation, and/or marine mammal medicine is also desired but not essential.

The appointment is for one year initially, with the possibility of renewal of an additional year, based on satisfactory performance and funding. Salary is competitive and commensurate with experience, and benefits are included. This position is available immediately and will be open until filled. This position is subject to Princeton University's background-check policy.

How to apply: - Please apply online at: <https://puwebp.princeton.edu/AcadHire/apply/-application.xhtml?listingId=13641> - Please complete the form and submit materials via the bottom half of that webpage! - Required materials: a curriculum vitae, a one page statement of research interests and experience, and a cover letter that includes names and contact information of three references.

Informal inquiries are welcome. In the first instance, please contact Andrea Graham at algraham@princeton.edu

Andrea L. Graham Professor of Ecology and Evolutionary Biology Princeton University Princeton, NJ 08544 USA

Tel: (+1) 609-258-6703 E-mail: algraham@princeton.edu

Graham Group: <http://algraham.princeton.edu/> Global Health Program: <http://globalhealth.princeton.edu/> IDEAS Research Coordination Network: <http://ideas.princeton.edu/> "Andrea L. Graham" <algraham@Princeton.EDU>

StockholmU UppsalaU MarineEndosymbiosis

Joint postdoc position in Marine Microbiology with Emphasis on Endosymbiosis in the Department of Ecology, Environment and Plant Sciences at Stockholm University and in the Department of Organismal Biology at Uppsala University (Sweden).

See full description and how to apply here: <https://www.su.se/english/about/working-at-su/jobs?rmpage=-job&rmjob=10173&rmlang=UK> Closing date: November 5, 2019

Project description: The position is associated with a project on characterising an enigmatic marine endosymbiosis in the genus *Meringosphaera*. *Meringosphaera*

are single-celled eukaryotes that are globally distributed and are considered photosynthetic based on consistent observations of autofluorescent 'green bodies' and absence of feeding behaviours. The autofluorescent bodies, however, have not been verified as true chloroplasts by ultra-structure or genetic analysis. In fact, no molecular data is available for *Meringosphaera*. The overarching goals of this two year postdoctoral project are to characterize the genetic integration and metabolic function of the photosynthesizing bodies of *Meringosphaera*. A suite of single cell methods will be employed including halogenated in situ-hybridization (HISH)-secondary ion mass spectrometry (HISH-SIMS), flow activated sorting (FACS) for single cell genome and transcriptome sequencing, confocal laser scanning microscopy (CLSM). The position is a collaborative project between the laboratories of Rachel A Foster from SU and Fabien Burki from UU.

Main responsibilities: The position involves sampling, imaging by CLSM, and attempts for cultivation of *Meringosphaera* cells in enrichment cultures. Additionally, managing the sample preparations for FACS, single cell sequencing, and implementation of stable isotope experiments and preparing and overseeing samples for nanoSIMS analyses. Training will be provided when necessary.

Qualification requirements: Postdoctoral positions are appointed primarily for purposes of research. Applicants are expected to hold a Swedish doctoral degree or an equivalent degree from another country. The selected candidate must possess expertise and knowledge in microbial sampling as well as identifying and handling small eukaryotic plankton. Experience in culturing of microbial eukaryotes with background in eukaryotic diversity and photosymbiosis will be seen as highly valuable. A suite of methodologies will be used in the proposed work and hence the following skills are desirable: use of basic and/or advanced microscopy platforms (epi-fluorescence, CLSM), use and or understanding of FACS, basic molecular based assays including kit based assays (e.g. nucleic acid extractions, PCRs, genome amplification kits), library preparations for bar-coding, and genome analysis. Previous experience with stable isotopes, and in field expeditions (e.g. ocean-going cruises) are also good qualifications but not necessary. The candidate should be interested, motivated and flexible to move between the labs of Foster (SU) and Burki (UU) as experiments will be carried out at both locations. Candidates must be fluent in English.

Assessment criteria: The PhD degree should have been completed no more than three years before the deadline for applications. An older degree may be acceptable under special circumstances, which may involve sick

leave, parental leave, clinical attachment, elected positions in trade unions, or similar. In the appointment process, special attention will be given to documented research skills as described in the qualification requirements (e.g. assay development, cultivation, work with single celled eukaryotes, various above mentioned single cell methods), and publication history.

Terms of employment: The position involves full-time employment for a maximum of two years, with the possibility of extension under special circumstances. Start date as soon as possible, and no later than 2019-12-31.

Contact: Further information about the position can be obtained from Dr. Rachel A. Foster, telephone: +46 8 16 12 07, rachel.foster@su.se or Dr. Fabien Burki, telephone: +46 18-471 27 79, fabien.burki@ebc.uu.se.

This project is funded by a grant from SciLifeLab (www.scilifelab.se), a Swedish national center for molecular biosciences with focus on health and environmental research. The center combines frontline technical expertise with advanced knowledge of translational medicine and molecular bioscience. SciLifeLab is hosted by four Swedish universities (Karolinska Institutet, KTH Royal Institute of Technology, Stockholm University and Uppsala University) and collaborates with several other universities.

När du har kontakt med oss på Uppsala universitet med e-post innebär det att vi behandlar dina personuppgifter. För

— / —

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>

UCalifornia Berkeley HumanEvolGenetics 2

Post-doctoral position ??? University of California, Berkeley ??? Human Evolutionary Genetics.

Description: The Moorjani Lab (<https://moorjanilab.org/>) at University of California, Berkeley uses computational and statistical methods to investigate questions in human evolutionary genetics, in particular on mutation rate, demographic inference and archaic ancestry. A central aim in the lab is to understand the impact of evolutionary history on

genetic variation and to apply this knowledge to learn about human history and disease. To this end, we use genetic data from ancient specimens and present-day species to learn about: (1) when key events (such as introgression and adaptations) occurred in human history, (2) how different evolutionary processes such as mutation rate evolve across primates, and (3) how we can leverage these patterns to identify genetic variants related to human adaptation and disease. The research in the lab involves both development of new methods and large-scale genomic data analysis.

Responsibilities: A successful candidate will develop and apply computational approaches to large genomic datasets to characterize patterns of population history and evolution. The main responsibilities include conducting research, attending regular lab meetings and journal clubs, and preparing research results for publication and presentations at scientific meetings. Opportunities may also exist for mentoring graduate and undergraduate students.

Required qualifications: Ph.D. or equivalent in genetics, genomics, computational biology or related fields and demonstrated record of productivity and publications. Experience with programming (e.g. C/C++, Python/Perl, R or other programming languages), genomic data analysis and methods development.

Please contact Priya with your CV and a brief overview of research questions you are interested in pursuing. Please also request three recommenders to send a letter of reference on your behalf. The position is open until filled with an anticipated start date in 2019/2020.

Salary: This is a multi-year postdoctoral position (initial appointment is for 12 months and renewable annually up to three more years). Salary is commensurate with qualifications and experience.

Contact: Priya Moorjani Assistant Professor Department of Molecular and Cell Biology Center for Computational Biology <https://moorjanilab.org/> Email: moorjani@berkeley.edu

Priya Moorjani <moorjani@berkeley.edu>

UCalifornia Berkeley HumanEvolGenetics

Post-doctoral position 'V University of California, Berkeley 'V Human Evolutionary Genetics.

Description: The Moorjani Lab (<https://moorjanilab.org/>) at University of California, Berkeley uses computational and statistical methods to investigate questions in human evolutionary genetics, in particular on mutation rate, demographic inference and archaic ancestry. A central aim in the lab is to understand the impact of evolutionary history on genetic variation and to apply this knowledge to learn about human history and disease. To this end, we use genetic data from ancient specimens and present-day species to learn about: (1) when key events (such as introgression and adaptations) occurred in human history, (2) how different evolutionary processes such as mutation rate evolve across primates, and (3) how we can leverage these patterns to identify genetic variants related to human adaptation and disease. The research in the lab involves both development of new methods and large-scale genomic data analysis.

Responsibilities: A successful candidate will develop and apply computational approaches to large genomic datasets to characterize patterns of population history and evolution. The main responsibilities include conducting research, attending regular lab meetings and journal clubs, and preparing research results for publication and presentations at scientific meetings. Opportunities may also exist for mentoring graduate and undergraduate students.

Required qualifications: Ph.D. or equivalent in genetics, genomics, computational biology or related fields and demonstrated record of productivity and publications. Experience with programming (e.g. C/C++, Python/Perl, R or other programming languages), genomic data analysis and methods development.

Please contact Priya with your CV and a brief overview of research questions you are interested in pursuing. Please also request three recommenders to send a letter of reference on your behalf. The position is open until filled with an anticipated start date in 2019/2020.

Salary: This is a multi-year postdoctoral position (initial appointment is for 12 months and renewable annually up to three more years). Salary is commensurate with

qualifications and experience.

Contact: Priya Moorjani Assistant Professor Department of Molecular and Cell Biology Center for Computational Biology <https://moorjanilab.org/> Email: moorjani@berkeley.edu

moorjani@berkeley.edu

UCalifornia Davis PopulationBiology

EFFECTIVE: September 20, 2019

DEADLINE: November 1, 2019

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, 2020. This position is covered by a collective bargaining unit. It has a starting annual starting salary of \$50,760 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/JPF03136> (this job number and application link will be open and available for

application input on or around September 20, 2019).

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, 2019. 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.

– 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 LosAngeles BiodiversityInformatics

Software Developer in Biodiversity Informatics

We are seeking a Software Developer in Biodiversity Informatics (SDBI) to develop new open source scientific software to make specimen-based data (phenotypic, genomic, spatial) easily accessible and ready to use in taxonomy and other downstream studies. This will make specimen-based research transparent, explicit, reproducible, and extensible. The SDBI will develop a computational workflow to integrate data and analyses via modular pipelines, automatize “data wrangling”, generate data-driven interfaces to interact with “big data”, and create dynamic/reactive documents native to the Web. This is a great opportunity to work in a small research group that uses computational biology to support research and training in quantitative taxonomy and evolutionary biology.

The ideal candidate will be comfortable with databases (relational or graph) and experienced in writing efficient code and documentation in at least one commonly used programming language (Python, R, Julia, Ruby, C/C++, etc). The BIR will be familiar with standard practices in scientific computing and software engineer-

ing including version control, continuous integration, test-driven development, and a focus on minimum viable products.

The SDBI will be part of a research group in the Department of Ecology & Evolutionary Biology at the University of California, Los Angeles. The SDBI will work and report to the principal investigator and other team members, participate in the organization and management of data sets, and ensure the integrity of complex data sets.

Qualifications:

Required:

PhD in related area (bioinformatics, biodiversity, ecology evolution systematics) At least 2 years of related Software Development in Biodiversity Informatics experience Strong background in databases Programming and scripting experience (e.g. bash, Python, R, Julia, Ruby, C/C++) Experience with version control technology such as Git Experience with continuous integration technology such as Travis CI Excellent verbal, written, and interpersonal communication skills Preferred:

Experience using HPC and parallel systems Experience with Machine Learning Experience with JavaScript Experience creating technical documentation Experience with cloud technologies including: AWS, Docker, CyVerse Application:

Please send a cover letter describing your qualifications and interest, and your updated CV. Make sure to include links to your repositories (e.g. GitHub, GitLab, BitBucket). Include the names and contact information (email) of 2 references.

If you have any questions and to apply to the position, please email fzapata@ucla.edu with the subject line Software Developer in Biodiversity Informatics. The position will start as soon as possible and will remain open until filled.

Job Location:

Los Angeles, CA

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: UC Nondiscrimination & Affirmative Action Policy. (<http://policy.ucop.edu/doc/4000376/-NondiscrimAffirmAct>)

Felipe Zapata <fzapata@ucla.edu>

UColodaroBoulder SymbiosisFunctionalGenomics

Job Summary: The Li Lab, in the Department of Ecology and Evolutionary Biology, University of Colorado Boulder, is hiring a Post-Doctoral Associate to work on functional genomics and metabolomics of marine photosymbioses. This project aims to use multiple marine invertebrate-algal symbiotic systems to study the genetic and molecular mechanisms behind the host-symbiont nutrient exchange process.

Minimal Qualifications: -PhD in Biology, Evolution, Molecular Biology or similar areas -Expertise with generating and analyzing genomic/metabolomics data - Proficient in R, Python, and other related bioinformatics tools -Excellent writing and communication skills -Independent, collaborative and motivated

Preferred Qualifications: -Understanding of phylogenetics, marine ecology, and invertebrate evolution - Experience with genome assembly -Experience working with symbiotic systems -Field work experience in marine habitats

About us: We offer a supportive, diverse and intellectually stimulating environment, with great opportunities for professional development and outreach. This is a full-time, 12-month position based at Boulder, Colorado, renewable for multiple years (2+) conditional on performance. The position is available immediately but starting date is negotiable. Salary will follow NIH/NSF guidelines (50-52k/yr based on experience) with full benefits.

If interested, please email Dr. Jingchun Li (jingchun.li@colorado.edu) a single PDF including: i) a motivation letter explaining your research interests and qualifications, ii) your CV, iii) contact information of three references. For full consideration, please apply by November 1, 2019. Please email Dr. Li for any questions. The University of Colorado is an Equal Opportunity/Affirmative Action Employer.

Learn about the lab: <https://jingchunli.weebly.com/>
Jingchun Li <Jingchun.Li@Colorado.EDU>

UCopenhagen PopulationGenomics

A 2-year postdoc fellowship is available in Ida Moltke's lab at the Department of Biology, University of Copenhagen. We are seeking a highly motivated computational postdoc with experience in population genetics to study genomic signatures of epidemics. For more details see <http://tiny.cc/bxefcz>. Application deadline is September 30, 2019. If you have any questions feel free to e-mail: ida@binf.ku.dk.

Ida Moltke <ida@binf.ku.dk>

UEdinburgh HostPathogenEvolution

The Vale group at the University of Edinburgh are recruiting a Postdoctoral Researcher Associate to investigate mitochondrial genetic effects on innate immunity. The post will be based at the Institute of Evolutionary Biology within the School of Biological Sciences, but will also collaborate with Dr Tiina Salminen (Tampere University, Finland). The position is funded by a Leverhulme Trust grant and is available from October 2019 for 2 years and 5 months.

The project Mitochondria are increasingly recognised as important mediators of innate immune responses. However, it is currently unclear how naturally occurring variation in mitochondrial DNA (mtDNA) contributes to the widespread heterogeneity in infection outcomes. The successful applicant will address this question using *Drosophila melanogaster*, a powerful and genetically tractable model of immunity where it is possible to generate hybrid lines with diverse mitochondrial genomes introgressed onto controlled nuclear backgrounds.

This system is currently well established in our lab, and the project will combine phenotypic, physiological and genomic approaches to test the effect of specific mitochondrial polymorphisms on cellular and humoral responses to pathogens and parasitoids. Relevant skills therefore include: carrying out large experimental infections using viral and bacterial pathogens and parasitoid wasps; measuring phenotypic outcomes of infection (survival, microbe loads, behaviour); measuring immune

gene expression (RNA extraction RT-qPCR) and other immune outputs (e.g ROS); disrupting mitochondrial function either pharmacologically or using UAS-Gal; preparing samples for, and analysing data from, transcriptome sequencing (RNA-Seq); active knowledge of statistical analyses using R.

We do not expect applicants to have expertise in all of the above, and local support and training is available.

The applicant While the ideal applicant would have a strong background in invertebrate immunity and mitochondrial biology, our main goal is to recruit someone with broad interests in the ecology and evolution of host-pathogen interactions who is enthusiastic and generally curious about the causes and consequences of variation in disease phenotypes. Demonstrated experience with *Drosophila* genetics is highly beneficial. However, we are flexible so if you think you might be a great fit for this position but are concerned about meeting all criteria please get in touch before applying (to Dr Pedro Vale (Pedro.vale@ed.ac.uk)).

The lab and the department The Vale group addresses the causes and consequences of individual variation in the response to infection and we use the fruit fly as a model of infection, immunity and behaviour. The overall aim of our research is to understand how individual-level heterogeneity scales up to population-level disease outcomes. More details about the lab and what we do can be found here <http://pedrovalle.bio.ed.ac.uk/>. We are based in the Institute of Evolutionary Biology, which includes diverse expertise in evolutionary and ecological genetics, host-pathogen interactions, and population genomics in a range of study species. We work in a very dynamic and sociable department and the successful applicant should become an active member of the local research community, and enjoy and thrive in such a collaborative environment.

How to apply

Full applications can only be accepted through the University of Edinburgh recruitment website: https://www.vacancies.ed.ac.uk/pls/corehrrecruit/-erq_jobspec_version_4.jobspec?p_id=049411 (or by searching the recruitment website for vacancy 049411.)

Full applications should be made before the 7th October 2019, and must include (as a single PDF file)

1. a cover letter explaining why you are interested in working with us and why you are suited to the position;
2. an up to date CV with a complete list of publications;
3. contact details of 2-3 references.

Informal enquiries to Dr Pedro Vale (Pedro.vale@ed.ac.uk) are welcome.

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

Pedro VALE <Pedro.Vale@ed.ac.uk>

UKentucky EvolutionaryTheory

Postdoctoral position available in Mathematical/Computational Evolution and Ecology at the University of Kentucky.

The Van Cleve lab in the Department of Biology (<http://vancleve.theoretical.bio>) at the University of Kentucky is seeking one Postdoctoral Scholar broadly interested in using mathematical and computational tools to study evolutionary and population genomics, evolutionary ecology, and social behavior. The specific project is flexible and will broadly relate to understanding how processes at the genetic scale, such as recombination, interact and coevolve with processes at the individual and social group scales. There will be opportunity to develop new theoretical models and new computational methods or tools. Support for the positions comes from a recent NSF CAREER award (https://nsf.gov/awardsearch/showAward?AWD_ID=1846260).

The successful candidate will have a Ph.D., expertise in mathematical or computational modeling, experience with scientific computing, interests in evolution and ecology, and a record of publication that reflects the ability to conduct original and independent research. Familiarity with C++/Python/Julia is a plus.

The start date is flexible, though a prospective start date sometime in early 2020 is preferred. The position is renewed each year with review and is funded for a maximum of three years. Salary is \$50,000, and benefits are included.

Interested applicants should submit via e-mail (jvancleve@uky.edu): 1. a 1-2 page statement describing their research interests 2. a CV including contact information (e-mail and phone) for three references.

Review of applications will begin immediately and will continue until the position is filled. For additional information regarding the position, please contact Jeremy Van Cleve (jvancleve@uky.edu).

– The University of Kentucky 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.

The University of Kentucky is located in Lexington, KY, known for the many bucolic horse farms that surround the city, thoroughbred racing at Keeneland, equestrian events at Kentucky Horse Park. Lexington and the surrounding area is home to many bourbon distilleries and microbreweries and numerous outdoor activities including hiking and world-class climbing at the nearby Red River Gorge. The cost of living in Lexington is modest and many UK students, faculty, and staff live close to the University and commute by walking or biking.

The University of Kentucky is an Equal Opportunity Employer and encourages applications from veterans, individuals with disabilities, women, African Americans, and all minorities.

– Jeremy Van Cleve

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

“Van Cleve, Jeremy” <jvanleve@uky.edu>

UManchester EvolutionAntibioticResistance

The Lagator group at the University of Manchester are recruiting a Postdoctoral Research Associate to work on advancing the ability to predict antibiotic resistance evolution by understanding the evolutionary consequences of existing molecular mechanisms in cells. The project is highly interdisciplinary, connecting biophysics, structural biology, and population genetics/evolutionary models, while working closely with an experimentalists. The post will be based at the Division of Evolution and Genomic Sciences, within the School of Biology.

Project Description One of the biggest outstanding problems in biology is how we can predict evolution. This project will combine methods from biophysics, synthetic and systems biology to study how the existing molec-

ular mechanisms determine evolution. Understanding this relationship will allow us to predict the effects of mutations, and hence improve our ability to predict evolution. This is particularly important when it comes to understanding and predicting the evolution of antibiotic resistance 'V one of the most important examples of how evolution affects human lives today, already causing over 25,000 deaths per year in the EU alone, in addition to dramatically extending hospital stays and increasing health care costs. The aim of this project is to improve our ability to predict multi-drug resistance evolution by integrating mechanistic, biophysical and evolutionary models in order to understand how the existing molecular mechanisms in the cell determine evolution. This project will develop a mechanistic model that aims to predict the effects of mutations in promoters and transcription factors that control the expression of multi-drug resistance pumps (AcrAB-TolC). This will allow us to understand how biophysical mechanisms determine the effects of mutations in transcription factors and promoters, and hence how they drive resistance evolution. The model will then serve as the foundation for performing evolutionary simulations in order to study the consequences of different antibiotic prescription regimes (e.g. altering usage periods of antibiotics, rotating between them, etc.). Two posts are available on this project. This postdoc (computation/theory) will work together with an experimental postdoc, with the aim to produce one of the first predictive genotype-phenotype maps, and hence dramatically improve our ability to predict antibiotic resistance evolution from first principles This post is available for upto 2 years in the first instance. Further funding may be available dependent on the progree and evolution of the project.

Candidate The ideal candidate will hold a Ph.D in theoretical/computational evolutionary biology, population genetics, mathematics, physics, computer science, or a related discipline, and will have a keen interest and enthusiasm for studying evolution in a collaborative and interdisciplinary setting.

Lab The recently-established Lagator lab uses interdisciplinary and collaborative approaches to provide novel insights into the evolution of gene regulation and antibiotic resistance in bacteria. The lab is situated within a growing cluster of evolutionary microbiologists at the University of Manchester. This position would provide an opportunity to work at the cutting-edge of evolutionary biology with a PI who values independence and intellectual curiosity.

How to apply full applications can only be accepted at the University of Manchester recruitment website, where additional information about the post can be found as well:<https://www.jobs.manchester.ac.uk/>-

[displayjob.aspx?jobid=17891](#) Full application should be made before the 14th of October, and must include a cover letter explaining why you are interested in working with us, an up to date CV with a complete publication list, and contact details for 2-3 referees. Informal enquiries to Dr. Mato Lagator are very welcome (mato.lagator@manchester.ac.uk).

Mato Lagator <mato.lagator@manchester.ac.uk>

UMaryland ComparativePhylogenomicsPollination

Post-Doctoral Associate in Comparative Phylogenomics
University of Maryland, College Park (USA)

Job Summary: The EspindoLab, in the Department of Entomology at the University of Maryland, is opening a Post-Doctoral Associate position to work on the phylogenomics of the specialized pollination interaction between the plant genus *Calceolaria* and its oil-bees *Chalepogenus*, with a negotiable start date.

Qualifications: We are seeking a motivated, independent, collaborative, and creative post-doctoral associate to join our lab. The ideal candidate owns a PhD in Biology, Entomology, Botany, Ecology, Evolution or similar areas, and has expertise with the production, treatment, and analysis of genomic data for phylogenetic purposes. Fluency in R and the use of phylogenetic softwares and informatic clusters, and familiarity with geospatial, phylogenetic, biogeographic and/or trait analyses are additional strengths. The ideal candidate can fluently read, write, and communicate in English. Women and members of minority groups are encouraged to apply.

Application Details: We offer a dynamic, supportive, diverse, intellectually motivating, and collaborative environment, with many opportunities for professional and career development. This position is based at the College Park campus of the University of Maryland and includes competitive salary (\$47,476/yr.) and comprehensive benefits (<https://uhr.umd.edu/>). This is a full-time, 12-month, 1-yr position, with reappointment available for another year, conditional on performance and the availability of funds. If interested, email Prof. Anahi Espindola ([anahiesp\[at\]umd.edu](mailto:anahiesp[at]umd.edu)) a single PDF including: i) a motivation letter explaining your research interests and qualifications, ii) your CV, iii) one-two representative publications, and iv) contact information of three references. The position will remain open until the appropriate candidate is found, but applications

received before October 31st, 2019 will be given full consideration. For questions, email Prof. Espindola ([anahiesp\[at\]umd.edu](mailto:anahiesp[at]umd.edu)).

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Learn about the lab: <http://anahiespindola.github.io>
Contact: Prof. Anahi Espindola, [anahiesp\[at\]umd.edu](mailto:anahiesp[at]umd.edu)

Anahí Espíndola *pronouns: she/her/hers* Assistant Professor Department of Entomology University of Maryland 3138 Plant Sciences Building 4291 Fieldhouse Dr. College Park, MD 20742-4454 Phone: 301-405-3920 anahiespindola.github.io

Anahi Espindola <anahiesp@umd.edu>

UMaryland EvolutionPlantDisease

The Bruns lab at the University of Maryland, College Park is seeking a Post-Doctoral Research Associate to study the ecology and evolution of infectious disease in natural plant populations. The lab uses a combination of field, laboratory, and theoretical approaches to understand the ecological and evolutionary impacts of disease in natural populations. Empirical studies utilize anther-smut disease (*Microbotryum*), a sterilizing pollinator vectored fungal disease as a powerful model system. The primary focus would be investigating the evolutionary dynamics of age-specific disease resistance, including the role of ecological feedbacks. The project will involve field transmission experiments, comparative inoculation studies, experimental evolution, and the development of evolutionary theory. The post-doc will also have the opportunity to develop an independent research project relating to host-pathogen evolutionary ecology.

Founded in 1856, University of Maryland, College Park is the state's flagship institution. Our 1,250-acre College

Park campus is just minutes away from Washington, D.C., and the nexus of the nation's legislative, executive, and judicial centers of power. This unique proximity to business and technology leaders, federal departments and agencies, and a myriad of research entities, embassies, think tanks, cultural centers, and non-profit organizations is simply unparalleled. Synergistic opportunities for our faculty and students abound and are virtually limitless in the nation's capital and surrounding areas. The University is committed to attracting and retaining outstanding and diverse faculty and staff that will enhance our stature of preeminence in our three missions of teaching, scholarship, and full engagement in our community, the state of Maryland, and in the world.

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Qualifications: A Ph.D. in ecology, evolution or related field is required by the start date of the appointment. The successful applicant will plan, conduct, and publish research, contribute to the professional development of undergraduate and graduate students, and assist with data dissemination and lab management. The ability to hike substantial distances and elevations is required. Candidates should have experience with experimental design, statistics, and fieldwork. Prior experience with modeling or disease biology is highly desirable. A track record of excellent written and verbal communication, and the ability to work well with others is required.

This is a two-year appointment, with the possibility of a 1-year extension contingent upon performance and available funding. The anticipated start date is January 2020.

To apply: Supply a cover letter, CV, contact information for 3 references, and 2 publications (or submitted/in prep. Manuscripts) uploaded as the required supplemental document 1 to: <https://ejobs.umd.edu/postings/-73469> For best consideration apply by 10/18/2019. The position will remain open until filled

elb5m@virginia.edu

UNorthCarolina Charlotte MarineInvertAdaptation

Postdoctoral or Research Assistant position in genomics and development of marine invertebrates (Reitzel Lab)

A Postdoctoral or Research Assistant position is available to study genetic diversity and development of marine invertebrates in the lab of Adam Reitzel at the University of North Carolina at Charlotte.

Work in the Reitzel lab is focused broadly on the ecology and evolution of marine invertebrates, particularly cnidarians and echinoderms. For this NSF-funded position, we are seeking a post-PhD candidate to analyze the genomic diversity and evidence for adaptation in marine invertebrates from the Arabian Gulf. Our goals are two-fold: i) Determine the extent of genetic diversity using whole genome comparisons of four species; ii) Characterize differences in development of these species experiencing specific abiotic conditions.

This work will primarily involve the collection of adults, culturing of developmental stages, whole genome sequencing, and transcriptome analyses for the four focal taxa. This project involves a direct collaboration with Dr. John Burt's lab (NYU-AD, UAE). The project will involve field work and wet lab work in Abu Dhabi, and thus travel is required for approximately 2 months per year. Candidates for this position will need to be dive-certified, have demonstrated experience in the sequencing, assembly, and analysis of de novo genomes, and trained in the culturing of marine invertebrate embryos and larvae. The selected candidate will have the opportunity to explore independent research directions during their time that contribute to a broader understanding of the evolution and ecology of marine invertebrates in this region. The selected candidate will also have the opportunity to co-mentor undergraduate and graduate students.

Candidates

Applications are encouraged from individuals who have a Ph.D. with experience in genome and transcriptome sequencing, population genomics, and experimental developmental biology. Top candidates will have a strong track record of research productivity and interest in collaborative science.

Candidates should send a cover letter, a detailed curriculum vitae, and names and contact details for three

references as a single pdf file to: areitze2@uncc.edu. In the subject line, please use “Adaptation Postdoc Applicant”.

Start Date and Project Duration

The start date is ideally on or before November 1 but applications will be evaluated until the position is filled. The position is funded for two years and potentially longer depending on progress.

Contact for additional information:

Adam Reitzel, Ph.D. Department of Biological Sciences University of North Carolina at Charlotte Charlotte, NC 28223 Email: areitze2@uncc.edu Web: <https://sites.google.com/site/thereitzellab/> “areitze2@uncc.edu” <areitze2@uncc.edu>

UNotreDame BaboonEvolutionBehavior

A 2-year postdoctoral position is available to study behavior-health-fitness links in wild baboons as a member of the Archie Lab at the University of Notre Dame (<http://sites.nd.edu/archielab/>). The postdoc will have access to extensive longitudinal data from the well-studied Amboseli baboon population (<http://amboselibaboons.nd.edu/>), which has been the subject of long-term, individual-based research since 1971. The Amboseli baboons are a model in evolution and ecology for understanding behavioral predictors of health, microbiomes, aging, and fitness. The data set is exceptionally rich and amenable to a wide range of projects, either on the baboons themselves or in a comparative context with other species. Strong, experienced applicants will be encouraged to develop their own research questions, but several projects (and data) are available to understand: (i) how early life conditions shape social development and social strategies; (ii) the links between social behavior and multi-dimensional markers of physiology/health/aging; and (iii) evolutionary or ecological dynamics in the gut microbiome.

Candidates must have a PhD in biology or a relevant social science (or plan to graduate in 2019 or 2020). The ideal candidate will have outstanding skills in data analysis, writing, and oral communication. Candidates with experience in one or more of the following areas are especially encouraged to apply: social behavioral research, genomics, microbiome research, population-based database analysis, population biology, biodemog-

raphy, life history evolution, longitudinal data analysis, or structural equation modeling. Familiarity or experience with social vertebrates (including humans) may be helpful, but is not required.

The Archie lab offers a congenial research environment that fosters strong interdisciplinary training and collaborative exchange. Collaborators include Susan Alberts (<https://sites.duke.edu/albertslab/>), Fan Li (<http://www2.stat.duke.edu/~fl35/>), and Ran Blekhman (<http://blekhmanlab.org/>), all of whom are available for advice and interaction. The postdoc is funded by an NIH R01 award to Elizabeth Archie.

To apply, please send an email to Elizabeth Archie (earchie@nd.edu), including a cover letter, CV, and contact information for three references. The anticipated start date is in winter or spring 2020, but this timing is flexible for strong candidates. Applications are rolling and applicants are encouraged to submit their materials by October 15, 2019 for full consideration.

Elizabeth Archie Associate Professor Department of Biological Sciences University of Notre Dame Notre Dame, IN Tel. (574) 631-0178 Office. 179 Galvin <http://blogs.nd.edu/archielab/> Elizabeth Archie <Elizabeth.A.Archie.2@nd.edu>

UOslo Biomathematics

An 18-month position as researcher is available at the Centre for Ecological and Evolutionary Synthesis (CEES), University of Oslo. The appointed candidate will be working on the project “Drivers of evolutionary change: understanding stasis and non-stasis through integration of micro- and macroevolution”, which aims at bringing together micro- and macro-evolutionary theories by studying to what extent macroevolutionary patterns can be explained from microevolutionary and ecological processes. The PI of the project is Nils Chr. Stenseth, University of Oslo; co-PIs are Jan Martin Nordbotten, University of Bergen; Indrė Āliobaitė, University of Helsinki; and Mikael Fortelius, University of Helsinki.

Deadline 21st October 2019. Read the complete advertisement here: <https://www.jobbnorge.no/en/available-jobs/job/175905/researcher-in-biomathematics> “folmer.bokma@ibv.uio.no” <folmer.bokma@ibv.uio.no>

m.pagel@reading.ac.uk www.evolution.reading.ac.uk
Mark Pagel <m.pagel@reading.ac.uk>

UReading PhylogeneticTrees

Postdoctoral Research Assistant Position

Professor Mark Pagel of the School of Biological Sciences at the University of Reading in the UK seeks applications for a 2.5 year fixed-term postdoctoral research position to study a new method for inferring time-calibrated phylogenetic trees from gene-sequence or other sequence data, using a Bayesian Markov chain Monte Carlo approach. The position is funded by the UK's Biotechnology and Biological Sciences Research Council (BBSRC). The successful candidate will have a PhD in biology, a related evolutionary discipline (such as evolutionary anthropology) or possibly statistics and computer science, and preferably have experience in inferring or using phylogenetic trees in research. He or she will join a research group working on problems in phylogenetic inference and macroevolution, and with strong computing resources and money for travel to conferences.

The research will investigate the new method in simulated and real data, and then apply it to inferring dates on trees for which current methods return wide confidence intervals. Preference may be given to postdoctoral candidates with a background in using Bayesian Markov chain Monte Carlo (MCMC) methods, the ability to program in R, experience in summarising research, writing papers for publication and producing conference presentations. However, an enthusiasm for research, an ability to work well with others and an aptitude for learning new methods can overcome lack of postdoctoral experience and will weigh heavily in the eventual employment decision regardless of background.

This position provides an opportunity to work with one of the leading international groups in phylogenetics and comparative methods. The University of Reading is situated in southern England, and enjoys a world-class reputation for research, teaching and enterprise. It is situated close to London and has excellent transport links to the capitol and airports. Informal (pre-application) enquiries can be made to m.pagel@reading.ac.uk. Further information and details for applying for the post can be found at this link: <https://www.jobs.ac.uk/job/-BUZ730/postdoctoral-research-assistant> Mark Pagel, FRS Professor, School of Biological Sciences University of Reading Reading, England RG6 6UR

phone: 44 (0)118 378 8900 fax: 44 (0)118 378 8160 email:

USaintJoseph Macao FunctionalGenomics

Exciting 2 years postdoctoral position in Functional Genomics and Behavioral Neuroscience (~USD 4,950.00/month) at the Institute of Science and Environment of the University of Saint Joseph, Macao. Applications must be submitted to ise@usj.edu.mo until October 31, 2019.

More info here: <http://ise.usj.edu.mo/postdoctoral-position-in-in-functional-genomics-and-behavioral-neuroscience/> David Manuel Flores Gonçalves <david.goncalves@usj.edu.mo>

USaoCarlos MammalianMetabarcoding

PD fellowship opportunity: Metabarcoding for identification of terrestrial mammals

The Laboratory of Molecular Biodiversity and Conservation (LabBMC), under the coordination of Pedro Manoel Galetti Junior and Patrícia Domingues de Freitas, Department of Genetics and Evolution, Federal University of São Carlos, participates in the FAPESP Thematic Project "Evaluation, recovering and conservation of the endangered fauna of the Pernambuco Endemism Center (CEP)", which is coordinated by Luis Fabio Silveira (MZUSP, São Paulo), and offers a postdoctoral fellowship for a foreign or Brazilian candidate, who has completed a doctorate not more than six years before the start of the scholarship, to develop activities of "Re-assessment of the species of mammals that are believed to be locally extinct in the Center of Endemism Pernambuco (CEP), from DNA of mixed samples (metabarcoding)", having specific objectives :

Metabarcoding analyzes for identification of the vertebrate community based on mixed DNA samples from the blood of hematophagous mosquitoes and other potential arthropod fauna samplers;

Evaluation of the occurrence of medium and large mam-

mal species in the area;

Survey of the mammal species occurring in CEP, generating a DNA barcode database of these animals.

This opportunity is open to highly qualified Brazilians and foreigners. The candidate should preferably have training in the area either of Genetics, Zoology, Ecology or Biology, satisfactory CV and scientific knowledge in the research area of the scholarship. It is essential the candidate be able to read, write and speak English and ability to write scientific articles and readiness to reside in São Carlos, SP, Brazil. The candidate will also need to be able to make periodic field trips to the state of Alagoas (Brazil) (10-15 days each). The selected candidate will be involved in the planning and execution of the research activities mentioned in this notice and will also work in the administration of the laboratory and co-orientation of graduate and undergraduate students. The professional should be familiar with bibliographic search tools, know how to plan and conduct experiments independently. Among the knowledge and techniques necessary for the development of this project we emphasize:

1. Field experience and collecting biological material for metabarcoding analysis in the project study area, as well as assisting the other project field collections when necessary;
2. Extraction and preparing DNA for large-scale sequencing and obtaining metabarcoding;
3. Understanding bioinformatics reasonably and ability to analyze the metabarcoding data produced;

Contract period and start of work: The scholarship lasts 36 months. The forecast is to begin in November 2019.

Values and conditions:

1. Monthly income (free of taxes) of R\$ 7,373.10 (Brazilian currency), plus 15% of the annual value for expenses related to research (Technical Reserve);
2. Financial support for travel and installation expenses may be requested for selected applicants and the merits will be analyzed by FAPESP upon acceptance of the concession;
3. The candidate must have completed a doctorate not more than six years before the start of the scholarship;
4. The scholarship requires full dedication to the research project (except under the conditions described in resolution PR 13/2009 of July 15, 2009);
5. The grantee may not have any formal or informal employment, nor receive, during the period of the fellowship, a scholarship from another entity, salary or remuneration derived from the exercise of activities of

any nature.

6. For the implementation of the scholarship the selected candidate must present all the documentation required by FAPESP;

For more details, go to: <http://www.fapesp.br/270>
How to apply: The submission deadline is September 30, 2019. Registration exclusively by email (pmgaletti@ufscar.br). Include the subject "Post-doctoral project ARCA project", followed by your name, and send the following files in PDF format:

1. An English text with a maximum of 2 pages explaining your motivations to work on this project;
2. Summarized CV (maximum 3 pages), including published papers attesting to the capacity to carry out the project;
3. Two letters of recommendation from researchers who should send them directly to the email above.

Selection: The selection will be made based on the candidate's CV (experience in the research area of the project and quality of the publications) and in the letters of motivation and recommendation. Applicants may be invited to a personal interview or via Skype. The selected candidate must submit the necessary documents for the FAPESP scholarship application within 15 days after approval.

Pedro Manoel Galetti Jr Departamento de Genética e Evolução

— / —

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>

UTennessee TeachingEvolution

General Biology Postdoctoral Teaching and Learning Scholar

The Division of Biology at the University of Tennessee, Knoxville seeks a Postdoctoral Teaching and Learning Scholar in the area of biology or biology education to provide curricular and programmatic support for the General Biology program. The successful candidate will also teach one large-enrollment introductory biology course for majors or non-majors in the General Biology program per year.

This position will work closely with the Director and Assistant Director of Biology Teaching and Learning, to develop and evaluate introductory biology curricula. Project specifics will be defined by the needs of the General Biology program and the interests of the successful candidate.

The Postdoctoral Teaching and Learning Scholar will: * contribute to assessment and curriculum development activities within General Biology and the Division of Biology * teach one semester of a large-enrollment introductory-level biology course per year, specific to the needs within the General Biology program * have the opportunity to disseminate results through publication or attendance at relevant national meetings

FTE salary: This position is a full-time, 9-month lecturer position with benefits, titled as Postdoctoral Teaching and Learning Scholar. Salary is \$40,000. There is an option to teach one summer course for additional pay. Start date and term: Beginning no later than January 1, 2020. This is a renewable appointment contingent upon performance and project needs, with a maximum of three years.

Minimum Qualifications: * Ph.D. in a life science, or science education with significant graduate course work in biology * Experience or demonstrated interest in curriculum design and assessment * Experience teaching at the introductory biology level * Demonstrated interest in undergraduate student success and/or faculty and graduate student teaching professional development * Ability to interact well in a collaborative environment

Preferred Qualifications: * Experience in curriculum design and assessment, or STEM education research

How to apply: Applications should be emailed as a single PDF (cover letter, CV, teaching philosophy, list of three references) to Caroline Wienhold (wienhold@utk.edu). Review of applications will begin Oct. 1, 2019 and continue until the position is filled. Contact Caroline Wienhold (wienhold@utk.edu) or Randy Small (rsmall@utk.edu) with any questions.

“Small, Randall L” <rsmall@utk.edu>

UTurku PhDPDF PaternalEffectsProject

Are you interested in molecular ecology and/or ecotoxicology?

We are looking for applicants to apply PhD/postdoc grants to the following project:

Transgenerational effects of pollution via fathers: sperm molecular alterations in birds

Environmental pollution increasingly presents a major concern to humans and wildlife across Europe and indeed worldwide. Exposure to toxic pollutants, such as heavy metals, may have a variety of ill effects on vertebrates either by directly disrupting the physiology of the organism or indirectly via effects on food quality and availability in polluted environments due to toxic effects on prey species (e.g. invertebrates) [1]. In Europe, wild passerines such as the great tit (*Parus major*) are not only highly valued for their ecological and cultural significance, but also present valuable sentinel species which can be used to indicate the impact of pollution on wild vertebrates [2].

Importantly, the effects of pollution exposure may extend down multiple generations in a population. In birds, this can occur by direct transfer of pollutants to offspring via eggs/embryos by the mother [3], or via effects on hormone levels transferred to eggs/embryos [4]. However, while the majority of studies of have focused on maternal effects, the male's role in transmitting effects of environmental exposures to the next generation remain under-explored. Various types of environmental exposures have been found to induce heritable alterations to the offspring of exposed males, with evidence stemming mostly from experimental studies on rodent models [5]. These heritable effects have further been linked with molecular alterations to the parental sperm including alterations to DNA methylation [6], noncoding RNA [5], and telomeres [7]. However, the molecular makeup of the sperm in response to pollution exposure has not been studied in birds, and the role of paternal exposure has not been studied in wild populations.

Using a combination of experimental approaches using a Japanese quail (*Coturnix japonica*) model and field studies on great tit populations in Finland and Belgium with our collaborators, this novel project will aim to fill these knowledge gaps in order to gauge the

extent to which such spermatozoal changes represent a multi-generational vulnerability to ambient pollution exposure.

The PhD student/postdoc will be positioned at the University of Turku, Finland, and supervised jointly by Dr. Suvi Ruuskanen (University of Turku) and Dr. James Ord (University of Tartu, EST). We are seeking a highly motivated individual with interests in ecotoxicology, animal physiology, reproductive biology, and / or molecular biology to undertake a unique interdisciplinary project. The candidate will have opportunities to undertake field work in Finland and Belgium, and gain expertise in physiological assays, qPCR, and RNA and / or bisulfite sequencing analysis. Prior experience in laboratory or field work is a plus.

There are multiple funding sources where grants for this work can be applied, including Nessling Foundation (Deadline 13.9.), Kone Foundation (DL 15.9.), Turku University Graduate School (DL 20.9, only for PhD students), Finnish Cultural Foundation (31.10.) and Aaltonen Foundation (Feb 2020).

Please contact Suvi Ruuskanen (skruus@utu.fi) asap (10.9.) for more information! <https://www.utu.fi/en/units/sci/units/biology/research/projects/verg/-Pages/SuviRuuskanen.aspx> Further reading 1. Eeva T, Rainio M, Berglund Å, Kanerva M, Stauffer J, Stöwe M, Ruuskanen S. 2014 Experimental manipulation of dietary lead levels in great tit nestlings: limited effects on growth, physiology and survival. *Ecotoxicology* 23, 914-928. (doi:10.1007/s10646-014-1235-5) 2. Janssens E, Dauwe T, Bervoets L, Eens M. 2001 Heavy metals and selenium in feathers of great tits (*Parus major*) along a pollution gradient. *Environ. Toxicol. Chem.* 20, 2815-2820. (doi:10.1002/etc.5620201221) 3. Ruuskanen S et al. 2014 Large-scale geographical variation in eggshell

metal and calcium content in a passerine bird (*Ficedula hypoleuca*). *Environ. Sci. Pollut. Res.* 21, 3304-3317. (doi:10.1007/s11356-013-2299-0) 4. Ruuskanen S et al. 2019 Transgenerational endocrine disruption: Does elemental pollution affect egg or nestling thyroid hormone levels in a wild songbird? *Environ. Pollut.* 247, 725-735. (doi:10.1016/j.envpol.2019.01.088) 5. Rodgers AB, Morgan CP, Bronson SL, Revello S, Bale TL. 2013 Paternal Stress Exposure Alters Sperm MicroRNA Content and Reprograms Offspring HPA Stress Axis Regulation. *J. Neurosci.* 33, 9003-9012. (doi:10.1523/JNEUROSCI.0914-13.2013) 6. Dias BG, Ressler KJ. 2014 Parental olfactory experience

— / —

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 Madison YeastEvolution

Chris Todd Hittinger and the DOE Great Lakes Bioenergy Research Lab are recruiting a postdoctoral researcher in yeast evolutionary and synthetic biology. See our ad and apply by October 31st: <https://hittinger.genetics.wisc.edu/Images/-postdocAd2019sept.pdf> .

cthjunk@hotmail.com

AsiaPacific AgriculturalGenomics June20	119	Coruna Spain RNAseq Oct16-18	126
BangaloreIndia PopGen Jan27-Feb7	120	Crete ComputationalMolEvol May10-21	126
Berlin Biogeography Nov4-8 LastCall	120	Glasgow 2 IntroBioinformatics RADseq Sep30- Oct4,Sep23-27	126
Berlin EukaryoticMetabarcoding Feb3-7	121	London Aarhus AnalysingComplexTraitGWAS Oct23,28 127	
Berlin IntroductionBioinformatics Oct14-18 Lastcall 121		Modica DataExploration Nov4-8	128
Berlin LandscapeGenomics Nov25-29	122	SanDiego PopConservationGenomics Jan11-15 ...	129
Berlin ModellingUsingNetlogo Oct21-25	122	SICB Austin EvolutionCommunication Jan3	129
Berlin ProteomicsWithR Feb17-19	123	UCalifornia Davis OmicsHackathon Oct23-25	130
Berlin SpeciationGenomics Feb24-28	124		
cE3c Portugal 2 BiodiversityBiogeography	124		
Coruna Spain NGS Sep19-20	125		

AsiaPacific AgriculturalGenomics June20

Dear colleague

We are currently collecting Expressions of Interest for our Empowering agricultural research through (meta)genomics series. The (brackets) means we treat eukaryotic genomics and prokaryotic genomics equally :-)

Previously held at the Bangkok campus of the prestigious Kasetsart University, Empowering agricultural research through (meta)genomics will now rotate to another country that touches the Pacific ocean, with Vietnam as one nominated location.

We try to be different: * This advanced workshop follows our unique format of combining wet- laboratory techniques with scientific exploration and bioinformatics analysis. * We value networking and professional skill development. We include a Research Seminar day participants can request to submit an oral or poster presentation. * We also stream biologists and bioinformaticians so they can learn with their peers and focus on furthering their own expertise. * Our main role is not to teach but facilitate bring world experts (established or emerging) from Asia Pacific and work together with the local culture. * We are passionate about equity (nationality, gender, and career stage) and are striving to make a change in our region. * We are all unpaid volunteers so the costs are kept minimal.

In 2019, about 35% and 45.9% of our teachers and students respectively identified as female and I hope we can do much better next time. Of the joint student and teacher pool, about 18% identified as a minority in their country of residence and 70% where either students or post-docs up to 5 years out of their PhD.

Are you interested in attending as a student or becoming a teacher? Then please register your Expression of Interest here: <https://forms.gle/c5khWV7SgPhzuaYE6>

Please complete the form by the 10th of October. It's free and short!

You can nominate topics of interest and maybe we can even organise an event at your home country.

You can see information for the previous workshop here: https://thegeneschool.org/ku_workshop_2019 With our final report due end of October / mid November.

Many thanks, alexie

—

Dr. Alexie Papanicolaou Researcher profile Senior Lecturer / Assistant Professor in Bioinformatics Hawkesbury Institute for the Environment—

P: +61(0) 2 4570 1385 | M: +61 (0) 46 85 81 247 A:—Hawkesbury Campus, L3.G07, Richmond 2753 M: Locked Bag 1797, Penrith, NSW 2751, Australia Virtual Office: <https://uws.zoom.us/my/alpapan> PGP-key fingerprint: 35410C52CEE74AC2A405BDF92EBE0615C21F009A

Australian Academy of Sciences EMCR Executive: Lifting the EMCR sector for Science and its People

Reviewer for Athena Swann: Working for new Equity benchmarks for Australian Science

Associate Editor for - Publish your next—Concepts & Synthesis—paper—in—Science of Nature—(formerly Naturwissenschaften EST'D 1913; Springer) - Publish your next genomics work at Genomics (Elsevier) - Make your research accessible at PLoS ONE

On collaboration: - One can only do so much, but together one can do so much more

On the rise of AI - It's already here

On supervising— - PhD students: Work with someone

to explore a phenomenon that fascinates them using your methods - Post-docs: Work with someone to explore a phenomenon that fascinates you using their methods - Nights & weekends: Work with family/cat to let you explore a phenomenon that fascinates you using your methods

“A.Papanicolaou@westernsydney.edu.au”

BangaloreIndia PopGen Jan27-Feb7

Dear Colleagues,

We are happy to announce the ‘Fourth Bangalore School on Population Genetics and Evolution’ (<https://www.icts.res.in/program/popgen2020>). This school aims to expose students and researchers from diverse backgrounds including biology, computer science, mathematics and physics to the basics and the forefront of current research in population genetics. There is no registration fee for participating in this program. Dates: January 27-February 7, 2020 Venue: ICTS, Bangalore, India Application deadline: October 1, 2019 Lecturers: Aneil Agrawal (University of Toronto)

Vaishali Katju (Texas A&M University) Chris Marx (University of Idaho) Christian Schlotterer (University of Veterinary Medicine, Vienna) Guy Sella (Columbia University) Lindi Wahl (University of Western Ontario) Organizers: Deepa Agashe (NCBS, Bangalore), Kavita Jain (JNCASR, Bangalore)

“jain@jncasr.ac.in” <jain@jncasr.ac.in>

Berlin Biogeography Nov4-8 LastCall

Dear all,

last 2 weeks before the registration deadline for our course “Big data Biogeography” V Species occurrences through space and time” with Dr. Daniele Silvestro (University of Gothenburg (Sweden), University of Lausanne (Switzerland)) and Alexander Zizka (German Center of Integrative Biodiversity Research (iDiv))

When: 4-8 November 2019

Where: Free University of Berlin (Germany)

Summary: The public availability of large-scale species distribution data has increased drastically over the last ten years. In particular, due to the aggregation of records from museums and herbaria, and citizen science in public databases such as the Global Biodiversity Information Facility (GBIF). This is leading to a ‘big data’ revolution in biogeography, which holds an enormous but still poorly explored potential for understanding large scale patterns and drivers of biodiversity in space and time.

Target group Students and researchers working with biodiversity data and biogeography, including large species occurrence data in biogeography or biodiversity research. Example data will be available for all excises, but students are encouraged to bring their own datasets. During the course, there will be time to work with the students data.

Literature Two weeks before the start, participants will be provided with five articles as pdfs, to be read prior to the workshop.

Objectives: After this course, students will be able to:

Obtain and prepare large scale species occurrence records from public databases in R (including data mining, data cleaning and exploration)

Apply novel methods for handling and processing ‘big data’ in biogeographic research, including area classification, bioregionalization and automated conservation assessments

Reconstruct species ancestral ranges based on species occurrences and phylogenetic trees, using different evolutionary models

Understand the potential and caveats of fossil based biogeography, and be familiar with novel methods to estimate ancestral ranges and evolutionary rates from ranges of extinct and extant taxa

For the full program, please see: (<https://www.physalia-courses.org/courses-workshops/course48/curriculum48/>)

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 17645230846 <https://groups.google.com/forum/>

[#!/forum/physalia-courses](https://forum/physalia-courses) “info@physalia-courses.org”
<info@physalia-courses.org>

Berlin Eukaryotic Metabarcoding Feb3-7

Course: Eukaryotic-metabarcoding

When: 3-7 February 2020

Where: Free University (FU) Berlin

Instructors: 1) Dr. Vasco Elbrecht ((<https://scholar.google.de/citations?user=L3dDk-IAAAAJ&hl=en>)) 2) Daniel Marquina ((<https://t.co/uLyvA2FW5T?amp=1>))

Overview:

This course gives an overview of metabarcoding procedures with an emphasis on practical problem-solving and hands-on work using analysis pipelines on real datasets. After completing the course, students should be in a position to (1) understand the potential and capabilities of metabarcoding, (2) run complete analyses of metabarcoding pipelines and obtain diversity inventories and ecologically interpretable data from raw next-generation sequence data and (3) design their own metabarcoding projects, including bioinformatic data analysis and planning of laboratory work. 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.

Please see details about this course here: (<https://www.physalia-courses.org/courses-workshops/course4/>)

For the complete list of our courses and Workshops, please see: (<https://www.physalia-courses.org/courses-workshops/>)

Should you have any specific questions, feel free to contact us: info@physalia-courses.org

All the best, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org <http://www.physalia-courses.org/> Twitter: @physacourses mobile: +49 17645230846 <https://groups.google.com/forum/#!/forum/physalia-courses> “info@physalia-courses.org”
<info@physalia-courses.org>

Berlin Introduction Bioinformatics Oct14-18 Lastcall

Dear all,

the registration deadline for our course “Introduction to Bioinformatics”, held at Free University Berlin, is soon approaching (14th September).

Instructor: Dr. Martin Jones (founder, Python for biologists).

The course aims to provide an introduction to the field of bioinformatics, with a special focus on teaching the basics of programming computers using a combination of Bash and Python. Attendees will learn how to arrange tools into pipelines which can be executed with minimal supervision. The course aims to use a combination of theoretical and practical sessions in order for participants to gain practical experience in using various tools and resources.

Monday 14th 'V Classes from 09:30 to 17:30

Session 1 'V connecting to the server and basic Linux commands

Session 2 'V assembling Linux commands into pipelines

Tuesday 15th 'V Classes from 09:30 to 17:30

Session 3 'V introduction to bash scripting and variables

Session 4 'V flow control in bash, aliases and paths

Wednesday 16th 'V Classes from 09:30 to 17:30

Session 5 'V introduction to Python, text and files

Session 6 'V lists and loops in Python

Thursday 17th 'V Classes from 09:30 to 17:30

Session 7 'V conditions in Python

Session 8 'V writing functions in Python

Friday 18th 'V Classes from 09:30 to 17:30

Session 9 'V paired data and dicts in Python

Session 10

The afternoon of Friday 18th is reserved for finishing off the next-gen workflow exercise, working on your own datasets, or leaving early for travel.

For more information, please see: (<https://www.physalia-courses.org/courses-workshops/-curriculum/course1/>)

For the complete list of our courses and Workshops, please see: (<https://www.physalia-courses.org/courses-workshops/>)

Should you have any specific questions, feel free to contact us: info@physalia-courses.org

All the best, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org <http://www.physalia-courses.org/> Twitter: @physacourses mobile: +49 17645230846 <https://groups.google.com/forum/#!forum/physalia-courses> “info@physalia-courses.org” <info@physalia-courses.org>

Berlin LandscapeGenomics Nov25-29

Course : LANDSCAPE GENOMICS (3rd edition)

When: 25th-29th November 2019

Where: Free University (FU) Berlin (Germany)

Sets left: 6

Application deadline is: October 20th, 2019. Attendees are seated on a first-come, first-served basis.

INSTRUCTORS :

- 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, we 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. We will give an overview of the different statistical approaches to study local adaptation, and the participants 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 at (<mailto:info@physalia-courses.org>)

Thanks!

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org <http://www.physalia-courses.org/> Twitter: @physacourses mobile: +49 17645230846 <https://groups.google.com/forum/#!forum/physalia-courses> info@physalia-courses.org

Berlin ModellingUsingNetlogo Oct21-25

Dear all,

we have the last places left on our course “Individual-based modelling using NetLogo”, which will take place next month (21-25 October 2019) in Berlin (Free University Berlin (Germany))

Instructors: Professors Steve Railsback and Volker Grimm.

Overview: This five-day course will introduce the principles of agent-based modelling using NetLogo, a development environment and a domain specific computer language for agent-based modelling. Participants will learn how to design, implement, and evaluate agent-based models that are relevant to their own fields of research and teaching.

For more information, please visit our website: (<https://www.physalia-courses.org/courses-workshops/-course52/>)

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.

All the best,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org <http://www.physalia-courses.org/> Twitter: @physacourses mobile: +49 17645230846 <https://groups.google.com/forum/#!forum/physalia-courses> “info@physalia-courses.org” <info@physalia-courses.org>

Berlin ProteomicsWithR Feb17-19

Dear all,

registrations are now open for our course “R/Bioconductor for Mass Spectrometry and Proteomics”.

Where: Free University (FU) Berlin (Germany)

When: 17th-19th February 2020

Instructor: Dr. Laurent Gatto (de Duve Institute, UCLouvain, Belgium)

Course website: (<https://www.physalia-courses.org/courses-workshops/course58/>)

Registration deadline: 15th January 2020

Overview

This course will introduce participants to the analysis and exploration of mass spectrometry (MS) based proteomics data using R and Bioconductor. The course will cover all levels of MS data, from raw data to identification and quantitation data, up to the statistical interpretation of a typical shotgun MS experiment and will focus on hands-on tutorials. At the end of this

course, the participants will be able to manipulate MS data in R and use existing packages for their exploratory and statistical proteomics data analysis.

Target audience and assumed background

The course is targeted to either proteomics practitioners or data analysts/bioinformaticians that would like to learn how to use R and Bioconductor to analyse proteomics data. Familiarity with MS or proteomics in general is desirable, but not essential as we will walk through and describe a typical MS data as part of learning about the tools. Participants need to have a working knowledge of R (R syntax, commonly used functions, basic data structures such as data frames, vectors, matrices and their manipulation). Familiarity with other Bioconductor omics data classes and the tidyverse syntax is useful, but not required.

Program Monday - Classes from 9:30 to 17:30

During the first day, we will focus on raw MS data, including how mass spectrometry works, how raw MS data looks like, MS data formats, and how to extract, manipulate and visualise raw data.

Tuesday- Classes from 9:30 to 17:30

The second day will focus in identification data, how to combine them with raw data, quantitation of MS data, and introduce data structure of quantitative proteomics data

Wednesday- Classes from 9:30 to 17:30

The last day will focus on quantitative proteomics, including data structures, data processing, visualisation statistical analysis to identify differentially expression proteins between two groups.

For the full list of our courses and Workshops, please see: (<https://www.physalia-courses.org/courses-workshops/>)

All the best, Carlo

Carlo Pecoraro, Ph.D

Physalia-courses DIRECTOR info@physalia-courses.org <http://www.physalia-courses.org/> Twitter: @physacourses mobile: +49 17645230846 <https://groups.google.com/forum/#!forum/physalia-courses> “info@physalia-courses.org” <info@physalia-courses.org>

Berlin Speciation Genomics Feb24-28

Dear all, the registration for the 3rd edition of our Speciation Genomics course are now open!

When: 24-28 February 2020

Where: Free University (FU) Berlin (Germany)

Instructors: Dr. Mark Ravinet (CEES, Univeristy of Oslo, Norway) and Dr. Joana I. Meier (University of Cambridge, UK).

(<https://www.physalia-courses.org/instructors/t54/>)

Overview

This course will provide a thorough introduction to the growing field of speciation genomics. The course aims to take students from the initial steps required for handling raw sequencing data to demographic modelling and inference of genome-wide signatures of selection and introgression. Through a combination of lectures covering key theoretical and conceptual topics, alongside hands-on exercises, participants will learn the most important computational approaches used in speciation genomics. This will include a heavy emphasis on data visualization and interpretation. After completing of the course, the participants should be able to begin using NGS data to shed light on the genomic aspects of speciation in their study system of choice.

Format

This course is designed for researchers and graduate students with strong interests in applying novel high-throughput DNA sequencing technologies to study the population genomic basis of speciation. The course will mainly focus on the analysis of NGS data for study systems for which a reference genome is available. We will provide theoretical lectures and hands-on exercises drawing on examples of whole-genome resequenced and RAD-sequencing data. Participants will make use of the UNIX command line, R and Python throughout the course.

Assumed Background

The participants should have some basic background in evolution and genomics. No programming or scripting expertise is required. Previous experience in UNIX-based command line and R is an advantage but a standard introduction will be provided. All hands-on exercises will be run in a Linux environment on remote

servers. Statistical analyses will be run in R using RStudio.

Learning Outcomes

Handling NGS data from raw reads to genetic variants

Applying basic population genetic statistics

Visualizing the genetic structure

Inferring demographic history

Identifying regions under divergent selection or barriers to gene flow

Understanding the potential and limitations of different methods to detect regions under selection

Please visit our website to have more information about the course content: (<https://www.physalia-courses.org/courses-workshops/course37/>)

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>

cE3c Portugal 2 Biodiversity Biogeography

Course Natural History Collections and Biodiversity Organized by Maria Judite Alves, Raquel Barata, Cristiane Bastos-Silveira et al. |November 18-22 2019 @ Lisbon, Portugal

Objectives This course aims to: - evidence the importance of natural history collections for the study of biodiversity. - show new tools and approaches to extract and disseminate biodiversity data from natural history collections - increase awareness of young researchers for the scientific and culture value of Natural History Museums.

Course coordinator Maria Judite Alves (Researcher at the Centre for Ecology, Evolution and Environmental

Changes (cE3c), and MUHNAC- Museu Nacional de Historia Natural e da Ciência)

<http://ce3c.ciencias.ulisboa.pt/member/maria-judite-silva-cardoso-alves> Intended audience This five days intensive course will be open to a maximum number of 16 participants, being directed to PhD or MSc students in Biology, Evolution, Ecology or related areas, and postdocs and other professionals working in related topics.

Minimum formation: Bachelor in Biology or related area.

The course is free for 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (UL; UP) and Biology and Ecology of Global Changes (UL, UA). For information of fees for other participants see the programme details (access link below).

Deadline for applications: October 18, 2019

Candidates should send a short CV and motivation letter to Maria Judite Alves (mjalves@fc.ul.pt)

For additional details about the programme of the course, fees and to know how to register, click here, and access the specific course <http://ce3c.ciencias.ulisboa.pt/training/?cat> For more information about the course, please contact by email:

Maria Judite Alves (mjalves@fc.ul.pt)

Course Island Biogeography organized by Ana Margarida Santos et al. | January 13-16, 2019 @ Lisbon, Portugal

Objectives: This four days intensive course introduces the field of island biogeography, a discipline that has long influenced other research areas such as macroecology, community ecology, evolution and conservation biology. This course covers the main aspects of island biogeography, and on completion of the course the students shall have acquired knowledge and understanding on: 1) Ecological/evolutionary theories developed from studies on islands, and its applications in other research areas. 2) Processes that occur during and after island colonization, that shape island communities. 3) Island evolutionary processes. 4) Applications of island biogeography to conservation biology

See the PROGRAMME at: <http://ce3c.ciencias.ulisboa.pt/training/?cat>
 INSTRUCTOR (coordinator): Ana M.C. Santos <http://ce3c.ciencias.ulisboa.pt/member/anamsantos>
 Researcher at cE3c

Intended audience This course will be open to a maxi-

mum number of 20 participants, being directed to PhD and master students as well as post-docs and professionals with a bachelor in Biology, Geography or related areas.

Minimum formation: Bachelor in Biology, Geography or related areas.

The course is free for a maximum of 10 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (BIODIV UL, UP) and Biology and Ecology of Global Changes (BEAG UL, UA). For information of fees for other participants see the programme details.

Deadline for applications: December 6, 2019
 Candidates should send a short CV and motivation letter to Ana Margarida Santos (ana.margarida.c.santos@googlemail.com).

For additional details about the course click here:

<http://ce3c.ciencias.ulisboa.pt/training/?cat> = Margarida Matos <mmmatos@fc.ul.pt>

Coruna Spain NGS Sep19-20

Course: High-throughput sequencing using Illumina, PacBio, and ONT: key concepts and applications.

Dates: 19-20 September 2019

Location: A Coruña (Spain)

Instructor: Antón Vizcaíno (AllGenetics)

High-throughput sequencing has already revolutionised our understanding of biology and has greatly accelerated research in many areas of the life sciences. In this 11-hour course, participants will be given the tools necessary to understand how this cutting-edge technique works, and how it can be applied to their current or future research. Participants will learn the basics of the different sequencing chemistries and platforms that are now available in the market with a focus on the Illumina technology. The course will also teach some of the main applications in the domain of life science research, such as RNA-seq, SNP discovery and genotyping, amplicon sequencing, whole genome sequencing, etc., covering the most important aspects of a high-throughput sequencing experiment, from DNA and RNA extraction to library preparation and sequencing.

Please find the course details here: <https://www.allgenetics.eu/index.php/services/training/>

[high-throughput-sequencing-using-illumina-pacbio-and-ont-key-concepts-and-applications.html](http://www.allgenetics.eu/high-throughput-sequencing-using-illumina-pacbio-and-ont-key-concepts-and-applications.html)

If you have any questions, do not hesitate to contact us: info@allgenetics.eu Website: <https://www.allgenetics.eu/> Twitter: @AllGenetics Phone: +34 881015541

Rosa GJ <rgarciajunco@gmail.com>

Coruna Spain RNaseq Oct16-18

Course: Introduction to RNA-seq data analysis. Dates: 16-18 October 2019 Location: A Coruña (Spain) Instructors: Dr. Alejandra Perina, Rocío Esteban, and Antón Vizcaíno (AllGenetics)

In this 16.5-hour course, participants will learn how to design, perform, and analyse an RNA-seq experiment. The course will cover the basic concepts of library preparation and sequencing, and the key aspects of an RNA-seq data analysis pipeline, focusing on gene expression quantification and differential expression analyses. Participants will also learn how to assemble a transcriptome de novo.

Participants will get the chance to work hands-on with real datasets, using different bioinformatic tools. The aim of the course is to provide researchers with the necessary resources to understand and carry out a basic RNA-seq pipeline to study gene expression.

Please find the course details here: <https://www.allgenetics.eu/index.php/services/training/introduction-to-rna-seq-data-analysis.html> If you have any questions, do not hesitate to contact us: info@allgenetics.eu Website: <https://www.allgenetics.eu/> Twitter: @AllGenetics Phone: 0034 881015541

Rosa GJ <rgarciajunco@gmail.com>

Crete ComputationalMolEvol May10-21

Dear Community,

The 12th summer school on Computational Molecular Evolution organized by Ziheng Yang, Alexis Stamatakis,

Adam Leaché, and me, will take place from May 10 - 21 2020 in HCMR Crete, Greece again.

Please visit the course web-site for further details:

<http://meetings.embo.org/event/20-comp-evolution>
Applications are now open.

Please feel free to circulate this message.

Aglaiia (Cilia) Antoniou

Dr. Antoniou Aglaia (Cilia) Institute of Marine Biology, Biotechnology and Aquaculture (IMBBC) Hellenic Centre for Marine Research (HCMR) Gournes Pedidos, P.O.Box 2214, 71003, Iraklio, Crete, Greece Tel: +30 2810 337826 Fax: +30 2810 337820

Cilia Antoniou <antoniou@hcmr.gr>

Glasgow 2 IntroBioinformatics RADseq Sep30-Oct4, Sep23-27

Introduction to Bioinformatics using Linux (IBUL04)

<https://www.prinformatomics.com/course/introduction-to-linux-workflows-for-biologists-ibul04/> Free accommodation packages available with early registration - Free accommodation if you are in full-time academia - please ask oliverhooker@prinformatomics.com

Martin Jones - Glasgow - 30th September - 4th October 2019

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.

Monday 30th ' Classes from 09:30 to 17:30

Module 1: The design of Linux. In the first session we briefly cover the design of Linux: how is it different

from Windows/OSX and how is it best used? We'll then jump straight onto the command line and learn about the layout of the Linux file system and how to navigate it. We'll describe Linux's file permission system (which often trips up beginners), how paths work, and how we actually run programs on the command line. We'll learn a few tricks for using the command line more efficiently, and how to deal with programs that are misbehaving. We'll finish this session by looking at the built in help system and how to read and interpret manual pages.

Module 2: System management. We'll first look at a few command line tools for monitoring the status of the system and keeping track of what's happening to processor power, memory, and disk space. We'll go over the process of installing new software from the built in repositories (which is easy) and from source code downloads (which is trickier). We'll also introduce some tools for benchmarking software (measuring the time/memory requirements of processing large datasets).

Tuesday 1st ' Classes from 09:30 to 17:30

Module 3: Manipulating tabular data. Many data types we want to work with in bioinformatics are stored as tabular plain text files, and here we learn all about manipulating tabular data on the command line. We'll start with simple things like extracting columns, filtering and sorting, searching for text before moving on to more complex tasks like searching for duplicated values, summarizing large files, and combining simple tools into long commands.

Module 4: Constructing pipelines. In this session we will look at the various tools Linux has for constructing pipelines out of individual commands. Aliases, shell redirection, pipes, and shell scripting will all be introduced here. We'll also look at a couple of specific tools to help with running tools on multiple processors, and for monitoring the progress of long running tasks.

Wednesday 2nd ' Classes from 09:30 to 17:30

Module 5: EMBOSS. EMBOSS is a suite of bioinformatics command-line tools explicitly designed to work in the Linux paradigm. We'll get an overview of the different sequence data formats that we might expect to work with, and put what we learned about shell scripting to biological use by building a pipeline to compare codon usage across two collections of DNA sequences.

Module 6: ' Using a Linux server. Often in bioinformatics we'll be working on a Linux server rather than our own computer' typically because we need access to more computing power, or to specialized tools and datasets. In this session we'll learn how to connect to a Linux server and how to manage sessions. We'll also consider the various ways of moving data to and from a server

from your own computer, and finish with a discussion of the considerations we have to make when working on a shared computer.

Thursday 3rd ' Classes from 09:30 to 17:30

Module 7: Combining methods. In the next two sessions ' i.e. one full day ' we'll put everything we have learned together and implement a workflow for next-gen sequence analysis. In this first session we'll carry out quality control on some paired-end Illumina data and map these reads to a reference genome. We'll then look at various approaches to automating this pipeline, allowing us to quickly do the same for a second dataset.

Module 18: Combining methods. The second part of the next-gen workflow is to call variants to identify SNPs between our two samples and the reference genome. We'll look at the VCF file format and figure out how to filter SNPs for read coverage

— / —

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>

London Aarhus Analysing Complex Trait GWAS Oct 23, 28

Hi all, we are holding two (identical) workshops on methods for analysing complex trait GWAS data. The first is on Wednesday 23rd October in University College London (cost 50); the second is on Monday 28th October in Aarhus University (free to attend). Please see below for details and registration links.

Thanks, Doug

Background: In recent years, there has been a massive increase in the amount of genetic data available; with resources such as the UK and China-Kadoorie Biobanks, researchers can now access data for thousands of phenotypes and hundreds of thousands of individuals. There has also been great progress developing genome-wide statistical tools for detecting causal variants, constructing prediction models and better understanding the genetic architecture of complex traits.

Course outline: We will cover a wide range of GWAS analyses. We will begin with basic analyses, such as

quality control, single-SNP regression and classical polygenic risk scores. However, the main focus will be more advanced analysis. These will include both methods that use individual-level data (e.g., mixed-model association analysis, G-REML, gene-based association tests, using tools such as Bolt-LMM, GCTA and LDAK), and methods that use summary statistics (e.g., heritability and genetic correlation analyses, using tools such as LDSC and SumHer). We will explain the principals underlying these methods, highlighting both their common elements and differences in underlying modelling assumptions.

The course will compose of two lectures and two practicals. 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 (ideally running either MAC or LINUX).

Prerequisites: This course is designed for researchers who have at least some experience of GWAS. Participants should have a basic understanding of statistics, and would ideally be familiar with the idea of a shrinkage regression. Knowledge of SNP genotypes and linkage disequilibrium will be assumed. Computer scripts and output will be discussed that assume some familiarity with scientific computing using Linux. Experience with PLINK would be helpful but is not essential.

For the London Course: <https://www.eventbrite.com/e/ugi-short-course-methods-for-analysing-complex-trait-gwas-data-tickets-71239167267?aff=ebapi> For the Aarhus Coure <https://www.eventbrite.com/e/aia-short-course-methods-for-analysing-complex-trait-gwas-data-tickets-71237799175> “Speed, Doug” <doug.speed@ucl.ac.uk>

Modica DataExploration Nov4-8

Dear all,

Last few days to the Early Birds subscription to the course on “Data Exploration and Visualization in R with tidyverse & ggplot2”.

Where: Modica, Sicily, Italy What: Data Exploration and Visualization in R with tidyverse & ggplot2 When: 04-08 November 2019

LINK: [https://www.hybleatraining.com/course/data-](https://www.hybleatraining.com/course/data-exploration-and-visualization-in-r/)

[exploration-and-visualization-in-r/](#) OUTLINE The upsurge of data sets complexity in evolutionary biology requires researchers the ability to organize, explore and visualize information in an efficient and reproducible way. Data exploration and visualization is a fundamental component of data science and scientific research. Extracting knowledge and insights from structured and unstructured biological data is a key skill and requires not only a good understanding of the scientific methods but also the ability to process and visualize data in a reproducible way.

In this course, you will learn how to explore, transform, analyze and visualize different data sets to gain knowledge and to communicate these insights to a scientific and/or general audience. The course will cover all the necessary steps that are needed for data exploration and visualization in R:

- Introduction to R, RStudio and Version Control
- Working with different data types
- Exploration and transformation of data using “tidyverse”
- Fitting simple models to analyze data
- Data visualization using “ggplot2”

TARGETED AUDIENCE This workshop is aimed at researchers and technical workers in biology and related sub-fields, although the content of the course is relevant to other similar data practitioners. In general, no programming experience is needed. The course teaches all relevant steps to load, transform, explore, visualize and analyze the data using R and RStudio.

THEMES: -Image analysis basics -Particle analysis -Data import in R -Data visualization with ggplot -Random forest classification

CALENDAR: Day 1: Introduction to R, RStudio and Version Control

Day 2: Data transformation using “tidyverse”

Day 3: Data visualization using “tidyverse” and “ggplot2”

Day 4: Data models using “tidyverse”

Day 5: Exploration and visualization of own (or provided) data

INSTRUCTOR: Cédric Scherer, Ph.D. @ BioMove IZW Berlin, Germany

REGISTRATION DEADLINE: 01 OCT 2019 EARLY-BIRDS DEADLINE: 15 SEPT 2019

For more info regarding the course, please visit: <https://www.hybleatraining.com/course/data-exploration-and-visualization-in-r/> or get in touch with us at: info@hybleatraining.com

Best regards, Pierluigi

HYBLEA TRAINING <https://www.hybleatraining.com>
Co-founders: Pierluigi Colangeli, PhD Silvia Lechthaler, PhD

pierluigi.colangeli <pierluigi.colangeli@gmail.com>

SanDiego

PopConservationGenomics Jan11-15

Call for Abstracts Population and Conservation Genomics Workshop Plant and Animal Genome XXVIII International Conference <http://www.intlpag.org/> January 11-15, 2020 Town and Country Convention Centre, San Diego, California

The annual Population and Conservation Genomics workshop will be held at the Plant and Animal Genome XXVIII International conference. The workshop is scheduled on Saturday, January 11, 2020 and Monday, January 13, 2020. You are invited to attend this Workshop and submit abstracts for oral presentations on any population and conservation genomics aspect of both plants and animals. The topics may include (but not limited to): population genomic diversity and structure; molecular evolution; landscape genomics; seascape genomics; natural selection and local adaptation; ecological and evolutionary genomics; population epigenomics; paleogenomics; eDNA; bioinformatics in population and conservation genomics; population genomics of speciation; metapopulation genomics; application of genomics in breeding, forensics, biogeography, demography inferences, and conservation and management of genetic resources; genomic effects of domestication, management practices, fragmentation, bottlenecks, climate and environment change, and transgenic deployment; and gene conservation; etc.

The Workshop will have 2 sessions with a provision for 12 invited speakers. Most of the invited presentations will be selected from the submitted abstracts. Please send your abstract of no more than 250 words by e-mail to Om Rajora (Om.Rajora@unb.ca) as an attached Word file no later than October 18, 2019. You will be notified by October 25, 2019 whether your abstract has been selected for an oral presentation. Thereafter, the selected presenters will need to submit their abstract to the PAG website. Authors whose abstracts are not selected for oral presentations are highly encouraged to present a poster at the conference.

Inquiries and Abstract Submission

For information and questions regarding the Population and Conservation Genomics workshop, please contact Om Rajora at the following coordinates.

Dr. Om P. Rajora University of New Brunswick Fredericton, NB E3B 5A3, Canada. E-mail: Om.Rajora@unb.ca
Tel: (506) 458-7477 Fax: (506) 453-3538

Om Rajora <om.rajora@unb.ca>

SICB Austin

EvolutionCommunication Jan3

Hi all,

We are writing to announce an interdisciplinary workshop on spatio-temporal dynamics in animal communication, to take place in advance of the annual meeting of the Society for Integrative and Comparative Biology in Austin, TX. The workshop itself will occur on January 3rd, 2020 from 9 am - 2 pm.

The intention of the workshop is to identify new scientific frontiers and challenges related to spatial and temporal dynamics in animal communication. Participants will work in interdisciplinary working clusters led by prominent researchers in the fields of behavioral ecology, neuroscience, biomechanics, computational biology, evolutionary biology, and philosophy. We expect these interdisciplinary clusters will initiate collaborations, including initiating a larger symposium on the topic at a future SICB meeting.

We are particularly interested in engaging the input of early career researchers who are beginning to work on topics related to this subject. Funds may be available to support travel and registration costs.

To indicate your interest in the workshop and topics of particular relevance to your work, please fill out the brief survey at the following link: <https://forms.gle/-SSM3uZeZic16uRAp7> An abstract describing the overarching aims of the workshop is appended below.

We look forward to hearing from you!

Sincerely,

Kim Hoke, Colorado State University Sara Wasserman, Wellesley College Nate Morehouse, University of Cincinnati

Abstract:

We are organizing a workshop-symposium combination that seeks to integrate approaches from neuroscience, cognitive ecology, biomechanics, spatial ecology, machine vision, evolution, and animal behavior to address the spatiotemporal dynamics of complex signaling. The workshop, to take place in 2020, will focus on identifying key questions and promising frontiers on this topic. A subsequent SICB symposium will then extend upon these discussions to highlight new directions in the field. During the workshop, interdisciplinary research teams will discuss critical needs and open research questions related to topics which may include: 1) coordination of spatial positioning between senders and receivers during dynamic communicatory interactions, and the evolution of cognitive mechanisms and signaling features that aid in such coordination 2) biomechanical, neurophysiological, and ecological constraints on display production and the effective direction of signals toward appropriate receivers across space and time, 3) receiver encoding of complex signals from neurobiological and cognitive perspectives, thereby linking variation in signal spatiotemporal dynamics to attention, habituation, learning, localization, and scene analysis, 4) machine learning and social network tool development for improved characterization of spatiotemporal dynamics. Our objective is to motivate/guide researchers in applying approaches and knowledge from other disciplines to generate new experimental designs, analytic tools, and theoretical paradigms that will advance our understanding of spatiotemporal complexity in animal communication.

“Morehouse, Nathan (morehonn)”
<morehonn@ucmail.uc.edu>

UCalifornia Davis OmicsHackathon
Oct23-25

Dear Colleagues,

Please find below an announcement for an exciting series of workshops focused on Speeding up Science in Environmental -Omics research fields. Our second workshop will take place October 23-25, 2019 at UC Davis, and travel funding for all accepted participants is being generously sponsored by the Moore Foundation.

Full workshop description and provisional schedule: <https://docs.google.com/document/d/1IZDGgDbTINnZPu6etmrbWfD0HzZoUFaNUNg1N77xQIk/-edit?usp=sharing> Application to participate (deadline Tues Sept 24): <https://forms.gle/vHbWL2caLTMdJPQMA> We're looking for people with metabarcoding, metagenomics, and metatranscriptomics data/code/scripts to join us for a Jupyter/Binder hackathon - the goal is to improve data analysis tools for Environmental -Omics studies, by producing reproducible workflows for common data processing and visualization steps. Outputs from our first event in May 2019 are posted on the main workshop website (code and data visualizations): <https://speeding-up-science-workshops.github.io/> If you are a researcher or software developer using high-throughput sequencing approaches in any ecosystem (marine, terrestrial, human microbiome, etc.), please apply!

Unfortunately due to limited budgets we are only able to offer travel support for workshop participants based in the USA.

Any questions can be directed to workshop organizers Holly Bik (holly.bik@ucr.edu) and C. Titus Brown (ctbrown@ucdavis.edu).

Holly Bik Assistant Professor Department of Nematology University of California, Riverside 3401 Watkins Drive Riverside, CA 92521 Email: holly.bik@ucr.edu Phone: (+1) 951-827-4230

Web: <https://www.biklab.org/> < <http://-biklab.github.io> > Twitter: <https://twitter.com/-hollybik> Holly Bik <holly.bik@gmail.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.