
E v o l D i r

March 1, 2023

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

Foreword

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

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

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



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Albuquerque Evolution Jun21-25

Registration is now open for EVOLUTION 2023, the joint annual meeting of the ASN, SSB, and SSE!

Join us for the in-person conference in Albuquerque this June 21-25 and for the virtual event a few weeks before on June 2-3!

Information: <https://evolutionmeetings.org> Registration: <https://www.xcdsystem.com/evolution/attendee/-index.cfm?ID=F4Zjeoi> Highlights:

* Early registration discount until May 1. * In-person talk submission is first-come, first-served-all submissions accepted until capacity is reached or until May 15. All posters accepted until June 1. In-person talk and poster submission are available once you complete

registration. * This year's virtual event includes award symposia, networking, workshops, and special events, as well as the usual chance to present your research in a talk, all presented LIVE. Virtual talk submission is available once you complete registration. * Hotel accommodations are open for booking. * Arrive early for pre-conference events and workshops, including a behind-the-scenes tour of UNM's Museum of Southwest Biology. * Conference-ending Super Social in the Albuquerque Civic Plaza. * Mid-meeting Night at the Museum at the New Mexico Museum of Natural History and Science. * Multiple participation/travel support opportunities to help finance your participation; details here: <https://www.evolutionmeetings.org/participation-support.html> * Hoping to compete for SSB Mayr (in-person and virtual) or SSE Hamilton (virtual) awards? Instructions here: <https://www.evolutionmeetings.org/-student-awards.html> * FREE on-site daycare, sign up during registration.

“Hollis, Brian” <BRIAN.HOLLIS@sc.edu>

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Berkshire UK
EvolutionOfSexualOrientation
Mar27

Theo Murphy meeting organised by Professor Vincent Savolainen, Professor Sergey Gavrilets and Professor Nathan Bailey

Homosexuality is common in animals and humans, but the biological foundations of such behaviour are unknown. Instead, as offspring are not produced, it is considered a Darwinian paradox. This meeting will confront genetic mechanisms and socio-evolutionary models underlying sexual orientation, in light of recent genomic findings, and with the aim to provide a modern, science-led synthesis on this topic.

Poster session There will be an in-person poster session on Monday 27 March at the meeting venue. If you would like to apply to present a poster please submit your proposed title, abstract (not more than 200 words and in third person), author list, name of the proposed presenter and institution to the Scientific Programmes team no later than Friday 10 March 2023.

Please include the text 'Poster abstract submission - Genetics and evolution of sexual orientation' in the email subject line. Please note that posters are selected at the scientific organisers' discretion.

Attending this event

This meeting is intended for researchers in relevant fields. This will be a residential meeting held at Moor Hall, Cookham, Maidenhead, Berkshire, SL6 9QH, United Kingdom.

* Free to attend.

* Advance registration is essential (please click and complete the 'request an invitation' tab). Requests are reviewed by the meeting organisers on a rolling basis so it may take some time to receive your invitation. Should your invitation request be successful, we will be in touch with a link in Eventbrite to register to attend the meeting.

* This is an in-person meeting only.

* Meals during the meeting can be paid for through

Eventbrite during the registration (lunches on both days of the meeting and dinner on the first night).

* Participants will need to book their own accommodation with Moor Hall.

Visit <https://royalsociety.org/science-events-and-lectures/2023/03/sexual-orientation/> Prof. Vincent Savolainen Professor of Organismic Biology

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Brazil EvolutionPlatyhelminthes
Jul24-28

Dear flatworm enthusiasts,

We are delighted to announce that *registration for the XV International Symposium on Flatworm Biology is open*! The symposium will be held at the Center for Marine Biology (CEBIMar) of the University of São Paulo from 24- 28 July 2023. CEBIMar is located on the north shore of São Paulo State, Brazil, in the municipality of São Sebastião - a place surrounded by lush Atlantic forest and a fantastic shoreline. Please, visit our web page at <https://www.even3.com.br/xvisfb/> You will find detailed information on the event, including dates for registration and submission of abstracts, confirmed invited speakers, registration fees, accommodation, and how to contact us if you need any additional information.

We hope this contact will encourage you to attend this important scientific event.

Sincerely,

Fernando Carbayo, convener Don't miss the XV International Symposium on Flatworm Biology < <https://www.even3.com.br/xvisfb/> > 24-28 July 2023, CEBIMar, São Sebastião, Brazil

Fernando Carbayo <baz@usp.br>

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Corsica MathematicalComputa- tionalEvolBiol Jun12-16

DEADLINE APPROACHING!

Mathematical and Computational Evolutionary Biology (MCEB), June 12-16, 2023 Centre CNRS de Cargèse, Corsica, FRANCE (<https://iesc.universita.corsica/>)

<https://mceb2023.sciencesconf.org/> Dates and dead-
lines:

January 15: Opening of pre-registration and abstract submission on conference web site

March 3: Closure of pre-registration and abstract submission
March 17: Notification of decisions to applicants
April 28: End of registrations and payment (~600 euro, including accommodation)
June 12 (evening) - 16 (early afternoon): Conference

The 2023 edition of MCEB is special, as it will take place on the island of Corsica, for the first time, near the amazing town of Cargèse and its beautiful coastline. This edition will address a major theme: the characterization of species biodiversity and the monitoring and conservation of natural and anthropized populations, using mathematical modeling and computational methods. These approaches are based on the complementarity between: (1) the analysis of biodiversity on a large evolutionary scale (macroevolution) using phylogenetics, population genetics and macro-ecological approaches; and (2) the detailed study of micro-evolutionary and micro-ecological processes that allow us to understand the dynamics of the populations studied and their interactions with their ecosystems.

Beyond this year's themes, general concepts, models, methods and algorithms will be presented and discussed, just as in the previous editions of MCEB. As usual, the meeting will bring together researchers originating from various disciplines: mathematics, statistics, computer science, phylogenetics, population genetics, epidemiology, ecological modeling... Keynote speakers (see below) will introduce a field of research and discuss their own work in this field. Afternoon will be for short presentations and posters, with plenty of time for discussions.

We will stop early every day, thus leaving time for other activities, such as hiking, snorkeling, sea kayaking

Keynote speakers:

Nicola De Maio <https://www.ebi.ac.uk/people/-person/nicola-de-maio/> Sebastian Höhna <https://hoehnalab.github.io/> Flora Jay <http://flora-jay.blogspot.com/p/research.html> Fredrik Ronquist <https://ronquistlab.github.io/people.html> Isabel Sanmartin <https://rjb.csic.es/personal-cientifico/-isabel-sanmartin-bastida/> Celine Scornavacca <https://isem-evolution.fr/en/membre/scornavacca/>

For more information and abstract submission, visit the website at:

<https://mceb2023.sciencesconf.org/> PLEASE SPREAD THE WORD!

Olivier GASCUEL <olivier.gascuel@mnhn.fr>

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CzechRepublic OrchidEvolution

The 7th International Orchid Workshop (7th IOW)

Challenges and Opportunities in Orchid Ecology and Conservation

will take place in Svachovka, Czech Republic, just at the doorstep of an extremely attractive beautiful medieval town of AeskÅ½ Krumlov, part of the UNESCO World Heritage List. See <https://www.orchid-workshop.cz/> for details (click the 3 dots in the upper right corner, if you do not see a list of links to individual website pages).—

The previous conferences were held in the Netherlands, Czech Republic, Estonia, Russia, Italy, and Poland. This one will be the third orchid conference held in the Czech Republic - preceded by the above-mentioned orchid workshop in 2001 and the International Orchid Conservation Congress in 2011.—

The main focus of the 7th IOW will be on the following topics (but other contributions will also be accepted). Preliminary chairs of the sessions in brackets (not yet firmly approved by some of them):

Models of orchid species distribution and population dynamics (Spyros Tsiftsis, Greece): - how orchid abundance and species richness are affected by environmental factors,— - population-level research including viability analyses, especially those considering the importance

of life-history strategies and the effects of population dynamics on orchid species diversity, - predictions of how global change (both in terms of climate and land use) could affect orchid individual/species population dynamics and survival,— - orchid diversity in individual regions/countries, especially in species-rich areas of developing countries, where information on the orchid distribution is poor.

Pollination (Tiiu Kull, Estonia): - interactions with pollinators and orchid pollination strategies, - differences in these associations between rewarding and deceptive orchid species.

Mycorrhiza (Dennis Whigham, USA): - orchid-fungal symbioses and their implications for orchid population dynamics and survival.

Genetics (Mike Fay, United Kingdom): - research on the genetic diversity of orchids, an essential component of efforts to effectively conserve orchids, - genetic studies of orchid species used for the determination of differences between species.

Taxonomy (Marta Kolanowska, Poland): - floristic studies and taxonomic revisions of problematic taxa in orchids.

If possible, the results of these analyses should be put into context with their evolutionary explanations what is the evolutionary advantage of a certain trait that enabled it to be so important?—

Accommodation for 5 nights, full board, coffee breaks, conference materials, all local transports, conference hall, posters, field trip, and all other daily incidentals are included in the conference fee (EUR 600 in shared and EUR 720 in single room) except for dinners on Tuesday and Wednesday. See the workshop webpage for more details.

Instructions on registration and how to pay are here: <https://www.orchid-workshop.cz/registration/>- Bank transfers and credit cards are accepted. Bank transfer costs are covered by the participants.

IMPORTANT - advantages of early payment: The accommodation will be allocated on a first pay - first serve basis and the capacity of Svachovka is limited to 36 rooms. So, if you pay late, you may have to stay outside of Svachovka and commute every day to the venue. This may be inconvenient, even though we will be offering a free shuttle service. Another argument for early payment (before February 28) is that after February 28 the promotional price offered by the hotel ends and therefore the fee will increase by EUR 200.

We are very much looking forward to meeting you again after such a long time!

Pavel

Pavel Kindlmann Professor of Ecology Institute for Environmental Studies Faculty of Science Charles University Benátská 2 128 01 Prague 2 Czech Republic

The conference is organized by: Biodiversity Conservation Center Proštední Svince 35 38232 VeleÁín Czech Republic

Pavel Kindlmann <pavel.kindlmann@centrum.cz>

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Ede Netherlands EvolutionaryBiology May16

Dear colleagues,

The NLSEB (Netherlands Society for Evolutionary Biology) meeting 2023 will take place on Tuesday, May 16th at Akoesticum in Ede!

Registration is open until Friday March 24th.

We have three amazing keynote speakers: Felicity Jones (Friedrich Miescher Lab, Tübingen), who studies molecular mechanisms of speciation and adaptation in sticklebacks, Franjo Weissing (U Groningen) who works on evolvability, phenotypic plasticity, game theory and behavior, and Colin Russell (U Amsterdam), who studies pathogen evolution, particularly of viruses.

The Programme includes two parallel presentation sessions, a cultural intermezzo, roundtable discussions and plenty of time for poster presentations and socializing with your fellow evolutionary biologists, to strengthen your networking connections and to establish new collaborations.

Visit <https://www.nlseb.nl/nlseb2023-meetings> for more information and for registration!

“Kupczok, Anne” <anne.kupczok@wur.nl>

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Edinburgh SEB Centenary Jul4-7

Dear colleagues,

We would like to invite you to submit an abstract to our SEB Centenary 2023 session (<https://www.sebiology.org/events/seb-centenary-conference-2023/sessions/animal.html>) "Rapid evolution of invasive populations due to anthropogenic changes".

The SEB 2023 conference is celebrating its 100 th edition and will take place in Edinburgh, Scotland from July 4-7, 2023. The abstract submission deadline is March 13, 2023.

Organizers: Dr. Antoine Fraimout, Dr. Diana Martinez-Alarcon and Dr. Jehan-Hervé Lignot

Invited speakers: Dr. Carol Lee, Dr. Carolina Arruda-Freire and Dr. Eric Edeline

Session Description:

It is crucial to understand what governs the growth and spread of invasive populations colonizing novel environments to better predict species responses to global changes, including range shifts in response to climate and anthropogenic changes. Rapid and parallel evolutionary processes can speed up growth rates and range expansion within a few generations notably for peripheral populations.

Session Aims & Objectives:

Biological invasions constitute a major feature of the Anthropocene. Within ecosystems that are deeply constrained by human activities with, therefore, major environmental changes such as chronic pollution and disturbances, understanding the rapid evolutionary changes that can occur (genetic range shifts, preadaptation, maladaptation) is a key element to better predict and potentially conserve the actual biodiversity.

We look forward to reading your abstracts and hearing your research!

Best regards,

Antoine Fraimout on behalf of all organizers

Dr. Antoine Fraimout Postdoctoral Researcher UMR 9190 MARBEC Université de Montpellier- Faculté des Sciences Place Eugène Bataillon - bât 24 - CC093 34095 Montpellier

Antoine Fraimout <antoine.fraimout@umontpellier.fr>

Ferrara Italy SMBE2023 WebsiteAbstractSubmission

SMBE2023 - Abstract submission is now open - Deadline March, 15

Dear All,

The website for the upcoming SMBE2023 meeting in Ferrara, Italy, is now online:

www.smb2023.org Information on registration fees, awards, accommodations, venues, and much more, can be found on the website.

We invite you to submit your abstract. Thirty symposia are planned (see titles and synopses in the website), including an Open Symposium.

Deadline for the abstract submission: 15 March

Registration will open on February 20, 2023.

Have a look and see you in Italy!

The Local Committee

The SMBE Council

#SMBE2023

Giorgio Bertorelle

Department of Life Sciences and Biotechnology University of Ferrara Phone +39 0532 455743

SMBE2023 in Ferrara Web site of the group

Web site of the Endemixit project

Giorgio BERTORELLE <ggb@unife.it>

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Ferrara Italy StructuralGenomicVariation Jul17-23

Symposium on the 'Evolution of structural genomic variation in populations & species' at the SMBE conference

this summer in historic Ferrara, Italy.

Abstract deadline is March 15th, 2023 - Conference is 17-23 July - hope to see you there.

<https://www.smbe2023.org/symposia> Abstract: Much of our understanding of the genomics of adaptive and neutral evolution has been based on single nucleotide variants (SNV), providing key insights. However, genomes are also in a state of flux generating structural variation (SV) associated with translocations, inversions, repetitive regions, transposons, variable gene copy number, etc. The 'pangenome' for a species or population is comprised of a core sequence shared by all, together with structurally variable or dispensable components found only in some individuals. While some structural variants will be evolutionarily neutral, examples are increasingly being proposed for SV changes that lead to local adaptations and the evolution of ecotypes, sometimes best understood when both SNV and SV changes are considered together. A more complete understanding of evolutionary processes will certainly require a better understanding of structural variation, which will also promote better inference for applications such as agricultural development and conservation. This symposium will highlight the present state of understanding and help identify valuable directions of study for the future.

"HOELZEL, RUS A.R." <a.r.hoelzel@durham.ac.uk>

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ing his open-source pipeline for compound eye analysis in 2D and 3D.

Further talks and flash talks will be selected from abstracts.

This meeting will be a great opportunity to have a wider discussion about future directions in the field and multidisciplinary strategies to understand invertebrate eye evolution, development, function.

Please see the attached poster and use this link for more information and registration:

<https://www.posnien-lab.net/eye-meeting/> Please forward this invitation to anyone else who might want to attend, including students from your own groups.

We look forward to seeing you in Göttingen on March 20th. In the meantime, feel free to contact us with any further questions.

Maike Kittelmann

Alistair McGregor,

Nico Posnien,

Lauren Sumner-Rooney

Alexandra Buffry

nico.posnien@gmail.com

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Goettingen EvoDevoInvertEyes Mar20-21

Dear all,

As part of our BBSRC-funded project we have organised an exciting meeting on invertebrate eyes and vision in Göttingen, Germany, on the 20th and 21st of March 2023. We aim to bring together researchers studying the huge diversity of invertebrate eyes from different perspectives, including evolutionary biology, morphology, vision, neurobiology, bioimaging, computational modelling, systems biology, biomedicine and developmental biology.

The three keynote speakers will be Isabel Almudi, Fernando Casares, and Emily Baird.

In addition, Pablo Currea will lead a workshop showcas-

Heidelberg VisualisingData Mar28-31

The EMBO Workshop on Visualising Biological Data (VIZBI 2023) will be held online and in-person at EMBL Heidelberg's Advanced Training Centre in Germany from March 28-31, 2023.

Registration: <https://vizbi.org/2023/Registration> Deadline for registration: 14 Feb.

Full Program: <https://vizbi.org/2023/Program> This will be the 13th international meeting in the VIZBI series. This year it takes place as an ISCB and EuroGraphics affiliated meeting with additional support from the Company of Biologists, and Frontiers. Plenary sessions include talks from 21 invited speakers on the application visualisation to gain insight from DNA, RNA, Proteins, Cells, Tissues & Organisms, Populations and

Ecosystems data. Keynotes will be delivered by Stefan Bruckner (U. Bergen, Norway), Arzu Aöltekin (FHNW, Switzerland), and Martin Dohrn (Ammonite, UK).

All participants are invited to present scientific work as a poster and lightning talk, and artistic images for the Art & Biology competition. This year we have a special focus on interactive media, serious games, and the application of eXtended Reality (AR and VR). To get involved please see <https://vizbi.org/2023/VR>

Work presented or discussed during the meeting will be eligible for inclusion in VIZBI 2023's Research Topic which will be published in the Data Visualisation section of Frontiers in Bioinformatics. Additionally, the two best scientific posters will receive the PeerJ poster prize, which includes a free publication with PeerJ. See <https://vizbi.org/2023/Posters> Additional Events: 2023's edition of the VIZBI Data Visualisation masterclass (<https://vizbi.org/2023/Masterclass>), held in partnership with ISCB, takes place online from March 27-28. This requires separate registration.

'Unseen Natural History' is a VIZBI public showcase event held in partnership with EMBL's Science & Society team. It takes place in downtime Heidelberg at 7pm on Friday 31 March, and features Martin Dohrn and Drew Berry (Walter & Eliza Health Institute, Australia). For more information see <https://vizbi.org/2023/Showcase> We hope very much you can join us in March in-person or online for VIZBI 2023!

The VIZBI 2023 Organising Committee. <https://vizbi.org/2023/People> The University of Dundee is a registered Scottish Charity, No: SC015096

"James Procter (Staff)" <J.Procter@dundee.ac.uk>

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MonteVerita Switzerland EvolutionInAction Jun11-15

Dear all,

We are pleased to announce the opening of registration for our INTERNATIONAL CONFERENCE 'EVOLUTION IN ACTION' taking place on Monte Verità, Switzerland, from June 11-15, 2023.

The conference aims to bring together a diverse, international group of researchers to foster interdisciplinary discussions about aspects of evolutionary biology based

on genomic and computational approaches. The program comprises five oral and two poster sessions, two keynote speeches and a workshop on machine learning in evolution.

KEYNOTES: Anthropological Genetics - Anne Stone, Arizona State University (<https://stone.lab.asu.edu>)

Evolution of Plant Reproductive Traits - George Coupland, Max Planck Institute for Plant Breeding Research (<https://www.mpipz.mpg.de/coupland>)

Please note that we also offer financial support for young academics to attend the conference.

More information: <https://www.evolution.uzh.ch/en/-conference.html> On behalf of the Conference Committee The Coordination Office of the URPP Evolution in Action (coordination@evolution.uzh.ch)

EVOLUTION coordination
<coordination@evolution.uzh.ch>

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Muenster Germany Blattodea Evolution Apr3-4

A kind reminder for registering to ICBR2023 before the 26th of February.

1st International Conference for Blattodea Research / Münster, Germany / 3-4 of April 2023

Deadline for registration and abstract submission is 26th February 23:59

Please *register* now:

<https://wwuindico.uni-muenster.de/e/ICBR23>

And submit your *abstract*:

<https://uni-muenster.sciebo.de/s/IVOAqqTZvJy1upu>

Please ensure that your uploaded abstract contains the following information:

1. Name and affiliation of presenting author and other contributing authors
2. Preference of talk or poster
3. Career stage of presenting scientist, e.g. Master student, PhD, post-doc, etc.
4. Title of talk/poster
5. Abstract of maximum 2000 characters

Check our website for further details:

<https://icbr2023.com/> Please spread the word to col-

leagues working on cockroaches and termites in any fields of Biology, as we would like to use ICBR2023 to launch a Blattodea Research Society and establish Blattodea as a model system for hemimetabolous insects and discuss the possibility of creating a 'blattbase', analogous to flybase, from which we all may profit.

Best wishes,

Dr. Mark C. Harrison and Dr. Bertrand Fouks

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Muenster Germany Blattodea Evolution Apr3-4

1st International Conference for Blattodea Research /
Muenster, Germany / 3-4 of April 2023

Extension of the deadline for registration and abstract
submission to the 10th of March.

*Deadline for registration and abstract submission is 10
of March 23:59*

Please *register* now:

<https://www.indico.uni-muenster.de/e/ICBR23>

And submit your *abstract*:

<https://uni-muenster.sciebo.de/s/IVOAqqTZvJy1upu>

Please ensure that your uploaded abstract contains the
following information:

1. Name and affiliation of presenting author and other contributing authors
2. Preference of talk or poster
3. Career stage of presenting scientist, e.g. Master student, PhD, post-doc, etc.
4. Title of talk/poster
5. Abstract of maximum 2000 characters

Check our website for further details:

<https://icbr2023.com/> Unfortunately, it will no longer be possible to ask for child care anymore, also it might be more difficult to get a place in hotel in Muenster.

Best wishes,

Dr. Mark C. Harrison and Dr. Bertrand Fouks

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Online Bird Migration Genomics Feb8

Dear All,

The first online Cigene seminar of the spring series takes place on Wednesday 8th February, 12:00-12:50 (Oslo Time). See details below.

Speaker: Kristaps Sokolovskis, Lund University, Sweden.

Title: Genetics of Migration in Willow Warblers

Abstract: Right before northern hemisphere's summer shifts to autumn, small insect-eating birds start lengthy journeys to tropical regions. It's been known for a long time that a substantial part of this behavior is genetically controlled however the genetic basis of bird migration remains poorly understood. We tracked genotyped willow warblers *Phylloscopus trochilus* from a migratory divide in Sweden where south-east and south-west migratory subspecies meet and interbreed. We found that two markers that seem to follow dominant inheritance and interact epistatically together explain 74% of variation in migration direction. The talk will be based on our recent paper: <https://doi.org/10.1038/s41467-023-35788-7> Zoom link: <https://nmbu.zoom.us/j/67064421833> An overview of the spring series timetable is available here: <https://cigene.no/cigene-seminar-series/>. More titles/abstracts for future seminars to follow.

** We are looking for an MSCA postdoc candidate! (by March 24th) **

<https://www.nmbu.no/forskning/euramme/nmbu-msca-pf-masterclass> See you soon!

Marie

Marie SAITOU, Ph.D.

Tenure-Track Principal Investigator,

Centre of Integrative Genetics (CIGENE),

Faculty of Biosciences,

Norwegian University of Life Sciences

<https://sites.google.com/view/saitou-lab> Marie Saito
<marie.saitou@nmbu.no>

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Online ESEB STN Speciation Feb14

Dear colleagues,

The next instalment of the online seminar series organised by the ESEB-funded STN network « Integration Of Speciation research » ([<https://speciation-network.pages.ist.ac.at/>]) will be held on 14 February 2023, 5 pm CET.

The upcoming session addresses the topic of “Coupling of RI barriers - contributions of multiple barriers”. We welcome as speakers Sophie Karrenberg (Uppsala University, Sweden) and Erik Dopman (Tufts University, USA).

The session will last 1.5 hours, with the first hour dedicated to talks from our speakers followed by questions. The last half-an-hour is dedicated to a more general discussion.

To attend the session live, please use the following link: <https://gu-se.zoom.us/j/62963260882> Talks (but not the discussion session) are recorded and made available here: https://www.youtube.com/channel/UCIEkDdE_5sDw70SQq78DIAA . The IOS network aims to promote scientific integration and also integration of the community. A main objective on this front is to foster diversity and inclusion across the field. The seminar series and subsequent discussion is open to everyone, from students to established researchers and non-scientists alike. In order to maximise the geographic diversity of attendees, we will alternate between two time slots every other month: 5 pm CET and 9 am CET. Please help us to circulate this email to anyone who may be interested, especially those in countries that are typically underrepresented in scientific discourse.

The programme of the seminar series is announced by email, on Twitter (@Speciation_net) and on the IOS network website. People who wish to automatically receive the programme and other news from the IOS network can sign up to the network mailing list from the IOS website.

We look forward to seeing you there!

The STN IOS organising committee:

Jonna Kulmuni (chair), Chris Cooney, Sean Stankowski, Carole Smadja (co-chairs), Sonal Singhal, Liz Scordato, Joana Meier, Richard Merrill, Konrad Lohse, Nick Barton and Roger Butlin

NERC Research Fellow School of Biosciences University of Sheffield www.cooneylab.co.uk Chris Cooney
<c.cooney@sheffield.ac.uk>

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Online PalaeoVC May8-22

Conference: Online.4thPalaeoVC.May8-22

Topic: Conservation paleobiology session at the 4th Palaeontological Virtual Congress

Dear EvolDir community,

Several colleagues and I will be convening a thematic session on conservation paleobiology at the 4th Palaeontological Virtual Congress < <http://palaeovc.org/> > this May. The session organizing team includes Jonathan Cybulski, Julia De Entrambasaguas-Laguna, Erin Dillon, Niklas Hohmann, Yuanyuan Hong, Matias Ritter, Isaiah Smith, and myself.

The conference runs from May 8-22, and all contributed content will be available to view online throughout this period. This is a great online conference geared toward early career researchers, has a flexible format to accommodate different geographic regions and types of talks, and is very reasonably priced (euro 5).

We invite you to submit an abstract to our session. In particular, we encourage students and early career researchers to consider participating. The call for abstracts will close on March 8th.

To learn more about the session and submit your abstract, please visit <https://palaeovc.org/-index.php/conservation-paleobiology-looking-at-the-past-interpreting-the-present-planning-for-the-future/> .Feel free to reach out if you have any questions.

We hope you’ll consider joining our session and participating to this exciting event!

Best,

Paolo Abondio, on behalf of the CPB session organizing team

Paolo Abondio, PhD Research Fellow Dept. of Cultural Heritage, University of Bologna - Ravenna Campus Via degli Ariani, 1 - 48121, Ravenna (Italy) email: paolo.abondio2@unibo.it

Paolo Abondio <paolo.abondio2@unibo.it>

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**Online SMBE
SexDifferencesGeneticsEvol
Apr26-27**

Dear colleagues,

We are thrilled to invite you to the “Genetics and Evolution of Sex Differences” Symposium

(GS10) that is part of the SMBEeverywhere 2022-2023 series of Global Symposia.

Our symposium will take place in short sessions across two days: April 26 - April 27, from 4pm-7pm EDT (1pm-4pm PST, 8pm-11pm UTC). Note that this corresponds to April 27 - April 28 for Australasia (6am-9am AEDT, 8am-11am NZDT).

We have invited talks from Mark Kirkpatrick (University of Texas Austin) and David Page (Whitehead Institute and MIT).

Please visit the SMBEeverywhere GS10 website for more information:

<http://www.smbe.org/smbe/MEETINGS/-SMBEeverywhere/GS10.aspx> Abstract submission EXTENDED deadline: 4 March 2023

Please submit your abstracts here:

<https://app.oxfordabstracts.com/stages/5602/-submitter> We particularly encourage submissions from underrepresented groups in the SMBE community (e.g., women, minorities, LGBTQ+, individuals based outside US/Canada/Europe/Australia/NZ).

Registration is free to SMBE members.

Abstract: Sexual dimorphism is one of the most conspicuous examples of evolution by natural selection and is observed across numerous phenotypes and species. It is even observed in molecular processes like mutation and recombination that directly shape patterns of genetic variation. However, the heritable components of traits under sex-differential selection stem largely from genetic

sequences that are co-inherited between the sexes (e.g., autosomes, X chromosomes). This genetic constraint gives rise to genetic variants with opposing fitness effects in each sex, which can shape genomes over short and long evolutionary timescales (e.g., they can affect the evolution of sex chromosomes), influence population extinction, and maintain genetic variation for fitness and disease. However, despite a decade of genomic-era research, studying sex-differential genetic effects and evolution remains very challenging.

This symposium will bring together theoreticians and empiricists to present cutting-edge research and novel approaches aimed at understanding the evolutionary causes and genetic consequences of sex differences.

Sincerely,

GS10 Organizers:

Ludovic Dutoit (Univ of Otago, NZ)

Sarah Flanagan (Univ of Canterbury, NZ)

Arbel Harpak (UT Austin, USA)

Filip Ruzicka (Monash Univ, Australia)

Ziyue Gao (Univ of Pennsylvania, USA)

Filip Ruzicka <Filip.Ruzicka@monash.edu>

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Online TortoisesEcoGenomics Feb22

Hi all,

The next seminar in the CIGENE spring series takes place next Wednesday 22nd February, 12:00-12:50 (Oslo time). See details below.

Speaker: G̃i_i¹/₂zde i_i¹/₂ilingir, Department of Evolutionary Biology and Environmental Studies, University of Zurich

Title: Genomic approaches in the conservation of Aldabra giant tortoises

Abstract: Aldabra giant tortoises are one of the two giant tortoise species left in the world. Their natural distribution is restricted to the Aldabra Atoll, located northwest of Madagascar. They have been successfully used in rewilding projects on several Western Indian Ocean Islands, whose endemic giant tortoise species are now extinct. My work focuses on producing high-quality genomic resources (such as a reference genome) and un-

derstanding the genetic structure and variation left in the wild and rewilded populations by using low-coverage whole-genome sequencing approaches.

Zoom link: <https://nmbu.zoom.us/j/67064421833> An overview of the spring series timetable is available here: <https://cigene.no/cigene-seminar-series/>. More titles/abstracts for future seminars to follow.

All the best

Marie

** We are looking for an MSCA postdoc candidate! (by March 24th) ** <https://www.nmbu.no/forskning/euramme/nmbu-msca-pf-masterclass> See you soon!

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

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Singapore AsiaEvo EvolBiology Dec16-18

Subject Header: Asi-
aEvo.Singapore.Evolutionary.Biology.Dec16-18

The Third AsiaEvo Conference on Evolutionary Biology 16-18December 2023, Singapore

We are pleased to invite you to the 3rd AsiaEvo Conference, set to take place at the National University of Singapore, Singapore, 16-18 December 2023.

The AsiaEvo conference is a biennial event that seeks to promote evolutionary research by facilitating international collaboration, research, and education on evolutionary biology in Asia and beyond.

At a time when many in the Northern Hemisphere are already shoveling snow, this exciting venue features warm tropical weather, tall skyscrapers, rich rainforests, and fantastic food. Singapore is also centrally located in Southeast Asia with inexpensive short flights to places like Bali, Phuket, and Angkor Wat.

We are open to registration and proposals for symposia. For more information, please navigate to: <https://phylorf.org> Some target dates:

Symposium Proposal Deadline: 1 April 2023 Abstract Submission Deadline: 1September 2023 Early Paid Registration Closes: 15 October 2023

Antónia Monteiro and Li Daiqin

Antonia Monteiro <antonia.monteiro@nus.edu.sg>

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SMBE Ferrara StructuralGenomicVariation Jul23-27

Hi All, registration is open for the SMBE conference in Ferrara (23-27 July, 2023):

<https://www.smb2023.org/registration-and-fees> but early bird registration closes on March 5th. Abstract submission is due by March 15th.

We welcome submissions for our symposium on the 'Evolution of structural genomic variation in populations & species' (number 19 at <https://www.smb2023.org/-symposia>)

Invited speakers:

Scott Edwards: Comparative population pangenomes of songbirds reveal unexpected genome complexity and fitness effects of structural variation

Sissel Jentoft: The Evolutionary role of Genomic Architectures in Marine Fishes

Symposium abstract:

Much of our understanding of the genomics of adaptive and neutral evolution has been based on single nucleotide variants (SNV), providing key insights. However, genomes are also in a state of flux generating structural variation (SV) associated with translocations, inversions, repetitive regions, transposons, variable gene copy number, etc. The 'pangenome' for a species or population is comprised of a core sequence shared by all, together with structurally variable or dispensable components found only in some individuals. While some structural variants will be evolutionarily neutral, examples are increasingly being proposed for SV changes that lead to local adaptations and the evolution of ecotypes, sometimes best understood when both SNV and SV changes are considered together. A more complete understanding of evolutionary processes will certainly require a better understanding of structural variation,

which will also promote better inference for applications such as agricultural development and conservation. This symposium will highlight the present state of understanding and help identify valuable directions of study for the future.

“HOELZEL, RUS A.R.” <a.r.hoelzel@durham.ac.uk>

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SMBE Italy AbstCall ExperimentalEvolution Jul17-23

To the evolution community,

We hope you will join us in Italy, at our symposium on: “Experimental evolution of non-model species and systems” (Symposium 22)

The abstract submission deadline is March 15, 2023.

The conference takes place from July 17-23, 2023 in Ferrara, Italy.

Organizers: Caitlin Pepperell, Lucy Weinert

Invited speakers: Vaughn Cooper, Britt Koskella

Description or the symposium:

The short generation times of microbes allows real time observations of evolution in action. The decades-long experiment of passaging *Escherichia coli* provides a striking example of the power of this approach in illuminating fundamental evolutionary processes. Foundational research on model microbes has created a solid basis for the field of experimental evolution, and enabled new adaptations of this approach to less tractable organisms. The development of high throughput methods of genotyping and phenotyping microbial populations has similarly broadened the possible applications for the tools of experimental evolution. Microbes vary widely with respect to generation time, rate of mutation, and recombination, enabling investigation of evolutionary dynamics under diverse conditions. Research in the field has also recently expanded to include studies of microbes in communities, an exciting and highly relevant approach given the importance of within- and between-species interactions in shaping microbial adaptation. Experimental evolution methods are powerful means of identifying the genetic basis of microbial traits. This has practical implications, for example, in studies of antimicrobial resistance. With this symposium we aim

to bring together researchers working in diverse fields and systems, including those tackling both theoretical and applied questions with experimental evolution.

We look forward to gathering in Italy!

Caitlin & Lucy

Caitlin Pepperell Associate Professor Department of Medicine, Division of Infectious Diseases Department of Medical Microbiology and Immunology School of Medicine and Public Health University of Wisconsin Madison pepperell@wisc.edu

CAITLIN S PEPPERELL
<cspepper@medicine.wisc.edu>

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SMBE Italy AbstractCall PolygenicAdaptation

Dear Colleagues,

We invite you to submit your abstract to our symposium on: Polygenic Adaptation - Predictability and Pleiotropy (Symposium #13)

Abstract deadline is March 15th, 2023

Conference is 17-23 July in Ferrara Italy. <https://www.smb2023.org/symposia> Organizers: Neda Barghi, Carol Eunmi Lee, Christian Schli $\frac{1}{2}$ tterer

Invited speakers: Jacqueline Sztepanacz, Daniel Ortiz-Barrientos

Description or the symposium:

Most quantitative traits have a polygenic basis which involves very many loci of mostly small effects. This has two important evolutionary implications: 1) The contribution of many loci to the generation of phenotype implies that the phenotypes could be generated by redundant genotypes. This redundant property of genetic architecture could lead to diverse patterns of molecular variation under polygenic adaptation. Populations could use different sets of adaptive alleles, which lead to non-parallel genomic patterns of adaptation among replicate populations. The emerging empirical data indicate that certain factors could affect the extent of repeatability during adaptation, including selection from standing genetic variation, linkage disequilibrium, pleiotropy, or epistasis. 2) Given that complex organisms have many

traits but finite number of loci, the polygenic basis of traits implies that each trait cannot have a private set of contributing loci. Thus, a single mutation/gene may affect multiple phenotypes, i.e. pleiotropy. Despite the pervasiveness of pleiotropy observed in genome-wide association studies, the extent of its role in adaptation is not understood. It is generally thought that pleiotropy restricts adaptation. However, recent theoretical and empirical studies have challenged this view by showing that intermediate pleiotropy and also the high modularity of gene-trait networks can facilitate adaptation. With the increasing availability of genomic data from a variety of natural and experimental populations, it is becoming more feasible to investigate the genomic patterns of polygenic adaptation and the role of pleiotropy in polygenic adaptation. The goal of this symposium is to amass the empirical studies to examine the factors that cause the repeatability, or lack thereof, of evolutionary patterns, and also to provide a better understanding of the role of pleiotropy in adaptation. Thus, we welcome studies of natural and experimental populations that focus on the extent to which polygenic adaptation is repeatable, and approaches characterizing pleiotropy and its role in adaptation. Studies that do not examine the role of pleiotropy, but other factors that affect the extent of parallelism during polygenic adaptation, are welcome.

Hope to see you there!! Carol Lee

Carol Eunmi LEE, Ph.D. Professor

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Birge Hall University of Wisconsin Madison, WI 53706
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<http://carollee.labs.wisc.edu> Carol Eunmi LEE
<carollee@wisc.edu>

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SMBE Italy AbstractCall ProteinEvolution Jul23-27

Dear Colleagues,

We would like to invite you to submit your abstracts to our symposium titled “Causation in Protein Evolution at the Society for Molecular Biology and Evolution (SMBE) 2023 Conference.

Abstracts are due on March 15, 2023.

The conference takes place July 23-27, 2023 in Ferrara, Italy. More information can be found, and abstracts can be submitted, at <https://www.SMBE2023.org> Child-care is available at the conference, and registration fee waivers are available as needed, as well as visa assistance.

Organizers: Hanon McShea, Georg Hochberg

Invited speakers: Joanna Masel, Patrick Shih

Description of the symposium:

In the light of evolution, what gives rise to observable properties of proteins, such as marginal stability of folding, catalytic rate enhancement, amino acid composition, and multimeric status? How do physical and physiological realities such as temperature, mutation bias, and crowded nature of cellular environments affect the outcomes of protein evolution that we observe? Causal questions arise in a variety of evolutionary contexts, including but not limited to de novo protein emergence, adaptation to extreme environments, long-term trends, and the degrees to which protein evolution is neutral, nearly neutral, and adaptive. From a biochemistry perspective, the advent of high-throughput techniques provides the means to test the mechanistic basis of evolutionary theories. These include multiplexed measurements of thermodynamic, kinetic, and fitness effects of mutations and natural variation in proteins, as well as high-throughput prediction of protein structures, for example AlphaFold. This symposium aims facilitate interaction between evolutionary biologists and biochemists working on evolutionary problems.

We welcome abstracts from all protein evolution enthusiasts: across scientific fields, geographic locations, and levels of experience.

Hope to see you in Ferrara! -Hanon and Georg

Hanon McShea PhD candidate, Welander laboratory Earth System Science Department Stanford University <https://cyclase.github.io> Hanon McShea <mcshea@stanford.edu>

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SMBE Italy AbstSubmission RegulatoryEvol Jul23-27

Dear EvolDir members,

We'd like to bring to your attention the symposium on "Regulatory evolution and the emergence of diversity" we are organising at the next SMBE meeting.

The meeting will be held in Ferrara, Italy from July 23rd to July 27th. You may find more information on location, registration and abstract submission on the official meeting website <https://www.smbe2023.org/>. Please, find below the description of our symposium. The deadline for the submission of abstracts is March 15th. We look forward to receiving many interesting contributions and to seeing you in Ferrara, Carmelo Fruciano, Paolo Franchini and Francesca Raffini

Symposium: Regulatory evolution and the emergence of diversity

Regulatory evolution and associated changes in gene expression often underpin rapid phenotypic shifts. This is particularly relevant to the initial stages of the speciation process and to the adaptive potential of natural populations in the face of changing ecological pressures. The central role of gene expression regulation in adaptive divergence and evolution is becoming increasingly clear as more data-rich and nuanced empirical work is undertaken on model and non-model organisms. Indeed, the classic sequencing of protein-coding transcripts across conditions can now be augmented with sequencing of several non-coding RNAs (e.g., miRNA, piRNA, lncRNA, circRNA) that have key regulatory roles in gene expression. Further, analyses of differential expression of individual protein-coding genes are now routinely complemented with analyses of co-expression across transcripts, typically involving the use of statistical network methods and the identification of modules of co-expressed transcripts. Finally, the increasing availability of full genome sequences and epigenomic data allows the identification and evolutionary characterization of regulatory sequences (e.g., transcription factors, miRNA binding sites).

These approaches collectively allow evolutionary-relevant analyses of gene (co)expression and regulation across genes, populations, species, and environments.

This symposium is a forum for theoretical, methodological, and empirical research on taxa from across the

tree of life. Bringing together contributions from scientists with disparate backgrounds and career stages, the symposium will contribute to illuminating the role of regulatory evolution and change in co-expression in promoting phenotypic variation and adaptation, or more generally the emergence of biological diversity.

Carmelo Fruciano Italian National Research Council (CNR) IRBIM Messina <http://www.fruciano.org/>
Carmelo Fruciano <c.fruciano@unict.it>

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SMBE Italy Evolutionary ApproachesCancer Jul23-27

Dear colleagues,

We (Alison Feder <<https://federlab.github.io/>> and Rob Noble <<https://robjohnnoble.github.io/>>) are organizing a symposium "Evolutionary approaches to understand cancer across scales" at the SMBE conference <<https://www.smbe2023.org/>> in Ferrara, Italy, 23rd-27th July, 2023. Our invited speakers are Ivana Bozic <<https://amath.washington.edu/people/ivana-bozic>> and Alex Cagan <<https://www.sanger.ac.uk/-person/cagan-alex/>>.

Abstract submission is now open <<https://www.smbe2023.org/abstractsubmission>> with a deadline of 15th March. We may be able to support travel for early career researchers from non-European and low-income countries to take part in our symposium, using a small budget allotted to us by SMBE. Researchers who may need such support should contact us after the decisions are announced.

Abstract: Somatic mutation and subsequent evolution are unavoidable outcomes of exogenous and endogenous processes affecting the cells of multicellular organisms, which only rarely give rise to cancer. Key to disentangling why cancer risk varies among species, tissues and tumors is a deeper understanding of the mechanisms driving mutational accumulation, and the evolutionary forces that permit those mutations to change in frequency. Increased genomic data collection and methodological advances now permit us to examine these processes with unprecedented resolution. In this symposium, we will bring together researchers quantitatively examining somatic evolution across multiple

scales: What are the processes driving somatic evolution across organisms and how does this contribute to cancer risk? What properties make some tissues or cell lineages vulnerable to cancer while others remain robust? Why does somatic evolution drive only some tumors towards malignancy and metastasis? We invite submissions that build new frameworks to analyze genomic data derived from cancerous or healthy tissues, exploit emerging data types (including single cell and/or spatial RNA-sequencing, epigenomes, in-situ hybridization and multi-region sequencing) from an explicitly evolutionary lens, or offer theoretical advances in the understanding of tumor risk and progression. By considering these shared processes across scales with approaches deriving from genomics, mathematical modeling and evolutionary theory, we hope to reach a deeper understanding of how and why tumors emerge and ultimately cause disease.

Abstract submission page: <https://www.smb2023.org/abstractsubmission> Awards and support: <https://www.smb2023.org/awards> “Noble, Robert” <Robert.Noble@city.ac.uk>

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SMBE Italy EvolutionSensorySystems Jul23-27

Dear colleagues,

We invite you to join us in the symposium 'Evolution of sensory systems', organized for the next SMBE congress in the beautiful city of Ferrara (Italy), from 23 to 27 July 2023. Abstract submission is now open (<https://www.smb2023.org/abstractsubmission>) with a deadline of 15 March 2023.

We welcome all researchers interested in learning and discussing the latest findings and hypotheses on the evolution and genetic basis of sensory systems. Studies on molecular evolution, phylogenetics, comparative genomics and gene family evolution of chemosensory genes are welcome, as are studies on the evolution of the associated sensory systems across the different life forms. Invited speakers will be Marjorie Liénard (Lund University, Sweden) and Thomas Auer (University of Lausanne, Switzerland).

To encourage the participation to the symposium of early career researchers (MSc and PhD students, post-

docs) from non-European and low-income countries we offer a limited number of travel grants. For more information on how to apply please contact one of the organizers.

All information on the congress can be found here: <https://www.smb2023.org>, but please feel free to contact us for any question.

See you in Ferrara!

Camille Meslin - camille.meslin@inrae.fr Nicolas Montagné - nicolas.montagne@sorbonne-universite.fr Roberto Feuda - rf190@leicester.ac.uk Lino Ometto - lino.ometto@unipv.it

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Società Italiana di Biologia Evoluzionistica www.sibe-iseb.it Lino Ometto <lino.ometto@unipv.it>

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SMBE Italy FrontiersConservationGenomics Jul17-23

Dear All,

We would like to invite you to submit an abstract to our SMBE 2023 symposium < <https://www.smb2023.org/symposia> > “*New frontiers in conservation genomics*”. The SMBE 2023 conference takes place in *Ferrara, Italy from July 17-23, 2023*. The abstract submission deadline is *March 15, 2023*.

Organizers: Mirte Bosse, Hernan Morales, Claudia Fontsero, Lara Urban

Invited speakers: *Katerina Guschanski & Moises Exposito-Alonso*

Description of the symposium: The field of conservation biology was one of the early adopters of genomic technologies, but only recently, reducing costs of sequencing and increasing computer power have catalyzed the widespread uptake of genomic tools for conservation purposes. Conservation genomics is now an established research discipline that is rapidly expanding. Recent developments in computer sciences and integrating insights from other fields into the conservation genomics toolbox are pushing the frontiers of the field. We in-

vite contributions that are part of this exciting future, and show the application of novel approaches in conservation, such as the use of artificial intelligence to understand genomic signatures, exploiting eDNA data, the use of time-series data, uncovering interactions between hosts and their microbiota, fitness studies, and genomic simulations. We would like to highlight the importance of assessing the evolutionary footprint of a species' population decline through high-quality omics tools (e.g., genomics, epigenomics, transcriptomics, proteomics, metabolomics, metagenomics). Our central aim is to showcase research on evolutionary genomic inferences that can comprehensively inform a species' risk of extinction and conservation assessment.

We look forward to hearing about your research!

Best wishes, Lara on behalf of all organizers

Dr Lara Urban

Principal Investigator Helmholtz Pioneer Campus, Helmholtz AI, Technical University of Munich phone: + 49 (0) 160 92105701 email: lara.h.urban@gmail.com website: <https://www.lara-urban.com/> "Nothing in life is to be feared, it is only to be understood." - Marie Salomea Skłodowska Curie

Lara Urban <lara.h.urban@gmail.com>

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SMBE Italy Human Domesticated Paleogenomics Jul17-23

Dear colleagues,

We are organizing a symposium titled

"Entangled histories: insights into the evolution of humans and their domesticates through paleogenomics"

to be held during the SMBE meeting in Ferrara, Italy, between July 23-27, 2023. Deadline for abstract submission is 15/03/2023.

More information about the SMBE meeting: www.smb2023.org Invited speakers: Pontus Skoglund (<https://www.crick.ac.uk/research/labs/pontus-skoglund>) Victoria Mullin (<https://www.nhm.ac.uk/our-science/departments-and-staff/staff-directory/-victoria-mullin.html>)

Abstract: Our understanding of recent demographic history and natural selection processes in human populations has increased dramatically over the last decade owing to the ever-growing number of genome sequences, in particular, ancient genomes. Genomic and paleogenomic data from domestic species are also multiplying. The analysis of these data is in its infancy but has already revealed notable parallels between evolutionary changes in humans and interacting taxa. These include parallel histories of dispersal and admixture, as well as cases of convergent evolution. In this session, we will cover recent and wide-ranging discoveries in this emerging field of paleogenomics. We expect the session to provide a deeper understanding of our own history, and also of the demographic dynamics of domesticates and their convergent adaptations.

Organizers: Mehmet Somel (somel.mehmet@googlemail.com) Eva-Maria Geigl (Eva-maria.GEIGL@ijm.fr) Anders Götherström (anders.gotherstrom@arklab.su.se) Pavlos Pavlidis (pavlidisp@gmail.com)

Dates: Registration opens: Feb 02, 2023 Abstract submission deadline: Mar 15, 2023 Notification of decisions: Apr 20, 2023 Early bird deadline: May 5, 2023

Abstract submission page: <https://www.smb2023.org/abstractsubmission> Awards and support: <https://www.smb2023.org/awards> Note the awards application deadline: 15/03/2023.

The symposium organizers may also be able to support travel for early career researchers from non-European and low-income countries through a small budget allotted to each symposium SMBE. Researchers who may need such support may contact the organizers after the decisions are announced.

Mehmet Somel <somel.mehmet@googlemail.com>

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SMBE Italy RegistrationOpen

SMBE2023 - Registration is now open - Early Bird deadline, May, 5

Dear All,

The registration for the upcoming SMBE2023 meeting in Ferrara, Italy, is now open: www.smb2023.org/-registration-and-fees The deadline (early bird) is May 5. Please, note that the registration for the childcare (financially supported by the Society) is also open at www.smb2023.org/visa-and-childcare The Local Committee The SMBE Council #SMBE2023

Giorgio Bertorelle Department of Life Sciences and Biotechnology University of Ferrara Phone +39 0532 455743 SMBE2023 in Ferrara Web site of the group Web site of the Endemixit project

Giorgio BERTORELLE <ggb@unife.it>

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SMBE Italy Sex-dependentSelection Jul23-27

Dear all,

We would like to invite you to join us at our symposium on “Molecular evolutionary patterns under sex-dependent selection and sexual conflict” that will take place at the SMBE meeting in Ferrara, Italy from July 23rd to July 27th. The deadline to submit abstracts is March 15th (<https://www.smb2023.org/->

[abstractsubmission](#)). You can also find more information about the meeting on the official meeting website at <https://www.smb2023.org/> We look forward to your contributions and to seeing you all in Ferrara!

Below is a description of our symposium.

Organizers: Jose Ranz, Alberto Civetta

Invited speakers: Manyuan Long, Max Reuter

Description or the symposium:

Sexual reproduction sets the ground for traits to evolve in a sex-dependent or limited manner, a process that is driven by sex-dependent (either sexual or natural) selection, sometimes resulting into opposed benefits for males and females, i.e. sexual conflict. This is possible because of an underlying sex-specific trait architecture that relies on genetic factors or mutations with sex-biased effects, ultimately affecting the functional properties of many genes across the genome. These properties typically include different expression attributes of genes and networks, having the potential to shape trait characteristics and impact main fitness components. As a result, sexual dimorphism is pervasive across multiple levels of biological organization and taxa. Importantly, recent technical and analytical advances are facilitating a more precise identification of molecular signatures associated with the action of sex-dependent selection and conflict, as well as the impact of intra and interlocus sexual conflict on the evolution of sex-specific adaptations and constrains on traits optima. In this symposium, we are bringing together recent work that broadly addresses molecular evolutionary patterns under sex-dependent selection and sexual conflict. Among other topics, we examine how sex-biased effects manifest at the molecular level and affect the phenotype, involving work from whole-genome scale expression patterns, to functional networks properties, to the evolution of young genes that are undergoing functional specialization.

Alberto Civetta <a.civetta@uwinnipeg.ca>

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SMBE Italy TemporalGenomics Jul17-23

Dear EvolDir Community,

We warmly invite you to submit an abstract to our SMBE 2023 symposium:

“From the ancient to the recent: using temporal genomics to answer questions in evolutionary biology”

The SMBE 2023 conference will take place in beautiful Ferrara, Italy from July 17-23, 2023*. The abstract submission deadline is *March 15, 2023*.

< <https://www.smbe2023.org/symposia> >

Organizers: Mozes Blom, Bonnie Fraser, Josephine Paris, Joshua Penalba

Invited speakers: Leo Speidel, Vincent Buffalo

Description of the symposium:

Temporal genomic data, where genomes are sequenced at multiple time points, is fast becoming an important tool to answer questions in evolution and has the promise to detect signals that may be otherwise missed when analysing contemporary samples from a single time point. This includes the analysis of selection on polygenic traits, soft selective sweeps, fluctuating selection and recent demographic changes. Concurrently, Natural History Collections are archives of biodiversity across time and space, and represent the primary (and often only) resource for temporal sampling of many non-model organisms. However, multiple challenges, from DNA extraction to analysis, need to be overcome before we can make full use of temporal and historical samples. For example, extracting genetic material from formalin-preserved specimens remains notoriously difficult and has important bearings for large groups of organisms across the Tree-of-Life. Similarly, accounting for biological biases inherent with ancient and historical samples, such as damage, fragmentation, and trace quantities remains a thriving area of research. Finally, evolution occurring over recent times (<200 generations), when human impact has been most prevalent, will require advances in analytical methodology because standard methods are most accurate only at deeper timescales. The purpose of this symposium is therefore to (1) feature recent methodological advances that have pushed the boundaries of data acquisition and inference using historical and temporal sampling, and to (2) showcase empirical studies that use temporal data to track evolutionary change. We look forward to meeting you in Ferrara! Josephine Paris (on behalf of all the symposium organisers)

Josie Paris <parisjosephine@googlemail.com>

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UAlabama Malacological Soc Aug1-5

Dear EvolDir community,

I'm writing to advertise the 89th American Malacological Society meeting, which will take place from 1-5 August 2023 in Tuscaloosa, Alabama at the University of Alabama and the Alabama Museum of Natural History. This meeting encompasses all aspects of molluscan biology including (but not limited to) evolution. Discounted early-bird registration is offered for some ticket types until 30 April (e.g., \$225 for full members and \$125 for student members). The deadline to register for the meeting and submit abstracts for posters and talks is 23 June. Virtual attendance of presentations and other events (but not virtual presentation) is also being offered - see below.

The meeting will open the evening of 1 August with a welcome reception in the Grand Gallery of the Alabama Museum of Natural History. The topic of the President's Symposium (2 August) will be "Freshwater Mollusk Diversity in a Biodiversity Hotspot." This symposium is organized by Dr. Carla Atkinson (University of Alabama) and confirmed speakers include Dr. Art Bogan (North Carolina Museum of Natural History), Dr. Alexa Maine (Confederated Tribes of the Umatilla Indian Reservation; CTUIR), Dr. Dave Strayer (Cary Institute), Dr. Ellen Strong (Smithsonian Institution), Dr. Caryn Vaughn (University of Oklahoma), and Dr. Nathan Whelan (Auburn University and USFWS). Contributed oral presentations (3-4 August) and posters (evening of 2 August) are expected to span diverse sub-disciplines of malacology with work on molluscan genomics, phylogenetics, and freshwater molluscan ecology expected to be particularly well-represented.

Student-centered events will include a student mixer at Black Warrior Brewing Company (after the poster session on 3 August) and a student-mentor networking program. The meeting will also include a panel discussion on inclusive fieldwork hosted by the Society's Justice, Equity, Diversity, and Inclusion (JEDI) Committee (during lunch on 3 August). Panelists will discuss ways for research teams to integrate principles of inclusion into fieldwork planning, navigate issues that arise in the field, and effectively debrief post-fieldwork. Topics covered may include reproductive functions (e.g. menstruation, pregnancy, lactation), mobility constraints and disability, race and nationality, harassment and

discrimination prevention and response, and audience questions. This panel is aimed at malacologists of all career stages.

We will be holding the annual AMS Auction (on 3 August) to support student participation in malacology. Please consider donating items to be auctioned off. Items submitted for auction can be anything mollusc-related (e.g., books, art, trinkets, etc.) but cannot include shells or other specimens. Items for auction could also include services. Please contact Kevin Kocot (kmkocot@ua.edu) if you wish to contribute.

The meeting will close with a banquet and awards ceremony in the Grand Gallery of the Alabama Museum of Natural History (on the evening of 4 August). The banquet is free for students and \$50 for others. Attendance is limited to 125 and is first-come, first-serve (so register early!).

An optional field trip (on 5 August) will allow participants an opportunity to see some of Alabama's 204 species of freshwater snails and 180 species of freshwater mussels. Attendance is limited and is first-come, first-serve. You will get wet on this ride.

In the interest of inclusivity, all oral presentations will be streamed live to the web for viewing by remote participants who are unable to attend the meeting in-person. Registration costs for remote participants will be \$25 to support the costs of equipment rental and tech support. Please note: only in-person presentations will be possible and events other than oral presentations and the JEDI panel will not be live-streamed.

For more information, please visit the AMS website: https://ams.wildapricot.org/AMS_2023 Sincerely, Kevin Kocot

Kevin M. Kocot he/him/his Associate Professor, Department of Biological Sciences Curator of Invertebrate Zoology, Alabama Museum of Natural History The University of Alabama < <https://www.ua.edu/> > 307 Mary Harmon Bryant Hall Campus Box 870344 Tuscaloosa, AL 35487 Phone: 205-348-4052 <tel:205-348-4052> | Fax: 205-348-4039 kmkocot@ua.edu | www.kocotlab.com <https://uasystem.zoom.us/j/3755490727> Due to my own efforts to strike a work-life balance, I sometimes send emails on weekends or evenings. Responses are never expected outside working hours.

kmkocot@ua.edu

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UBath EvolutionEducation Jul3-5

Dear friend!

Share your expertise in public engagement in science, evolution education and outreach or boost your evolution education and outreach project by applying to be a workshop organiser at the EvoKE2023 conference!

<https://evokeproject.org/2023/02/13/evoke-2023-in-bath-save-the-date/> EvoKE 2023 will take place from the 3rd to 5th July 2023 at the University of Bath, UK.

<https://bath.ac.uk> During these days, our international and interdisciplinary community will meet to learn, collaborate and develop creative and effective education and outreach projects.

The workshops will run for 2 hours (or 4 hours over two sessions; morning/afternoon) and are expected to be strongly hands-on and collaborative.

Deadline for applications, 31st March, 2023 Apply here;

https://docs.google.com/forms/d/e/-1FAIpQLSdAn1GGKXmcKFrJ_5cq4NqaTQP1QbhGNre-uduyKZZtRY5wQ/viewform Dr Alex C. Jeffries, FHEA, Senior Lecturer

Department of Life Sciences University of Bath Building 4 South, Bath, BA2 7AY, UK | Telephone: +44 (0)1225 386263 | Email: A.C.Jeffries@bath.ac.uk

Alex Jeffries <bssacj@bath.ac.uk>

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UFribourg Polyploidy Jul10-11

A symposium entitled “Genome duplication at the intersection of biodiversity and crop sciences” will take place at the University of Fribourg (Switzerland) from 10 to 11 July 2023.

Most organisms have gone through polyploidy (i.e. genome duplication) and this process is thus central to the origin and evolution of species, including most current major crops. Invited lectures and

contributed talks will thus illustrate current approaches to tackle main challenges inherent to research on polyploid organisms and advance our understanding of biodiversity and crops in changing environments. More details available at <https://events.unifr.ch/summerschool-polyploidy/en/> Invited speakers include Yves van de Peer (Ghent University, Belgium) <https://www.vandepeerlab.org/> Kirsten Bomblies (ETH-Zurich, Switzerland) <https://impb.ethz.ch/research/research-evo.html> Boulos Chalhouh (Agroscope, Switzerland) <https://www.agroscope.admin.ch/agroscope/en/-home/about-us/organization/competence-divisions-strategic-research-divisions/plant-breeding/field-crop-breeding-genetic-resources.html> Christian Parisod (local organizer; University of Fribourg, Switzerland) <https://www.unifr.ch/bio/en/research/genetics/-parisod-group.html> You can submit your abstract for consideration as a contributed talks until 16.04.2023 at: <https://events.unifr.ch/summerschool-polyploidy/en/registration/> This symposium, open to everyone, also represents the starting point of a summer school entitled "Polyploid evolutionary genomics: challenges and opportunities" that involves international lecturers and that is open to selected participants. More information available at: <https://events.unifr.ch/summerschool-polyploidy/en/program/overview.html> Registration fees for the Symposium (CHF 100). Deadline for registration: 16.04.2023 Further details about the venue, program and registration can be found at: <https://events.unifr.ch/summerschool-polyploidy/en/> Prof. Christian Parisod Department of Biology - University of Fribourg Chemin du Muséum 1/2 - 1700 Fribourg - Switzerland Phone: +41 26 300 8852 e-mail: christian.parisod@unifr.ch <https://www.unifr.ch/bio/en/research/eco-evol/parisod-group.html> PARISOD Christian <christian.parisod@unifr.ch>

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The sixth bi-annual Symposium will take place on September 14-17th, 2023 at the University of Huelva, Spain.

This will become a great venue for a diversity of researchers, managers, conservationists, environmental journalists, and the general public, so we hope to attract a diverse group.

Information about our meeting:

Our goal is to better integrate all society sectors focused on conservation. We plan to continue bi-annual workshops in every corner of Spain. This will be our 6th bi-annual meeting and we have been attracting scientists from all over the world and overseas.

Registrations are now open.

Abstract and early bird registration is due on May 1st, 2023.

Symposium has a limited capacity of participants.

Link to meeting information: <https://congresoconserbio.com> <http://www.facebook.com/conserbio/> <https://twitter.com/ConserBio> https://www.instagram.com/asociacion_conserbio/ For further information, please feel free to contact us: infoconserbio@gmail.com

The organizing director

Dr Marga L Rivas

Scientific researcher

University of Cádiz, Spain

Congreso Biodiversidad y Conservación de la Naturaleza - Facebook < <http://www.facebook.com/conserbio/> > Congreso Biodiversidad y Conservación de la Naturaleza. 2,238 likes ? 2 talking about this. En esta página se actualizará la información referente al... www.facebook.com/marga-lopez-rivas <margaflor13@hotmail.com>

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UHuelva Spain
BiodiversityNatureConservation
Sep14-17

Dear all,

We are glad to announce the 6th International Symposium on Biodiversity and Nature Conservation: Dissemination and transfer of knowledge among all social sectors

UKansas Genomics May19

Dear Colleagues,

The abstract submission deadline is less than 2 weeks away! Abstracts are due March 15th for oral or poster presentations. Registration is open until April 15th. Please remember you will need to separately register even if you submit an abstract.

The 2nd Annual Research Symposium hosted by the KU Center for Genomics will be held in person on Friday, May 19, 2023 at Maceli's Banquet Hall in Lawrence, KS. We invite anyone, especially postdocs, graduate students, research staff, and undergraduates, to apply to present their work via poster or oral presentation. The event is free for anyone to present or attend.

For additional information about the symposium including registration information, please see the attached flyer or follow this link < <https://genomics.ku.edu/2023-genomics-symposium> >. Please feel free to forward this to anyone who may be interested. If there are any questions or comments, please direct them to kucg@ku.edu.

On behalf of the organizing committee, we look forward to seeing everyone in May!

Link to webpage: <https://genomics.ku.edu/2023-genomics-symposium> Thank you, KU Symposium Postdoc Committee

“Everman, Elizabeth Rose” <e.everman@ku.edu>

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Webinar WithinHostInteractions Feb17

Dear colleagues,

The MEEDIN (Montpellier Ecology and Evolution of Disease Network) < <https://meedin-montpellier.com/> > is pleased to announce a webinar on:

Within-host interactions and their population-level consequences

Friday, February 17, 2023, 2 PM (CET) Webinar Zoom link: <https://umontpellier-fr.zoom.us/j/94812492580>
Programme:

14h00: Andy Fenton (University of Liverpool, UK): “The transmission modifying effects of parasite coinfections: insights from wild mice”

14h30: Nicole Mideo (University of Toronto, Canada): “The evolution modifying effects of parasite transmission: insights from wild models”

15h00: Natacha Kremer (Université de Lyon, France): “Effects of oxidative stress and viral infection on *Drosophila*-*Wolbachia* symbiosis: insights from experimental evolution”

15h30: Alison Duncan (Université de Montpellier, France): “The transmission modifying effects of within-host density dependence: insights from a wildly cool lab system”

oliver.kaltz@umontpellier.fr

Oliver Kaltz Directeur de Recherche CNRS Institut des Sciences de l'Evolution (ISEM) UMR 5554 (CC065) Université de Montpellier Place Eugène Bataillon 34095 Montpellier Cedex 05 France

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YosemiteNatIPark Symbiosis May5-7

Dear Colleagues,

The ELEVENTH annual Yosemite Symbiosis Workshop will take place on May 5-7th, 2023 at the Sierra Nevada Research Institute, Yosemite National Park. In the previous nine years, this meeting became a great venue for a diversity of symbiosis researchers. We hope to continue to attract a diverse group in 2023!

KEYNOTE SPEAKER: Monica Medina, Penn State University <http://medinalab.org/new/> REGISTRATION NOW OPEN: <https://snri.ucmerced.edu/form/-symbiosis-workshop-2023> Why: Our goal is to better integrate scientists that focus on symbiosis research, including researchers that study animal-microbe and plant-microbe systems, as well as broader topic related to the microbiome, cooperation, and mutualism. This will be our 11h annual meeting and we have been con-

sistently attracting scientists from all over the country and overseas.

Who: The meeting is small and intimate by design (~50 participants). We would like to make room for a diverse group of people so we will initially accept up to 3 lab members per group (including the PI) on a first come first served basis. In the past we have covered a range of symbiosis topics from ecology and evolution to molecular mechanisms in different model and non-model systems.

What: The meeting will be made up of two half-days of talks and one poster session. Other than the keynote (~1 hour), talks are 15 minutes long (including time for questions). Posters are flexible for size, but the ideal poster should be no larger than ~4 feet square. When you apply for the meeting, you will provide your preference for a talk or poster.

When: A welcome party will occur for everyone arriving on the evening of May 5th. The talks and poster sessions will be held May 6-7, 2023.

Where: This is the best part! The meeting takes place at the Sierra Nevada Research Station, in Wawona California, within the border of Yosemite National Park!

What will it cost? More good news here! We have received generous funding from the Gordon and Betty Moore Foundation. This will allow us to provide funding awards to select graduate student and postdoc presenters. Even without the awards, we have been good at keeping costs low: Advanced Registration (deadline

April 1st, 2023) Students: \$230, Postdocs \$250, PIs \$300
Late registration (deadline April 19th, 2023) Students: \$260, Postdocs \$280, PIs \$330

Registration AND payment page is here: <https://snri.ucmerced.edu/form/symbiosis-workshop-2023>
Please make sure to REGISTER first then PAY

Please direct any questions to the organizers:

COVID SAFETY: 1. Attendees will be required to provide attestation of full vaccination status against SARS-CoV2 during the registration process. 2. Rapid antigen tests will be made upon arrival at the conference (provided by us) to provide an extra layer of safety for attendees.

Please direct any questions to the organizers:

Joel Sachs joels@ucr.edu

A. Carolin Frank cfrank3@ucmerced.edu

Joel L. Sachs *Professor & Chair, * Evolution Ecology & Organismal Biology University of California, Riverside Chair's Office 2745 Life Sciences Building Office (951) 827-6357 / Fax (951) 827-4286 / <http://www.sachslab.com> Zoom: <http://ucr.zoom.us/my/Sachsevolution> *Post address*: Sachs Lab - UC Riverside 3401 Watkins Dr., 1229 Spieth Hall, Riverside, CA 92521

Joel Sachs <joels@ucr.edu>

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Basel Switzerland Two EvolutionaryGenomics

University of Basel, Switzerland Department of Environmental Sciences, Zoology

2 PhD-positions in evolutionary ecology and genomics are available in the group of Dieter Ebert at Basel University, Basel, Switzerland.

I am looking for highly motivated candidates with interests in evolutionary ecology/genetics/genomics. The research group employs laboratory- and field-based approaches to understand the evolution of phenotypic and genetic diversity. The Ebert research group covers the entire range from evolutionary and ecological aspects of local adaptation, environmental stress, host-parasite interactions, coevolution, phylogenetics and biogeography, to studies on the genetics and genomics of entire populations.

The 2 PhD projects are concerned with the role of environmental stress and the role of parasitism in natural populations of the planktonic crustacean *Daphnia*. The detailed projects will be worked out with the successful candidates.

A Master degree (or equivalent) in biology or related subject is necessary for admission. Experience in bioinformatics, molecular tools, and data analysis are helpful, but are not required.

The positions are fully funded and are supported by the Swiss National Science Foundation and the University of Basel. Starting date for the PhD is negotiable (any time from September 2023 onwards). The working language in the group is English.

Please send your application by email (all material in one PDF please) to Dieter Ebert. Applications should include a motivation letter (including research interests), a CV and a list of publications. Please give names and email addresses of two persons who are willing to write a letter of recommendation. Application deadline is 1. April 2023.

Further information and address for application: Prof. Dr. Dieter Ebert, University of Basel, Department of Environmental Sciences, Zoology, Basel, Switzerland, Email: dieter.ebert@unibas.ch Tel. +41-(0)61-207 03 60. Web: <http://evolution.unibas.ch/ebert/> Best wishes, dieter ebert

Dieter Ebert <dieter.ebert@unibas.ch>

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BerlinIZW EvolutionDespotismSpottedHyena

Dear colleagues,

We are recruiting a PhD student to work with Oliver Höner and myself on the determinants of dominance styles and hierarchical properties in the spotted hyena. The student will be based at the Leibniz-IZW in Berlin (Germany) as part of our research group Ngorongoro Hyena Project (<https://hyena-project.com/>).

This project is part of an international collaboration with Elise Huchard and Marie Charpentier from the ISEM (Montpellier) and Dieter Lukas from the Max-Planck-Institute for Evolutionary Anthropology

(Leipzig) to study the evolution of despotic societies in mammals (“DESPOT”), which is co-funded by the French (ANR) and German (DFG) research foundations for 3 years.

The student will have at their disposal an exceptional individual-based dataset compiling 27 years of demographic, ecological, social and behavioral data on the eight clans of spotted hyenas that make up the population living on the floor of the Ngorongoro Crater (Tanzania). The student will also have the opportunity to do fieldwork in Tanzania and contribute to data collection.

This is a full-time position with a comfortable salary in the range of 1600-1800 euros netto per month (translation of the administrative jargon indicated by the mention “65% TVöD (Bund) E13” in the official announcement).

The application deadline is 10 March 2023 for a start date on 1 June 2023.

A detailed description of the offer and the application procedure is available on the online platform: <https://short.sg/j/28105318> We would be grateful if you circulated this announcement in your networks. Feel free to contact me (Eve Davidian: davidian.ceve[at]gmail.com) and Oliver Höner (hoener[at]izw-berlin.de) for more information.

Best Regards, Eve

Cher.e.s collègues,

Nous recrutons un.e étudiant.e en thèse pour travailler avec Oliver Höner et moi-même sur les déterminants des styles de dominance et des propriétés hiérarchiques chez la hyène tachetée. L’étudiant.e sera basé.e au sein de notre groupe de recherche Ngorongoro Hyena Project (<https://hyena-project.com/>) à l’institut Leibniz-IZW de Berlin (Allemagne).

Ce projet s’intègre dans une collaboration avec Elise Huchard et Marie Charpentier de l’ISEM (Montpellier) et Dieter Lukas de l’Institut Max-Planck en Anthropologie Évolutive (Leipzig) pour l’étude de l’évolution des sociétés despotiques chez les mammifères (“DESPOT”), avec un co-financement ANR-DFG pour 3 ans.

L’étudiant.e aura à sa disposition un jeu de données exceptionnel compilant 27 années de données démographiques, écologiques, sociales et comportementales sur les huit clans de hyènes qui composent la population vivant sur le plancher du Cratère du Ngorongoro (Tanzanie). L’étudiant.e aura aussi la possibilité de collecter des données sur le terrain.

La position est à temps-plein pour un salaire confortable dans la gamme 1600-1800 euros net par mois (traduction du jargon administratif indiqué par la mention « 65 % TVöD (Bund) E13 » dans l’annonce officielle).

La date limite de dépôt de candidature est le 10 mars 2023 pour un début de projet le 1er juin 2023.

Une description (en anglais) détaillée de l’offre et de la procédure de candidature est disponible sur la plateforme de candidature: <https://short.sg/j/28105318> Merci de faire circuler cette annonce dans vos réseaux. N’hésitez pas à me contacter (Eve Davidian: davidian.ceve[at]gmail.com) ainsi que Oliver Höner (hoener[at]izw-berlin.de) pour plus d’information.

Bien à vous, Eve

Dr. Eve Davidian Postdoc Research Associate Co-director of Ngorongoro Hyena Project, Leibniz Institute for Zoo and Wildlife Research, Berlin (Germany)

ResearchGate: www.researchgate.net/profile/-Eve_Davidian Website: hyena-project.com/ Twitter: @HyenaProject < <https://twitter.com/hyenaproject> > eve davidian <evit@hotmail.fr>

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Bielefeld RaptorParasiteEvolution

We are looking for a bright student to join our research on birds of prey. Together we use cutting-edge technologies to understand the ecology, behaviour, physiology and ecology of these fantastic birds and publish prominently about them!

We seek a highly motivated student with a MSc degree or equivalent in a relevant field (e.g. animal behaviour, behavioural ecology, population ecology, evolutionary ecology, wildlife -omics, ornithology, parasitology) who wants to work with the coolest birds possible but also build a scientific career with them. Organisational skills, knowledge on hot topics in ecology and evolution, and own ideas in some of these fields are indispensable. The ideal candidate will additionally be able to work both independently and as part of a team, will have experience in statistics and/or bioinformatics and excellent spoken and written English.

WHERE: You will join our team at the Department of Animal Behaviour in Bielefeld University, Germany.

Field work takes place around Bielefeld, where we have been studying the raptor populations over 30 years.

WHEN: Submission deadline March 1st. The field season starts in mid-March and optimally by then our joint brainstorming will allow you to collect data for your own project.

WHAT YOU WILL BE DOING: You will start with field work but progress fast to analyses and manuscript preparation. Importantly, these have to be driven by your enthusiasm and scientific creativity (which you can exemplify in the requested proposal iii). The field work involves nest searching and checks, nest video surveillance and sampling of raptor nestlings during spring and summer, as well as combining analyses of transmitter tags, -omics, parasites and other life history data. Genuinely enjoying both field work with birds and wielding of scientific ideas is essential, as is the curiousness to integrate and extend what is known in a greater context.

WHAT WE OFFER YOU: A stipend for one year - time for you to crystalize and compose your own PhD project, which we together will submit to get full funding for your project. Doing homework and having ideas for action, fitting to past efforts, existing infrastructure and/or unexplored gaps, will make this process much more efficient and show that your MSc was not wasted time and neither will be you PhD. Once funding is granted you will start a fully funded 3-year PhD position (salary 65% 13 TV-L) including many training opportunities. Multiple alternative solutions exist.

The student will be supervised by Dr. Nayden Chakarov and Prof. Oliver Krüger. Our department is the oldest of its kind in Germany and currently hosts seven principal investigators, ten postdocs, and 20 PhD students from over ten different countries, working on related topics in behaviour, ecology, and evolution. It offers a stimulating international environment and an excellent research infrastructure. The working language is English. Bielefeld is a city of 333,000 inhabitants, having an odd blend of big city flair with pockets of quiet, simple rural life and easy access to the Teutoburger Forest for hiking and other outdoor pursuits.

HOW TO APPLY: Please send as a single PDF file to: nayden.chakarov@uni-bielefeld.de, including

(i) your CV (ii) a 1-2-page letter of motivation including a statement of your research experience and how it fits the specific project (iii) a 1-2 page research proposal, including sufficiently underexplored scientific ideas which personally you might want to study over the next years and why they deserve investment (iv) the contact details of three referees.

Review of applications will begin upon arrival. Interview

invitations will be sent in the beginning of March. For further information, please see the webpage or contact Nayden Chakarov via email.

The University of Bielefeld is an equal opportunity employer. We particularly welcome applications from women and handicapped people. Given equal suitability, qualifications and professional achievement, women and handicapped people will be given preference, unless particular circumstances apply.

“Chakarov, Nayden” <nayden.chakarov@uni-bielefeld.de>

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BielefeldU ChemicalEvolution

Bielefeld University - The Faculty of Biology, Department of Evolutionary Biology, has the following job opening:

Research Position (PhD candidate) in Chemical Ecology
ID: Wiss23015 - Start: as soon as possible - part-time
65 % - salary according to Remuneration level 13 TV-L
- fixed-term

The Phd position is part of the “Freigeist” research project “Plasticity-led evolution in the phenotype of a freshwater snail: from the epigenome to genetic change” funded by the Volkswagen-Stiftung. Phenotypic plasticity allows organisms short-term adaptation to environmental changes. Antipredator plasticity, the ability of individuals to plastically respond to the presence of predators with inducible defenses, is one of the best-studied instances of phenotypic plasticity. The freshwater gastropod *Physella acuta*, a simultaneous hermaphrodite, is a well-established model system for antipredator plasticity. While there are numerous different chemical predator-related cues that can induce defenses in this species, little is known about their properties and their chemical identity. The aim is to study behavioral and morphological responses of individuals to different predator-related chemical cues and to use chromatographic methods so as to reveal the identity of the chemical compounds that induce antipredator plasticity in this model system.

Your Tasks research tasks (95 %): - experimental work with freshwater gastropods - chromatographic analyses - collaboration with other researchers - preparation of contributions for scientific conferences - writing scientific

publications for international journals

other tasks (5 %): - organizational tasks within the research group

The employment is designed to encourage further academic qualification

We offer - salary according to Remuneration level 13 TV-L - fixed-term (3 years) (§ 2 (1) sentence 1 of the WissZeitVG; in accordance with the provisions of the WissZeitVG and the Agreement on Satisfactory Conditions of Employment, the length of contract may differ in individual cases) - part-time 65 % - internal and external training opportunities - variety of health, consulting and prevention services - reconcilability of family and work - flexible working hours - job ticket for regional public transport network - supplementary company pension - collegial working environment - open and pleasant working atmosphere - exciting, varied tasks

Your Profile We expect - completed scientific university degree (e. g. Master of Science or equivalent) in evolutionary ecology, chemical ecology, animal ecology, animal behavior or any related field - experience in experimental work with living animals - proven skills in chromatography (flash chromatography, analytical chromatography) or high motivation to rapidly acquire such skills - excellent oral and written English language skills - independent, self-reliant and dedicated style of work - strong organizational and coordination skills - ability to cooperate and work in a team

Preferred experience and skills - experience in chemical ecology - experience with high-performance liquid chromatography/electrospray ionization tandem mass spectrometry as well as with the systems Reveleris X2, MicroTofQ - experience in preparing scientific publications - experience with R - experience with antipredator phenotypic plasticity - experience with alarm cues - experience in working with gastropods or with the model species *Physella acuta*

Application Procedure

We are looking forward to receiving your application. For full consideration, your application should be received via either email (a single PDF document is required) sent to denis.meuthen@uni-bielefeld.de or post (see postal address). Please mark your application with the identification code: Wiss23015. Please note that the possibility of privacy breaches and unauthorized access by third parties cannot be excluded when communicating via unencrypted e-mail. For Information on the processing of personal data click here.

application deadline: 23.02.2023

Contact Dr. Denis Meuthen denis.meuthen@uni-

biellefeld.de

Postal Address Universität Bielefeld Faculty of Biology
Dr. Denis Meuthen Postfach 10 01 31 33501 Bielefeld

- Dr. Denis Meuthen Freigeist Fellow Bielefeld University Evolutionary Biology Konsequenz 45 D-33615 Bielefeld Germany denis.meuthen@uni-bielefeld.de
https://scholar.google.ca/citations?hl=en&user=-lgw8cu4AAAAJ&view_op=list_works&sortby=-pubdate “Meuthen, Denis” <denis.meuthen@uni-bielefeld.de>

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CharlesU PlantPolyploidy

PhD position: Evolution of reproductive isolation in a diploid - polyploid plant system

Research group: The Āertner Lab - Plant Adaptation and Speciation Department of Botany, Charles University, Prague, Czech Republic <https://web.natur.cuni.cz/-botanika/certner/> Deadline March 13, 2023

Polyploidization (whole genome duplication) is widely regarded as an important mechanism of sympatric speciation, particularly in plants where it drives reproductive isolation of many crop species from their wild relatives. While often perceived as a strong and instantaneously forming reproductive barrier, empirical data show its strength may vary considerably across plants. In the project, the successful applicant will be assessing rates and evolutionary significance of inter-ploidy introgression across a diploid - tetraploid hybrid zone, looking for genomic signatures of selection and complementing it with multigenerational manipulated crosses that will allow studying separately the contribution of different components to overall reproductive isolation. By using an interdisciplinary approach combining field research, ex situ experiments, and population genomics on a carefully selected non-model species from the Asteraceae family, we will aim at providing new insights into the reproductive isolation of polyploids. The project builds on a detailed knowledge of the plant system and preliminary data gathered during previous research. The student will become a member of a gradually forming team led by an early-career group leader, will have opportunities to actively interact with other research groups focusing on polyploidy in plants (within the same building), network with collaborating teams abroad, and

benefit from a friendly atmosphere at the Department of Botany. We offer creative and supporting atmosphere in the team, interdisciplinary training in plant research, competitive salary on top of a PhD scholarship, health and social security insurance fully covered, support for arriving foreign employees (Staff Welcome Centre of the university), becoming part of a diverse community of international STARS PhD students, and work in the vibrant historic centre of Prague.

Please submit your CV, contact details for two referees and a half-page motivation letter via the STARS PhD programme <https://stars-natur.cz/>. Review of the applications will begin on March 13, 2023 and will continue until the position has been filled. The exact start date is negotiable.

Martin Certner Department of Botany Faculty of Science, Charles University Benatska 2, 128 00, Prague, Czech Republic hanzm7an@natur.cuni.cz

“RNDr. Martin Āertner, Ph.D.”
<martin.hanzl@natur.cuni.cz>

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CharlesU Prague Biogeography Evolution

PhD Position in Biogeography and Evolution of Vertebrates

Research Group: Biogeography and Evolution (Antonin Machac) Department of Ecology, Charles University, Prague

<https://www.natur.cuni.cz/biology/ecology> <https://-machac.weebly.com> Deadline: March 15, 2023

How did the diversity of life on Earth emerge? The successful candidate will address this fundamental question by analyzing the fascinating biodiversity of mammals, birds, amphibians and reptiles (approx. 30,000 species), integrating their phylogenies, maps and traits, to uncover the general principles that governed their diversification. This work complements ongoing research within the team and will permit the student to work in close collaboration with international partners (ETH Switzerland, S-BiK Frankfurt, UBC Vancouver, CMEC Copenhagen). The PhD topic provides flexibility of the pursued questions, which will be addressed using modern statistics, making the student highly qualified after

graduation for work within academia and in private companies. The combination of independent and collaborative research ensures secure dissertation research but also opportunities for high risk/high gain results.

*** PhD involves - doctoral studies at Charles University in Prague (Department of Ecology), which belongs to the leading research institutions in the Czech Republic. The Department is situated in the historical center of Prague, one of the world's most beautiful and monumental cities - study of global vertebrate biodiversity (mammals, birds, amphibians, reptiles) - integrating molecular phylogenies, geographic maps and species traits to uncover the processes that generated biodiversity around the world and over time - addressing fundamental questions about the evolution of biodiversity, using modern statistics (regression analyses, GIS geographic information systems, phylogenetic comparative methods, implemented in R)

ü.½ *** We offer

- friendly, creative and supportive environment of a large international team - membership in the diverse international PhD student community at Charles University - competitive salary (composed of 4-year PhD scholarship, doubled for 2.5 years through a research grant) sufficient to comfortably cover living costs in Prague (will be discussed at the interview) - interdisciplinary experience through national (Petr Baldrian, David Storch, Center for Theoretical Studies, IMIC) and international collaborations (ETH Zurich, Univ Copenhagen), including the possibility to attend international conferences - fully covered health insurance and contribution to the social security system - support for establishment of foreign employees via the Staff Welcome Center of the University

ü.½ *** We require

- strong motivation to pursue interdisciplinary research at the interface of evolution, ecology, and statistics - MSc degree in biology or related fields (in early fall 2023 at the latest) - good spoken and written English, communication at the Department is fully in English

ü.½ *** Desirable but not required

- experience with quantitative methods, R programming, GIS - background in phylogeny-based research - experience with presenting and publishing research ü.½ Please submit (1) your CV, (2) one-page motivation letter, (3) contact information for two references to Antonin Machac (A.Machac@email.cz) with “PhD Student Position 2023” in the subject line. Review of applicants will begin on March 15, 2023, and continue until the position has been filled. The selected candidate will be assisted in submitting their PhD application to the university. The exact start date is negotiable. You can

find more on the website: <https://machac.weebly.com>
Antonin Machac <A.Machac@email.cz>

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golding@mcmaster.ca<mailto:golding@mcmaster.ca>)
golding@mcmaster.ca<mailto:golding@mcmaster.ca>)

CharlesU Prague ProgrammedDNAElimination

PragueCharlesU.ProgrammedDNAElimination

PhD position in: Mechanisms of programmed DNA elimination in songbirds Application deadline: March 12th, 2023 Position is for 4 years and starts in October 2023

Multicellular organisms usually have the same genetic information in all cells of an individual. There is, however, a growing list of exceptions, where parts of the genome are removed from some cells. This programmed DNA elimination has evolved multiple times across animals and plants, but we still know very little about its function, proximate mechanisms, and evolutionary significance. This project aims to study programmed DNA elimination in songbirds, where a whole chromosome is removed from the somatic cells during embryogenesis and from the male germ cells during spermatogenesis. This germline-restricted chromosome (GRC) shows extraordinarily dynamic evolution and unstable meiotic and mitotic inheritance. Yet, it has not been lost from the genome for over 30 million years of songbird evolution, suggesting that it has an important function. The goal of this project is to reveal cellular mechanisms of the GRC elimination from the somatic cells as well as from male germ cells and clarify modes of GRC inheritance. This will be achieved using a combination of advanced cytogenetic, immunohistological and genomic approaches. The project will be performed on two model organisms, the two closely related nightingale species of the genus *Luscinia* and several estrildid finches of the genus *Lonchura*. The successful candidate will have the opportunity to work in an interdisciplinary team of young researchers experienced in cytogenetics, genomics and bioinformatics.

Where we are based: Our group is based at the Department of Zoology, Faculty of Science, Charles University, which belongs to the leading research institutions in the Czech Republic. The Faculty of Science is situated in the center of Prague, one of the world's most beautiful

and monumental cities.

How to apply: If interested, please, send (1) CV including a list of publications, (2) copy of PhD diploma, (3) motivation letter, and (3) contact details for 2-3 references to Radka Reifova (radka.reifova@natur.cuni.cz) by 12th March 2023.

Contact: Radka Reifová, Department of Zoology (radka.reifova@natur.cuni.cz). Web page: <http://web.natur.cuni.cz/~radkas> Radka Reifová <radka.reifova@natur.cuni.cz>

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ClevelandStateU MusselHabitatAdaptation

River/ Freshwater Mussel habitat adaptation PhD

Project Background: Over the next several years, reintroduction of freshwater mussels into the lower Cuyahoga River is anticipated, focusing on the river within the Cuyahoga Valley National Park. To facilitate this work, an experienced graduate student is desired who will oversee the day-to-day components of introducing and monitoring not just the mussels, but also the stream conditions as a study in the efficacy of expanding reintroductions of *Lampsilis siliquoidea* to additional species and understanding how diverse mussel species have evolved microhabitat preferences. Critical research components include habitat preference and dispersal, with ample opportunities to expand dissertation work in their own direction and evolutionary interests.

Qualifications: M.S. or undergraduate research experience in river ecology, evolutionary biology, remote sensing/GIS, population genetics or other relevant discipline required. Strong oral and written communication skills are desired, as well as a record in seeing projects to completion. The successful applicant is expected to work both independently and collaboratively, mentor undergraduates in the group, and support a citizen science initiative within the project. Comfort in open water, kayak/canoe and a valid driver's license is essential.

Salary: Approximately \$22,000-24,000 per year plus tuition waiver is anticipated to be covered by a combination of research and teaching.

To Apply: Contact Dr. Bob Krebs, at r.krebs@csuohio.edu with the subject header "Mussel

conservation PhD ” and send a cover letter and C.V. as an unofficial application. The position will remain open until filled. Formal application for admission to Cleveland State is through the graduate school: <https://go.csuohio.edu/portal/apply> Project Team: Dr. Robert A. Krebs, Professor, CSU and members of the Cuyahoga Valley National Park, the Northeast Ohio Regional Sewer District, the Army Corp of Engineers and various county metroparks.

Dr. Bob Krebs

Dept. of BGES, COSHP Cleveland State University

“I fear, therefore I am.” T.R., 2022

This message and any response to it may constitute a public record and thus may be publicly available to anyone who requests it.

Robert A Krebs <r.krebs@csuohio.edu>

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CPG Stockholm BumblebeeMuseomics

4-year PhD on bumblebee genomics with focus on museum samples (deadline: 15 February 2023)

The Department of Zoology invites applications for a four-year PhD position based at the Centre for Palaeogenetics in Stockholm. The project is aimed at investigating temporal patterns of population structure, genomic diversity, and introgression in bumblebees. The analyses will use state-of-the-art genomic and palaeogenomic methods with focus on recovering DNA from museum specimens collected throughout the last 200 years. This will be a conservation genomics project part of a research programme funded by FORMAS (a Swedish gubernamental research council for sustainable development) focused on investigating genomic introgression from commercial bumblebees into wild populations. The PhD student will join the research group led by David Díez-del-Molino at the Centre for Palaeogenetics located on the Stockholm University campus.

The selection among the eligible candidates will be based on their capacity to benefit from the training. The following criteria will be used to assess this capacity: the candidates' documented knowledge in a relevant field of research, written and oral proficiency in English, the capacity for analytical thinking, the ability to collabo-

rate, as well as creativity, initiative, and independence. The assessment will be based on previous experience and grades, the quality of the degree project, references, relevant experience, interviews, and the candidate's written motivation to apply for the position. In addition, experience in population genetics, insect ecology, bioinformatics, and working in a DNA laboratory are relevant qualifications.

Check the requirements and apply here <https://www.su.se/english/about-the-university/work-at-su/available-jobs/phd-student-positions-1.507588?rmpage=job&rmjob=19893&rmlang=UK>

More information about the Centre for Palaeogenetics can be found here <https://palaeogenetics.com>

David Díez-del-Molino

Centre for Palaeogenetics Stockholm University Svante Arrhenius väg 20C SE-106 91 Stockholm, Sweden

Mobile: +46(0)739512922 diez.molino@gmail.com @indianadiez

David Díez <diez.molino@gmail.com>

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CRAG Barcelona WheatGenomicsEvolution

FOUR YEAR PhD POSITION ON WHEAT GENETICS AND EVOLUTION THROUGH rePLANT TRAINING PROGRAMME

The Botigue group on Genomics of ancient crops and domestication focuses on the analysis of modern and ancient plant genomes to understand plant domestication, the spread of agriculture and the process of adaptation to new ecosystems that the dispersal of the new domestic crops had to overcome. We combine DNA-seq and RNA-seq analysis with population genetics theory and statistics to investigate population structure, model genome evolution and find the genomic signals of positive selection. We are located at the Centre for Research in Agricultural Genomics (CRAG) near Barcelona city. You can find more information on the group in the link below: <https://www.cragenomica.es/research-groups/genomics-ancient-crops-and-domestication> JOB DESCRIPTION Selection for the free-threshing trait determined the transition from the first domestic wheats to the modern ones around 3,000 years ago. Several QTLs

in chromosomes 2A and 2B have been previously identified. The goal of this project is to find the genetic basis of this phenotype and determine whether the genomic footprint of positive selection can still be detected. For this purpose, the regions of interest will be characterized in hulled (emmer) and free threshing (durum) wheat for large-scale structural rearrangements, differential transposable element activity and SNPs. SNP variation will be used to run different selection statistics. Differences at the genome level in the two wheat subspecies will be contrasted with differences in gene expression using transcriptomics from wheat during spikelet formation. This project combines experimental and bioinformatic analyses and is in collaboration with different research groups around Europe.

The project is in collaboration with the Institute of Experimental Botany of the Czech Republic and the John Innes Center in United Kingdom. The predoctoral researcher will become familiar with experimental techniques such as chromosome isolation and CRISP-Cas9 based target enrichment and bioinformatic analyses for genome de novo assembly and variant calling. He or she will also perform population genetic analyses to gain insights into wheat evolution and find the genetic basis of the free-threshing trait. Genome architecture will be studied to determine how it impacts the performance of selection statistics. Finally, in order to study the genetic basis of the free-threshing trait the PhD candidate will carry out a research stay in Uauy's group at John Innes, where he will work on RNA-seq data generation and analysis.

Contact laura.botigue@cragenomica.es for further details.

REQUIREMENTS A MSc (on-going or completed) in Plant Biotechnology, Bioinformatics, Population Genetics, Evolutionary Biology or similar fields is required.

Interest in population genetics, bioinformatics and evolution are required.

THE rePLANT programme

The rePLANT programme offers training in advanced research topics and technologies and training in non-research oriented transferable and transversal skills. rePLANT researchers will enjoy a common training programme in which all rePLANT researchers will have the opportunity to interact with researchers of the three institutions from inside and outside rePLANT. Collaborative research projects and secondments. This programme will be implemented by collaborative research projects led by researchers at CRAG and MPIPZ in close collaboration with JIC $\frac{1}{2}$ researchers. The alignment, complementarity, and synergy of the research

conducted at CRAG, JIC and MPIPZ is evidenced by the organisation of their activities into four similar Scientific Programmes (CRAG), Research Areas (JIC) or Scientific Departments (MPIPZ). rePLANT fellows will be strongly encouraged to have secondments abroad. Secondments abroad are considered an essential step for fellows to improve the quality of their training. In addition, the collaboration with Associated Partners and mentors will help them to build a strong international network. International networking in both the academic and the industrial sectors. rePLANT has 27 Associated Partners interested in participating in the Programme through the collaboration in research projects, hosting of researchers in secondments, mentoring or training.

DEADLINE 19 March 2023

More information: https://www.cofund-replant.eu/?page_id=400 For queries contact laura.botigue@cragenomica.es

Laura Botigü $\frac{1}{2}$, PhD Group Leader Plant and Animal Genomics Program CRAG, Centre for Research in Agricultural Genomics Edifici CRAG, Campus UAB Cerdanyola, BCN, Spain.

Tel. +34 93 563 66 00 Ext. 3309 Twitter: @BotigueL

“Laura R. Botigü $\frac{1}{2}$ ” <laura.botigue@cragenomica.es>

— / —

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>

CULS Prague PlantSpeciationGenomics

Dear colleagues,

The Plant Biodiversity and Evolution Research Group at the Czech University of Life Sciences (<http://www.fzp.czu.cz/PBERG>) seeks a highly motivated Ph.D. student to take part in the investigation of the evolutionary history of allotetraploid species of the *Chenopodium album* aggregate. The study is funded by a collaborative project between Czech (Czech University of Life Sciences and Institute of Botany of the Czech Academy of Sciences) and American (Brigham Young University and University of Nebraska Omaha) research institutions. The successful candidate will participate in the

re-sequencing of cca 200 genomes and perform phylogenomic and population genomic analyses in order to elucidate the origin and patterns of speciation of four closely related allopolyploid *Chenopodium* species and understand the genomic basis of their diversification.

Requested qualification:

- MSc (or equivalent) in Biology
- experience with basic molecular genetic techniques (DNA extraction, PCR)
- experience with genetic/genomic data analysis (phylogenetics or population genetic)
- good English communication skills (written and spoken)

Desirable qualification:

- experiences with Illumina library preparation
- basic experience with bioinformatic and statistical analysis of NGS data
- basic experience with bash and R scripting

Personal qualities:

- good presentation skills
- willing to learn
- networking skills
- ability to collaborate and cooperate with other team members
- keen interest in plant evolution and speciation

We offer:

- a four-year position with a tax-free Ph.D. stipend (120.000 - 192.000,- CZK/year)
- additional funding (60% employment) covered by the project (gross salary 273.000 - 298.000,- CZK, which is cca 230.000 - 250.000 CZK/year after tax)
- friendly and inspiring working environment in an international working group
- collaboration with researchers from other institutions in Czech Republic and the USA
- opportunity to master up-to-date methods (both wet lab and bioinformatic)
- possibility to attend international conferences
- flexible working hours, 25 days of paid vacation
- subsidized meals at the university canteen

For details see ([https://www.fzp.czu.cz/en/r-9409-science-research/r-9674-leading-research-groups/r-9672-plant-biodiversity-and-evolution-research-group/-](https://www.fzp.czu.cz/en/r-9409-science-research/r-9674-leading-research-groups/r-9672-plant-biodiversity-and-evolution-research-group/)

[r-9720-team-news/ph-d-position-available.html](https://www.fzp.czu.cz/en/r-9409-science-research/r-9674-leading-research-groups/r-9672-plant-biodiversity-and-evolution-research-group/r-9720-team-news/ph-d-position-available.html)), the application deadline is the 15th of March 2023. The position is available from the 1st of October 2023, at the latest. However, an earlier start (June/July 2023) is preferred.

For informal queries about the position or the project, please contact Dr. Karol Krak krak@fzp.czu.cz

Karol Krak Czech University of Life Sciences Prague Faculty of Environmental Sciences Kamáňská 129 CZ 165 00 Praha 6 - Suchbátka +420 22438 2996 <http://www.fzp.czu.cz/PBERG> Krak Karol <krak@fzp.czu.cz>

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CzechAcademySci MycorrhizalSymbiosis

Ph.D. position in mycorrhizal symbiosis available from September 2023 Mycorrhiza as insurance: How important is fungal functional diversity for complex mycorrhizal effects?

Within a starting project, we seek a Ph.D. student interested in investigating how the benefits provided by arbuscular mycorrhiza to host plants relate to fungal community composition and plant traits. Arbuscular mycorrhiza is compared to plant insurance against unfavourable conditions, as it can benefit plants in multiple ways and alleviate a range of environmental stresses. Our project will specifically focus on this multifunctionality of mycorrhiza and address a broader range of mycorrhizal benefits including alleviation of biotic and abiotic stress. We plan a series of greenhouse experiments with fungal communities of different composition and complexity as well as with host plants of different traits. The student will participate at the establishment of experiments within the project team, his/her main responsibility will be the collection and analysis of the experimental data such as plant parameters, fungal development (by microscopy) and composition of communities of arbuscular mycorrhizal fungi (AMF) (by NGS).

The ideal candidate for this PhD position has experience with experimental plant cultivation and AMF-related methods, likes both greenhouse a laboratory work. Experience with molecular methods is of advantage but not required. Ability to work independently and as

sume responsibility for partial tasks within the project team is essential as well as sound knowledge of written and spoken English. We also expect involvement into international collaborations and presentations at conferences.

The student will work under the supervision of Martina Janoušková in Department of Mycorrhizal Symbioses, Institute of Botany, Czech Academy of Sciences in Práhonice, a suburban village close to Prague. The Department has excellent facilities for all the types of work required, solid scientific reputation, established network of national and international collaborators and a friendly work atmosphere. Formally, the 4-year Ph.D. studies will be conducted either at Faculty of Science of Charles University or at Faculty of Environmental Sciences of Czech University of Life Sciences, both in Prague - according to the student's preferences. Institute of Botany has well-established, routine collaboration with both universities in supervising Ph.D. students. None of the two universities charge tuition fees, no knowledge of the Czech language is required. To be eligible, the candidate must have obtained a degree equivalent to a biology diploma or M.Sc. by September 2023.

The position is available for up to four years, starting in September 2023. The Ph.D. candidate's net monthly income will be about 25000 CZK (ca 1000 EUR, composed of Ph.D. scholarship + half-time employment in the Institute), which is sufficient to cover the living costs in Prague.

If interested, send a letter outlining your motivation for this position and specific experience, CV, list of publications or conference presentations (if available) and contact details of two senior scientists that can provide references on you to recruitment@ibot.cas.cz until February 28, 2023. Please, use "PhD Student Position 0105" in the subject line. The selected candidate will be assisted in submitting the application to the university of his/her choice for the PhD position.

Useful links Institute of Botany official web page <https://www.ibot.cas.cz/en/> Department of Mycorrhizal Symbioses web page http://www.ibot.cas.cz/mykosym/en_index.html Faculty of Science, Charles University https://www.natur.cuni.cz/eng?set_language=en Faculty of Environmental Sciences, Czech University of Life Sciences <https://www.fzp.czu.cz/en/> Janoušková Martina <Martina.Janouskova@ibot.cas.cz>

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Iberian Plants Adaptation Genomics

We are searching for candidates to apply for an FPU Phd contract #FPU2022 to carry out a PhD thesis in plant evolution in the framework of a project at the Botanic Garden of Madrid, CSIC, and the University of La Coruega, UDC: "Understanding Iberian plant diversity: How cryptic speciation and hybridisation have shaped the evolutionary history of an enigmatic endemic genus?".

Please send your CV or request more information about the project or the FPU grants to: Gonzalo Nieto Feliner (Real Jarden Botenico de Madrid, CSIC) nieto@rjb.csic.es; Rosalea Pieiro (Univ. de A Coruea) rosalia.pineiro@udc.es.

Contact deadline: 31st January 2023 (final submission deadline will be on the 15th February)

The project will focus on the evolution of the genus *Phalacrocarpum* (DC.) Willk. as a study system to explore how the diversity of Iberian lineages has been shaped. *Phalacrocarpum* is one of 27 genera of vascular plants endemic to the Iberian Peninsula. It is included in a tribe, Anthemideae (Asteraceae), with phylogenetic relationships still unresolved, and in which hybridisation seems to be an important evolutionary mechanism. The latest taxonomic treatment of the genus recognises a single species, *P. oppositifolium* and, on the basis of geographically associated leaf variation, three subspecies. The genus has been poorly understood taxonomically for decades, with hybridisation and cryptic speciation events being the most likely underlying causes. In this project, we will use NGS genomic data to investigate the evolution of this genus, with particular emphasis on the role of positive selection via fixation of advantageous alleles or negative selection via purging of deleterious mutations.

Rosalea Pieiro

University of A Coruea

Botany - Biology

15071 A Coruea, Spain Tel.: (+34) 981 16 70 00

Email: *rosalia.pineiro@udc.es <rosalia.pineiro@udc.es>* ; rosalia.pineiro@gmail.com

Telephone: (+33)535385360 (+34) 981167000 ext. 2147

Rosalea Pieiro Portela <rosalia.pineiro@gmail.com>

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golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>)

IGB-Berlin

MicroplasticsAndDiseaseEvolution

Reminder: Application deadline - 10.02.2023

Project: “The influence of microplastic pollution on the outcome of host-parasite interactions (IMPACT)” (duration: 36 months)

The doctoral project centres on the implications of microplastic (MP) pollution in the context of parasitic infections, using the water flea *Daphnia* and its various natural pathogens as a model host-parasite system. Given that parasitism is one of the most common lifestyles on earth and can play important roles in many evolutionary and ecological processes, we propose to incorporate interactions between host species and their parasites as important new ecotoxicological endpoints to better assess the ecological consequences of MP pollution. In order to assess MP effects on the outcome of host-parasite interactions and to understand the mechanistic drivers of potential changes and related upscaling effects, several lab experiments will be conducted. For example, we will test if MP-induced changes in host resistance are related to: immune priming (transcriptome), re-allocation of host resources (life-history traits), and modification of the host gut microbiome (metabarcoding or shotgun sequencing). The successful candidate will join a team of researchers working on evolutionary ecology of disease < <https://www.igb-berlin.de/en/wolinska> >, microbiology, plankton ecology and modelling. The position is located at IGB in Berlin < <https://www.igb-berlin.de/en> >.

Your tasks

* Designing and performing experiments with the water flea *Daphnia* and its various natural pathogens by using different concentrations of MP * Isolation and processing of RNA of *Daphnia* and DNA of its microbiome * Statistical analyses of life-history traits and bioinformatic analyses of DNA and RNA data * Publication of results in scientific journals and presentation at conferences * Working actively on a doctoral dissertation

Your profile

* MSc or equivalent in Biology or related field *

Demonstrated experience in experimental or molecular/genomic work * Ability to perform intense lab work (including micro- and mesocosm experiments, with an opportunity to join LakeLab < <https://www.igb-berlin.de/en/lakelab> > experiment) * Strong statistics and/or bioinformatic skills * Collaborative team worker * Good communication skills in English, including scientific writing

Our offer

We offer an exciting position in an international and dynamic team of researchers, and an attractive scientific working environment including excellent equipment and technical support. We foster flat hierarchies and active participation and offer a variety of training opportunities < <https://www.igb-berlin.de/en/doctoral-education> >. We actively support the reconciliation of work and family life < <https://www.igb-berlin.de/en/equal-opportunities> >. Qualified women are particularly encouraged to apply.

The IGB is committed to diversity < <https://www.fv-berlin.de/en/careers/diversity> >. We welcome every application, regardless of gender and gender identity, origin, nationality, religion, belief, health and physical disabilities, age or sexual orientation. Disabled applicants with equal qualification and aptitude will be given preferential consideration.

This is a position with 3 years duration and a tentative start date of 01.04.2023 (or shortly thereafter). Salary is paid according to the German salary scheme for the public sector for doctoral research (65% TVi₂¹D). The working language at IGB is English.

Are you interested?

We look forward to receiving your application (letter of motivation indicating research interests and experience, CV, certificates, contact information of two potential referees; as a single PDF document) by 10.02.2023. Please state the job reference number 36/2022 and apply exclusively via our recruitment platform at www.igb-berlin.de/en/jobs. Enquiries can be directed to Prof. Justyna Wolinska < <https://www.igb-berlin.de/en/wolinska> > at justyna.wolinska@igb-berlin.de

https://karriere-igb.softgarden.io/job/26654029/-PhD-position-in-Disease-Evolutionary-Ecology-m-f-x-?jobDbPVIId=66760088&li_i_1/2

Justyna Wolinska Group Leader (IGB) & Professor for Aquatic Evolutionary Ecology (Freie Universität Berlin)

justyna.wolinska@igb-berlin.de



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IGB-Berlin RiverBiodiversity-eDNA

For the Department of Evolutionary and Integrative Ecology of the IGB in Berlin, we are looking for a PhD student (f/m/x) as of 1st of May 2023, for a project using eDNA to study all trophic levels of a riverine ecosystem.

The work is carried out as part of a multidisciplinary project investigating the environmental catastrophe in the Oder River of August 2022 (ODER-SO) which is funded by the Federal Agency for Nature Conservation (BfN). The ODER-SO project monitors and analyses algal and pollutant loads, documents the status and recovery of populations of multiple organism groups, carries out precautionary studies on potential future poisoning events, and investigates the ecological role of floodplains in multiple development scenarios. The overall aim of ODER-SO is to provide a broad knowledge base for the integrative management of coupled river-floodplain ecosystems, enabling more precise analyses and forecasts of river status that can form the basis for preventive measures against the harmful effects of algal blooms.

Your tasks

- Laboratory analysis of planktonic and benthic organism groups using eDNA metabarcoding
- Sequencing of reference mt-genomes of selected species
- Mapping of shotgun metagenomic reads to mt-genomes
- Relate environmental variables to community dynamics
- Field sampling on the Oder River
- Contributions to overall scientific activities of the ODER-SO project

Your profile

- Master's degree in biology, ecology, bioinformatics, or similar
- Good knowledge of molecular biology including DNA metabarcoding or metagenomics
- Knowledge of freshwater organisms is desirable
- Experience in data analysis and publication is advan-

tageous

- Ability to work in a team, good English communication skills

Our offer

We offer an exciting and versatile job in an international, dynamic, scientific working environment with opportunities for flexible working hours and mobile working.

Salary is paid according to the German (PhD) salary scheme for the public service (TVöD Bund, 75%). This employment contract is limited to 36 months as part of the BfN project ODER-SO in the period from 1 May 2023 to 30 April 2026.

The IGB is committed to diversity. We welcome every application, regardless of gender and gender identity, origin, nationality, religion, belief, health and physical disabilities, age or sexual orientation.

We foster your career development by providing qualification and training opportunities. Applicants are treated equally regardless of gender. Qualified women are particularly encouraged to apply. Severely disabled applicants with equal qualification and aptitude will be given preferential consideration.

Are you interested?

We look forward to receiving your application including a cover letter that details your motivation to study for a PhD and your fit to the profile, a CV, and contact information for 2-3 references in a single pdf file by 15.03.2023 (or until enough suitable candidates are found). Please state the job reference number 09/2023 and apply exclusively via our recruitment platform at www.igb-berlin.de/en/jobs. Questions can be directed to Michael T. Monaghan by e-mail (monaghan@igb-berlin.de).

“Research for the future of our freshwaters” is the mission of the Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB). The IGB is Germany's largest and one of the leading international research centres for freshwaters. We seek to understand the fundamental processes governing freshwaters and their communities. Our research findings help to tackle global environmental changes and to develop measures for sustainable water management. The IGB is a diverse and inspiring place to work and conduct research. We promote individual development at every career level and stand for lively exchange and cooperation. With more than 350 employees and guests from all over the world, we conduct research at five locations in Berlin and at Lake Stechlin (Brandenburg). IGB closely collaborates with numerous national and international universities and other partners in science and society and is a member of the Leibniz Associ-

ation, which connects 97 independent public research institutes in Germany. www.igb-berlin.de/en Michael Monaghan <michael.monaghan@igb-berlin.de>

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KielU ComputationalEvolution- aryMicrobiol

In the Evolutionary Microbiology Group of Prof. Tal Dagan at the Institute of General Microbiology at Kiel University, Germany, a PhD position (m/w/d) in the field of computational evolutionary microbiology is available for a period of 36 months at the earliest possible date.

The Evolutionary Microbiology Group research interests are focused on microbial genome evolution with an emphasis on the study of horizontal DNA transfer. In our research we use both computational and experimental approaches (see www.uni-kiel.de/genomik).

Well-motivated and highly-qualified students from all countries are welcome to apply. We are looking forward to your application for a PhD fellowship in the beautiful landscape of Northern Germany.

Your profile: - Master of Science degree in Molecular Evolution / Microbiology / Bioinformatics or related fields. - Experience in programming and analysis of genomic data. - Any of following expertise is an advantage: biostatistical analysis, phylogenetic reconstruction, comparative genomics. - Good oral and written communication skills in English. Motivation to learn and research topics in basic science.

The working language of the group is English

The position is offered for 3 years with a possibility of 1 year extension. The project is funded via an ERC Consolidator grant on the evolution of prokaryotic plasmids. The recruited student is expected to work on a PhD thesis on the topic of plasmid genome evolution. See related publications: doi: 10.1371/journal.pgen.1009656 and doi: 10.1093/molbev/msab283. The position will be integrated within the graduate school Translational Evolution (<https://transevo.de/>).

The Christian-Albrechts-University sees itself as a modern and cosmopolitan employer. We welcome your application regardless of your age, gender, cultural and social background, religion, ideology, disability or sexual

identity. We promote equality of the sexes.

The Christian-Albrechts-University is committed to the employment of people with disabilities. Preference will be given to applications from severely handicapped persons and persons of equal standing, provided they are suitable.

We expressly welcome applications from people with a migration background.

For enquiries regarding the position and research topic please contact Prof. Tal Dagan: tdagan@ifam.uni-kiel.de.

Applications should be submitted by email to Prof. Tal Dagan as a single PDF and include: (1) a letter of motivation (max 2 pages, Arial 11, line spacing 1.15), (2) CV, (3) Master certificate. Please use 'pMolEvol PhD application - [your name]' as a subject.

Please, refrain from sending us application photos.

Application deadline: 15.3.23

If you have any questions regarding the position please do not hesitate to contact us (see email below).

Prof. Dr. Tal Dagan

Genomic Microbiology Group Institute of General Microbiology Christian-Albrechts-University Kiel ZMB, Am Botanischen Garten 11 24118 Kiel, Germany

Tel: +49 431 880 5712 Fax: +49 431 880 5747 e-mail: tdagan@ifam.uni-kiel.de web: www.uni-kiel.de/genomik
Tal Dagan <tdagan@ifam.uni-kiel.de>

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KielU Two FungalDiversity ResistanceGenes

The Institute of Phytopathology at the Christian-Albrechts-Universität in Kiel, Department of Phytopathology and Crop Protection (Head Prof. Dr. Remco Stam) has a two Graduate Student vacancies:

PROJECT 1 PhD Student in pathogen genetic diversity

The candidate will participate in a project in collaboration with a large agricultural firm investigating the genetic diversity and spread of a major crop pathogen.

Within the project we aim to collect several hundreds of pathogen isolates. By using whole genome sequenc-

ing and epidemiological models we want to assess the genetic diversity of the pathogen, its dispersal and the impact thereof on crop protection strategies.

Job description:

This PhD project will encompass a diverse range of tasks, that include, but are not limited to: — Data analyses: genetic diversity and epidemiological data analyses. — (Coordination of) sample collection (field) and preparation (lab work) — Communication with stakeholders: industry partners, field owners — Preparation of reports, presentations and publications in the field of evolutionary genomics or population genomics and epidemiology of phytopathogens — Organisational tasks within the department — Supervision of MSc and BSc theses and HiWis.

We offer: — An exciting project in a dynamic department working on a broad range of phytopathological subjects. — Excellent working opportunities for Genomics analyses through direct access to the CAU HPC. — A high level of independence to develop the research project. — The opportunity to develop further through seminars and courses organised by the CAU Graduate Centre. — The possibility to interact with genomics and epidemiology experts in industry.

Requirements profile: — Msc in biology, bioinformatics, plant sciences, agricultural sciences or a related science subject. — Knowledge in evolutionary genomics or population genomics and experimental design — Experience with NGS data analysis — Scripting experience (Bash, R and/or Python) — Interest in epidemiology of plant pathogens — Flexibility, an independent working style and ability to work in a team — Field and laboratory experience with fungal plant pathogens, including isolation, propagation and DNA extraction is desired. — A driving license category B is highly desired, as the selected candidate need to be able to access the field sites.

Relevant literature:

Population-level deep sequencing reveals the interplay of clonal and sexual reproduction in the fungal wheat pathogen *Zygomycetia tritici*. Singh NK*, Karisto P, Croll D (2021). Microbial Genomics <https://doi.org/10.1099/mgen.0.000678> Whole Genome Sequencing Elucidates the Species-Wide Diversity and Evolution of Fungicide Resistance in the Early Blight Pathogen *Alternaria Solani* Severin Einspanier, Tamara Susanto, Nicole Metz, Pieter J. Wolters, Vivianne G. A. A. Vleeshouwers, Åsa Lankinen, Erland Liljeroth, Ralph Hückelhoven, Hans Hausladen and Remco Stam* (2022). Evolutionary Applications— <https://doi.org/10.1111/eva.13350> Population Genomics of Filamentous Plant Pathogens A Brief Overview of Research Questions, Approaches, and Pitfalls S. Everhart, N. Gambhir and R. Stam* (2021) Phytopathology <https://doi.org/10.1094-PHYTO-11-20-0527-FI> The current epidemic of the barley pathogen *Ramularia collo-cygni* derives from a recent population expansion and shows global admixture R. Stam*, H. Sghyer, — A. Tellier, M. Heß, R. Hückelhoven, (2019) Phytopathology 109 (12) :2161-2168 <https://doi.org/10.1094-PHYTO-04-19-0117-R> Applications:

Christian-Albrechts-Universität zu Kiel sees itself as a modern and cosmopolitan employer. We welcome your application regardless of your age, gender, cultural and social origin, religion, ideology, disability or sexual identity. We promote gender equality. Women are given priority in the case of equivalent aptitude, ability and professional performance.

The university is committed to the employment of severely disabled people. Therefore, these applicants and their peers will be given preferential consideration if they are suitably qualified. Applications by people with a migration background are particularly welcomed.

We do not endorse submitting photographs/application photos and therefore ask you to refrain from doing so.

Applications with the following documents: 1. letter of motivation explaining the candidates fit to the requirements profile, 2. curriculum

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

Lafayette LA FishEvolutionaryBiomechanics

I am seeking a Master of Science student to work on a partially-funded project examining local adaptation of mechanical performance of mosquitofish (*Gambusia affinis*), with a start date of July 1, 2023. This applied project will test how interacting ecological and anthropogenic threats to coastal Louisiana scale up to affect whole-animal functions including swimming and feeding. This 1-year project must be completed by June 2024. Beyond that, further research goals utilizing this system may be added and are flexible if desired and depending on student goals.

Applicants with an interest in examining multiple simultaneous tradeoffs, as well as with prior skills or experience in more than one of the following specific areas are preferred. Applicants are not expected to have prior experience with all areas.

* Fish care in high density lab situations * Swim tunnel operation * Endurance, sprint, and/or other swimming performance in fish (highly preferred) * High speed videography and kinematic analysis * General linear model statistical analysis

External funding through June 2024 covers 6 months of salary at \$1,800/month, including 1 semester of Research Assistantship (RA) and tuition as well as 1 summer month of salary. The RA can be taken either in Fall 2023 or Spring 2024 depending on experience and degree of training needed. Remaining semesters will be covered using Teaching Assistantships (\$1,450/month salary + tuition) unless additional external funding is received. Health insurance is not provided.

The application process consists of 3 steps:

1. Before applying, interested applicants should review the requirements of the Master's program in biology (see link below). GRE scores are no longer required. If the program's minimal requirements are met, email Dr. Emily Kane at emily.kane@louisiana.edu with a CV, a brief statement of prior experience and goals for receiving a MS degree, and availability within the subsequent 2 weeks.
2. I will set up a virtual meeting to further discuss expectations with acceptable applicants. This meeting should last approximately 1 hour.
3. The strongest 1-2 applicants will be encouraged to apply for the thesis track Master of Science in Biology. The target date for application submission is February 28, 2023. Applications will then be reviewed by the Graduate School, who will determine final acceptance.

Department of Biology: <https://biology.louisiana.edu/>
 Master's program: <https://biology.louisiana.edu/-programs/graduate/master-science> How to apply: <https://biology.louisiana.edu/programs/graduate/how-apply>
 Dr. Emily Kane She/her Assistant Professor
 Department of Biology University of Louisiana at Lafayette
 PO Box 43602 Lafayette, LA 70504 Phone: 337-482-5246
 Website: www.thekanelab.com Twitter: @TheKaneLab < <https://twitter.com/TheKaneLab> >

Schedule a meeting with me! < <http://calendly.com/emilykane> >

Emily Kane <emily.kane@louisiana.edu>

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LMU Munich MyriapodaEvolution

PhD position, 75% TV-L E13 LMU Munich, Faculty of Biology, Zoology Starting date: 01 May 2023 End of application: 10 March 2023

Doctoral position (f/m/x) - Giants and dwarves: reconstructing the evolution of body size and life cycles in Myriapoda

We are seeking a highly motivated PhD student to take part in the investigation of the evolutionary history of the group Myriapoda, including extant representatives, fossils preserved in amber, but also Palaeozoic fossils "in stone". The project is funded by the German Research Foundation (DFG).

The project is based on an interdisciplinary approach, in which developmental data of extant and fossil species are incorporated into an evolutionary framework, shortly referred to as palaeo-evo-devo. The major database is provided by morphological investigations of extant and fossil specimens with modern imaging methods. Data are interpreted in a strict phylogenetic framework.

Focus of research is on two aspects: 1) Size evolution of bristly millipedes, especially of their immature stages. The amber record of bristly millipede immatures is especially rich and covers a time span of more than 100 million years. 2) Morphological comparison between bristly millipedes and the giant Palaeozoic animals of the group Arthropleura. Specimens will be provided via scientific collections, fieldwork is not considered. Techniques to be applied are various imaging methods (digital microscopy, super-macro-photography, μ CT-scanning and other up-to-date methods)

The prospective PhD student does not necessarily need to have experience with the imaging methods or specific systematic groups, but is expected to gain expertise early in the course of the project. The project includes a distinct amount of traveling to collections in Germany and abroad. The results of the project are expected to be presented regularly at national and international conferences by the prospective PhD student as well as published in peer-reviewed journals.

We are especially seeking for a good team worker being able to cooperate closely with people in the workgroup and national and international colleagues of a wide network.

The successful candidate will be based in the workgroup of Zoomorphology at the campus Martinsried (part of municipality Planegg) south-west of Munich, in close proximity to Munich. Child care facilities as well as schools are nearby. The project is a conjoined one with the Zoological State Collection Munich (ZSM), regular visits and work in the collections and imaging facilities there are part of the project.

We offer: DFG-funded PhD position (75%) for 36 months; interdisciplinary research project and working environment; modern imaging equipment (macro- and microscopic)

We expect: MSc (or equivalent) in Biology or Palaeobiology; good English communication skills (oral and written); ability to work in teams; high motivation; keen interest in zoological evolutionary questions

The position is limited to 36 months with a presumed starting date of May 01, 2023.

Applications of women are strongly encouraged. Severely challenged persons will be given preference in case of otherwise equal qualifications.

Please send your application to jhaug@bio.lmu.de until March 10, 2023. The application should include CV, transcript of records, letter of motivation and the names and contact details of two potential referees.

For further information contact: Prof. Dr. Joachim T. Haug, LMU Munich, Faculty of Biology, Großhaderner Str. 2, 82152 Planegg-Martinsried, Germany, Phone : +49-89-2180-74132; Email: jhaug@bio.lmu.de <https://www.en.zoomorphologie.bio.lmu.de/index.html> <https://www.palaeo-evo-devo.info/> or: Prof. Dr. Roland R. Melzer, SNSB - Zoologische Staatssammlung München, Münchhausenstraße 21, 81247 München, Germany, Phone : +49-89-8107-141; Email: melzer@snsb.de <https://www.zsm.mwn.de/sektion-mitarbeiter/roland-melzer/> Prof. Dr. Joachim T. Haug - Lichtenberg-Professor - LMU Munich Biocenter - Faculty of Biology Großhaderner Str. 2 82152 Planegg-Martinsried Germany

GeoBio-Center at LMU Richard-Wagner-Str. 10 80333 München Germany

Phone 1: +49-89-2180-74132 Phone 2: +49-89-2180-71082 Email: jhaug@bio.lmu.de joachim.haug@palaeo-evo-devo.info

Website of Carolin and Joachim T. Haug: <http://www.palaeo-evo-devo.info> Joachim Haug <jhaug@biologie.uni-muenchen.de>

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MaxPlanck Cologne PlantGenomics

Ph.D. position

Fulgione Group

Max Planck Institute for Plant Breeding Research, Cologne, Germany

A PhD position in plant population genetics and genomics is available under the supervision of Dr. Andrea Fulgione. The project is on the population genomics consequences of the evolution of mating systems and reproductive strategies, using the perennial plant *Arabidopsis thaliana* as a model. The successful candidate will work on long-reads genome assemblies and use population genetics methods to study the evolution of transposable elements and structural variants. Further, in the group we have developed a large-scale collection of NGS whole-genome sequences, which can be used as an additional resource for this project.

Candidates should hold a MS degree (or equivalent), preferably in Evolutionary Biology, Quantitative Biology, Bioinformatics or Plant Sciences. Experience in assembling genomes, population genetics, bioinformatics, and/or plant sciences will be preferred. Curiosity and an interest in learning new topics is essential. We strive to increase the proportion of women in science, so qualified women are particularly encouraged to apply for this position.

Please send your application in English to Andrea Fulgione (E-Mail: fulgione@mpipz.mpg.de), using as subject: "Application for PhD position PRMS245". Include in the application your CV, a letter of motivation and research interests, relevant certificates (e.g., degree certificates) and the name, contact and affiliation of 2-3 referees. Please send your application documents until the 31st of March 2023. The position is available as soon as a fitting candidate is found.

Contact: Dr. Andrea Fulgione, Max Planck Institute for Plant Breeding Research (MPIPZ), Department of Plant Developmental Biology, Cologne, Germany.

"Fulgione, Andrea" <fulgione@mpipz.mpg.de>

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MaxPlanckInst Ploen RateOfEvolution

IMPRS EvolBio offers two PhD positions at the Max Planck Institute for Evolutionary Biology Plü $\frac{1}{2}$ n, German, starting in September 2023. “(Epi)genetic control of recombination rate evolution” is situated at the interface of genetics and epigenetics and aims at understanding the evolution, specificity, and plasticity of meiotic recombination regulation across time and space. “Adaptation in complex systems” investigates how adaptation occurs in the presence of genetic interactions. The program includes a six-month training period followed by a PhD project of three years. The students are mentored by their principal investigator and an individual thesis advisory committee. Training includes seminars, courses (including soft-skill courses), workshops, an annual retreat, opportunities to attend international meetings and visit collaborating laboratories. The language of the graduate school is English. German language courses for beginners are offered to foreign students.

Both positions are fully funded for three and a half years.

<http://www.evolbio.mpg.de/imprs> . Motivated, career-minded, and curiosity-driven individuals with a passion for evolutionary biology are welcome to apply now. We request to establish first contact with the principal investigators by 22 February. The formal application has to be submitted by 12 March.

Thank you very much. Sincerely, Angela Donner

Welcome Office | IMPRS Office presence in MPI Interim Building: Tue 15-17 Wed 15-18 Fri 9-12 Phone: +49 (0)4522 763 233 Email: donner@evolbio.mpg.de

Max Planck Institute for Evolutionary Biology August-Thienemann-Str. 2 24306 Ploen Germany

Angela Donner <donner@evolbio.mpg.de>

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MonashU Australia EvolutionaryGeneticsTheory

Dear EvolDir readers,

March 31 is the next deadline for international applications to the PhD program at Monash University (located in beautiful Melbourne, Australia). I am seeking potential PhD students who might be interested in applying to join my group. Our research uses mathematical modelling – sometimes accompanied by analysis of genomic and population genetic data – to understand how evolution works.

Students that are interested in working on evolutionary theory (through mathematical modelling), or in testing quantitative predictions of theory using bioinformatics, are encouraged to apply. A love of evolutionary biology is a must. Strong mathematical and/or programming skills are assets, but the most important attributes are curiosity and an enthusiasm and willingness to develop these skills.

If you are interested, please send me an email with your CV and a copy of your academic transcript, along with a brief outline of the type of research you might be interested in pursuing. We can then begin a conversation, and I could help you develop your application to the program. Each successful applicant to the program would receive a guaranteed scholarship for 3.5 years (with some potential for extension), along with a stipend of ~\$33,000 per year, tax free. Teaching is not a requirement during the PhD, which is primarily research-based, though opportunities for teaching (which carries additional income) are an option for all PhD students.

My group works on a variety of questions in evolutionary biology, including the evolution of sexual dimorphism, the maintenance of genetic variation in the major fitness components (e.g., survival, lifespan, fertility, etc.), the genetic basis of adaptation, the evolution of sex chromosomes, and other topics in evolutionary genetics. We use mathematical models to help interpret empirical patterns or to develop new predictions that can later be tested, and we often collaborate with evolutionary researchers at Monash and other universities whose expertise and research interests are complementary to ours. You can get an idea of some of our recent work here:

<https://scholar.google.com/citations?hl=en&user=->

[D87t4zwAAAAJ&view_op=list_works&sortby=-pubdate](#) We are part of the School of Biological Sciences at Monash University, which is a great place to work and learn. Monash University is consistently ranked within the top 100 universities in the world. The school of Biological Sciences is home to ~35 lab groups, is a friendly and collaborative place to do research, and is particularly strong in evolutionary biology. Monash University is in the eastern suburbs of Melbourne and is very close to outdoor attractions (forests and beaches) and all the benefits of a major international city.

Some information about the School of Biological Sciences, including our PhD program, can be found here:

<https://www.monash.edu/science/schools/biological-sciences> <https://www.monash.edu/science/schools/biological-sciences/postgrad> For inquiries, please don't hesitate to contact me: Tim Connallon Email: tim.connallon@monash.edu

tim.connallon@monash.edu

NorthernArizonaU TreeAdaptation

PhD student in tree genomics and evolution

We are looking for a highly motivated PhD student to work on a recently funded NSF project investigating the link between hybridization and drought tolerance in long-generation tree species. The PhD will join the Forest Genomics Lab at Northern Arizona University (NAU). The position includes a stipend, tuition waiver, and health benefits for 4 years.

Minimum qualifications:

- MSc degree in Genetics, Forest Sciences, Biology, Evolutionary Biology, or related fields of study.
- Graduate courses in Genetics and Evolution.
- Experience with R, and Perl or Python (familiarity with Linux is a plus)
- Molecular lab experience.
- Availability to start by July 1st, 2023.

How to apply: Please send a 1-page statement of interest, CV, unofficial copy of transcripts, GRE scores, and TOEFL scores (international students), and the names and contact information of 3 references by February 15th, 2023. If found to be a good match for the position, you will be encouraged to apply to the graduate program at NAU.

Contact Information: Dr. De La Torre, Amanda.de-la-torre@nau.edu

Amanda De La Torre <Amanda.de-la-Torre@nau.edu>

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OxfordBrookesU Bioinformatics DeadlineFeb23

Funded bioinformatic/genomics PhD position - 23rd Feb deadline

I have a funded PhD studentship advertised to join my group, investigating questions relating to genome evolution in primates. Ideally looking for an enthusiastic student with a suitable Genetics background with some experience of bioinformatics (familiarity with Python, R, Linux). Link to the advert is below. I would be grateful if you could highlight the position to any suitable candidates you might know of. Deadline is quite close though -23rd February!

<https://www.jobs.ac.uk/job/CXD986/phd-studentship-primate-genome-evolution> Best wishes,

Ravinder Kanda

rkanda@brookes.ac.uk

Senior Lecturer in EvolutionaryGenomics Department of Biological and MedicalSciences (SNC 3.02), Oxford Brookes University, Gypsy Lane, Headington, Oxford, OX3 0BP UK

Tel: +44 (0)1865 484023 Twitter: @ravinderkanda

Genetics Society LocalAmbassador for Oxford Brookes University

Ask me about studentmembership | [@GenSocUK](http://www.genetics.org.uk) Ravinder Kanda <ravinder.kanda@gmail.com>

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OxfordBrookesU MorphoDivergenceAI ClosingFeb23

Project: Investigating the Contribution of Morphological Divergence to Behaviour using AI

Supervision: Dr M Dani Santos-Nunes < <https://www.brookes.ac.uk/Research/Units/HLS/Groups/-Phenotypic-Evolution-and-Adaptation/> > , Prof Fabio Cuzzolin < <https://www.brookes.ac.uk/research/units/-tde/groups/visual-artificial-intelligence-laboratory/> >

Faculty of Health and Life Sciences Department of Biological and Medical Sciences 3 Year, full-time PhD studentship Eligibility: Home UK/EU and International applicants

Bursary per annum: Bursary equivalent to UKRI national minimum stipend plus fees (current 2022/23 bursary rate is $i_{\frac{1}{2}}17,668$)

University fees and bench fees: University fees and bench fees will be met by the University for the 3 years of the funded Studentship. Visa and associated costs are not funded. International applicants can visit <https://www.brookes.ac.uk/students/isat/> for further information

Closing date: 23 February 2023 Interviews: Provisionally 13,14 March 2023 Start date: September 2023

Requirements:

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

Project Description:

Identifying the genes underlying phenotypic divergence is crucial to understanding how new phenotypes arise and species differentiate. Recently, we identified some of the genes that contribute to divergence in size and shape of male genitalia between two species of fruit flies. Genital structures evolve very quickly between closely related species and are known to affect mating behaviour and reproductive fitness. However, identifying behavioural differences encoded by the effect of these genes on male

genital morphology necessitates large-scale experiments under tightly controlled conditions. Recent advances in automated tracking and behaviour annotation make high throughput analysis of behaviour now possible.

This project aims to implement a high-throughput pipeline for mating behaviour analysis, using machine-learning techniques such as deep neural networks, to analyse video data acquired from custom-made behaviour arenas. Objective 1: To use males that differ in the species-specific allele they carry for each of the focal genes to determine if their effect on genital morphology results in differences in stereotypical mating, including the nature and timing of those differences. Objective 2: To automate the discovery of new behavioural phenotypes and apply the pipeline in more complex contexts (e.g. multiple mating pairs), leading to better understanding of group mating behaviour in the wild. Results will provide fundamental insight into the proximate causes of behavioural evolution driving speciation.

There is an additional requirement to undertake up to 6 hours undergraduate teaching/week during semesters and to participate in a teaching skills course without further remuneration.

For informal Enquiries, please contact: msantos-nunes@brookes.ac.uk How to apply: Applicants should visit the project webpage < <https://www.brookes.ac.uk/courses/research/contribution-of-morphological-divergence> > for instructions on how to submit an online application

Dr. M. Daniela S. Nunes Senior Lecturer in Evolutionary and Developmental Biology

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

Tel. +44 (0)1865 488629 <https://www.brookes.ac.uk/-research/units/hls/groups/phenotypic-evolution-and-adaptation> twitter: @Nunes_Lab

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

A central question in evolutionary biology is how changes in cis-regulatory sequences facilitate phenotypic evolution. A crucial piece of the puzzle is understanding transcription factor (TF) binding and function. This project will study paralogs of Pax6, a gene that plays a central role in animal eye development and regulation of eye size, to gain further insight into the evolution and functional divergence of TFs. The *Drosophila* Pax6 genes, *eyeless* (*ey*) and *twin of eyeless* (*toy*), are crucial for the initiation of eye development and are individually sufficient to induce ectopic eye formation. However, these paralogs have at least partially distinct functions in eye and head development.

A comprehensive comparison of expression patterns, binding motifs and direct target genes for *Ey* and *Toy* is required to gain further insights into how evolutionary diversification of TF paralogs can lead to sub- and neo- functionalisation of TFs. This will be addressed using state-of-the-art methodologies including CRISPR-mediated protein tagging, CUT&RUN sequencing and bioinformatic analyses, as well as confocal and electron microscopy.

The supervisor team has extensive experience in *Drosophila* genetics, imaging, and developmental biology as well as bioinformatic analyses. The student will be embedded in a larger group of *Drosophila* labs at Oxford Brookes and benefit from shared facilities and close collaborations with the Centre for Functional Genomics and the Centre for Bioimaging.

Please visit <https://www.brookes.ac.uk/courses/-research/dissecting-the-genetic-regulation-of-eye-dev> for further details and contact Maike Kittelmann (maike.kittelmann@brookes.ac.uk) or Sebastian Kittelmann (skittelmann@brookes.ac.uk) for informal inquiries. The application deadline is 23rd February.

p0035945@brookes.ac.uk

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PolishAcadSci AvianEvolution

THE ROLE OF EARLY ENVIRONMENT AND PHYSIOLOGY ON PHENOTYPIC VARIATION OF NESTLINGS IN AN AVIAN COEVOLUTIONARY ARMS RACE

We are looking for a highly motivated PhD student to join the Behavioural Ecology Group at the Museum and Institute of Zoology of the Polish Academy of Sciences in Warsaw (Poland) to conduct research on the environmental and physiological mechanisms determining phenotypic variation in nestlings of fan-tailed gerygone (*Gerygone flavolateralis*) from New Caledonia under the supervision of dr. Alfredo Attisano and prof dr. hab. Jörn Theuerkauf. The project is financed by an OPUS grant from the Polish National Science Center (NCN) and will offer a monthly scholarship of 5000 PLN for up to 4 years. The candidate will be enrolled in the doctoral program of the BioPlanet Doctoral School (<https://szkoladoktorska-bioplanet.pl/>).

Project description In the remote island of New Caledonia the brood-parasitic shining bronze-cuckoo (*Chalcites lucidus*) and its exclusive host the fan-tailed gerygone (*Gerygone flavolateralis*) have nestlings occurring in two discrete colour morphs, either pink-grey (bright) or dark-grey (dark). Additionally, the host broods can be either monomorphic (bright, dark) or mixed. The cuckoo nestlings mimic the gerygone nestlings but, despite mimicry and phenotypic variation, host parents discriminate and eject the cuckoo nestling from the nest. No other known cuckoo-host system anywhere else in the world has reached a similar level of complexity in coevolutionary interactions.

The Behavioural Ecology Unit of the Museum and Institute of Zoology PAS has been conducting research on this cuckoo-host system since 2011. We have been monitoring three populations of fan-tailed gerygone at three different sites on the main island of Gran Terre in which adults and fledglings have been colour banded, genotyped and monitored across multiple breeding seasons. Our research has focused on the breeding biology of host and parasite, cognitive mechanisms underlying host's recognition of the parasite nestling and genetic basis of nestling colour variation (see selected publications). However, we still know little about the role of ecological and physiological mechanisms in determining nestling phenotypic variation.

Selected publications: Attisano et al., 2018 <https://www.nature.com/articles/s41598-018-28710-5> Attisano et al., 2019 <https://link.springer.com/article/10.1007/s10336-018-1592-6> Attisano et al., 2020 <https://onlinelibrary.wiley.com/doi/full/10.1111/jav.02476>

Attisano et al., 2021 <https://academic.oup.com/cz/article/67/6/653/6350480> Attisano et al., 2022 <https://besjournals.onlinelibrary.wiley.com/doi/abs/10.1111/1365-2656.13849>

Bojarska et al., 2018 <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0194059> Sato et al., 2015 <https://www.sciencedirect.com/science/article/pii/S0960982215014220>

Work description We will conduct fieldwork in a well-established site on the main island of Grand Terre in New Caledonia for 3-4 months per year during the period September - January. The objectives of the main research project will be to investigate if the host nestling phenotype: 1) depends on the mother's condition and changes in incubation patterns 2) depends on nest environment during incubation, in particular nest exposure to direct sunlight, UV irradiation and temperature fluctuations 3) is associated with physiological differences in immune and stress response

The PhD research will primarily contribute to the objectives of the main project, but there will be possibilities for the development of complementary research. The fieldwork will involve bird tracking, mist-netting and banding of adult birds, monitoring of cuckoo parasitism and host breeding attempts, experimental manipulation of the host nest's exposure to UV irradiation, blood sampling, immune and stress response assays of host nestlings. Depending on the student interests, it will be possible to participate in molecular work (genetics and corticosteroid analysis). The field research will be conducted in collaboration with the principal investigator and will require the supervision of a small research group (2-4 research assistants, occasionally M.Sc. students). The candidate will be encouraged to become an active

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

QueensU ArcticSeabirds

I have an opening for a Canadian graduate student (MSc or PhD) to study evolutionary and conservation genomics of birds. Several projects are possible; most involve Arctic seabirds, but some involve temperate land birds. Most have direct conservation or management applications. A solid theoretical foundation in evolutionary genetics is essential - do not apply if you do not have this. Preference will be given to candidates with prior experience with genomics/bioinformatics. Projects involve field work on remote islands, and so prior field experience is an asset, preferably with birds or marine animals. The successful applicant will join a dynamic group of faculty and students studying ecology and evolution at Queen's University (see <https://www.friesenlab.ca/> and <https://biology.queensu.ca/>). Please send a resume or curriculum vitae, informal transcript, and contact information for two academic references to Dr. Vicki Friesen (vlf@queensu.ca). Deadline for inquiries: 14 Feb. 2023. Deadline for completed applications following interview and invitation: 28 Feb. 2023. Black and Indigenous students, People of Colour, and members of the LGBTQ2+ communities are especially encouraged to apply and will be eligible for extra support.

Dr. Vicki Friesen, Professor Department of Biology, 4443 Biosciences, 116 Barrie Street, Queen's University, Kingston, ON K7L 3N6, Canada Tel: 613-533-6156 Fax: 613-533-6617 Email: vlf@queensu.ca

vlf@queensu.ca

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QueensU Belfast PlacentaEvolution

BETWEEN COOPERATION AND CONFLICT - THE EVOLUTION OF THE MAMMALIAN PLACENTA
Open to UK and international students worldwide

Supervisors:

Dr Isabella Capellini, School of Biological Sciences (Queen's University Belfast)

Prof Kathryn Elmer, School of Biodiversity, One Health & Veterinary Medicine (University of Glasgow)

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Summary:

The placenta is essential to mammalian reproduction and it is surprisingly the most diverse organ in this group. However, we still have a limited understanding about how and why such diversity has evolved; what implications this has for nutrient transfer, maternal investment and offspring growth; and what genes underpin its diversity.

The influential conflict hypothesis proposes that, while the placenta clearly reflects cooperation between mother and offspring, its astonishing diversity is likely the result of an evolutionary arms-race between mother and fetus over the allocation of maternal resources. Under this hypothesis, the placenta is the battleground of a conflict fought through chemical communication and influenced by paternal genes. The degree of relatedness between siblings in a litter has the potential to further exacerbate this conflict. The conflict hypothesis has received some support but remains largely untested as are alternative hypotheses suggesting a role for natural selection. Finally, while several genes have been identified that contribute to placental development, it is unknown which genes have driven, and can help explain, diversity in placental morphology.

Building on our successful comparative approach that demonstrated how placental diversity coevolved with key life history traits, such as gestation time, the student on this project will:

1. Test whether the parent-offspring conflict explains placental diversity;
2. Test whether mating system explains placental diversity;
3. Test whether natural selection drives placental evolution;
4. Investigate the correlated evolution between placental morphology and genes.

The student will receive training in assembling and managing large scale datasets of placental morphology, behaviour and genes from the literature and in using cutting-edge phylogenetic comparative approaches to test the hypotheses.

For further information please contact Dr Isabella Capellini (I.Capellini[at]qub.ac.uk).

To apply: <https://www.gla.ac.uk/colleges/mvls/-graduateschool/northwestbio/apply/> DEADLINE: Friday 17th of March

Isabella Capellini <isab972@yahoo.co.uk>

UBristol Evolution Of Heat Impacts On Pregnancy

Fully funded PhD opportunity at the University of Bristol, UK Heat impacts on pregnancy outcomes: an interdisciplinary and cross-species approach

4-year stipendship + research costs; open to international applicants. Link to project details and eligibility criteria: <https://www.jobs.ac.uk/job/CWZ394/phd-studentship-heat-impacts-on-pregnancy-outcomes-an-interdisciplinary-and-cross-species-approach>

Supervisors: Dr Sinead English (School of Biological Sciences) - <https://evelab.org> Dr Eunice Lo (Cabot Institute for the Environment) - <https://www.climatebristol.org/research/> Dr Kate Birchenall (Bristol Medical School)

The project: There is increasing appreciation that extreme weather events such as heatwaves increase mortality risks in humans and a range of organisms. Less well understood, however, is how such events affect other aspects of health, particularly those in potentially heat-vulnerable categories such as pregnant women. Recent research across a range of organisms has shown that fecundity outcomes are even more sensitive to temperature variation than survival. Moreover, there is emerging evidence that pregnant women exposed to heat are more likely to have miscarriages or give birth pre-term. We can gain powerful insights by using animal models to understand underlying physiological mechanisms in tandem with epidemiological studies in human populations. Heatwaves are increasing in frequency and intensity across the globe and miscarriage and pre-term birth have major consequences for short- and long-term well being of mothers and children. Taken together, a new understanding of how heat affects pregnancy outcomes is important for estimating how climate change will impact human health in the future.

We propose an exciting PhD project that will use an interdisciplinary approach to understand the consequences of heat exposure on pregnancy outcomes in humans and other organisms. This project will also investigate whether such effects depend on the timing in pregnancy (heat exposure around conception, or in a particular trimester).

The aims are: (1) Understand the physiological mechanisms by which heat affect pregnancy outcomes, and how these depend on the timing when these were experienced. The student will conduct heat simulation experiments in *Diploptera punctata* - a viviparous cockroach, and a non-human experimental model of pregnancy - to test how heat exposure affects both phenotypic (size and gestational age at birth) and molecular outcomes (DNA methylation and gene expression) in offspring, and any long-term consequences of such exposure.

(2) Investigate how temperature variations are linked to pregnancy outcomes in humans. The student will use large-scale human cohort studies such as ALSPAC and UK Biobank, and link these data with UK Met Office climate observations based on the participants' locations during their pregnancy, to establish how patterns of temperature are linked to pre-term birth and size for gestational age. Molecular insights into such associations will also be available by conducting both GWAS and EWAS studies.

(3) Project future impacts to inform adaptation based on physiological and observational insights. The student will combine both the biological and mechanistic insights gained from the experimental approach (Objective 1) and epidemiological analyses (Objective 2) to (i) project future birth outcomes and long-term morbidity patterns (due to, e.g., higher pre-term birth) in humans associated with climate change; (ii) develop potential heat adaptation strategies for pregnant women at stages of pregnancy when they are particularly vulnerable, for public health policy consideration.

Candidate experience and qualifications o upper second-class honours degree (or equivalent) in biological sciences or related discipline

How to apply to the University of Bristol When applying for this project please choose 'Biological Sciences (PhD)' (<https://www.bristol.ac.uk/study/postgraduate/apply/start-application/>) in the 'find a programme' box. You should refer to the project title and supervisor in your application.

Application deadline: 28 February 2023 Interviews will be held the week commencing 17 April 2023.

General Enquiries: Dr Eunice Lo (eunice.lo@bristol.ac.uk)

Sinead English <sinead.english@bristol.ac.uk>

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UCalgary GenomicsOfAdaptation

PhD Position Yeaman Lab Department of Biological Sciences, University of Calgary

I am seeking to recruit a PhD student interested in studying how evolution works. My lab has mainly pursued questions related to adaptation using theory & simulation approaches to generate predictions and genomic data to test them. We have worked on a range of organisms, from parasitic nematodes to stickleback to conifers, and have ongoing projects in many of these areas. I'm also very open to helping you develop a new study area of your own design. Additionally, I am very interested in working on similar questions in cultural evolution, and would be particularly enthusiastic about collaborating with a student on work in this area, as a complement to work on genetic evolution. The genetics of local adaptation to climate in conifers remains a main area of research in my lab, so field work in the Canadian Rockies is always an option - we have an ongoing project studying the genetics of hybridization and adaptation to montane environments in two species of spruce. On the other hand, if you're more of a drylab person - and this applies to most of my lab members, there is a wealth of existing data and plenty of opportunities to generate and analyse new data.

For international students: I would love to hear from you! It is sometimes hard for me to evaluate the meaning of grading systems in different countries, so if you can provide some context there, that would be really helpful for me (e.g. explain what percentage of students achieve similar marks, point out particularly noteworthy achievements). Similarly, if some kind of adversity has meant you might not look as competitive based on your CV, please let me know. I'm most interested in recruiting someone with great ideas and curiosity - and this isn't necessarily well-represented by the traditional CV.

TO APPLY: Please send a CV and a short description of your academic interests to samuel.yeaman@ucalgary.ca, along with the names and emails of three people I could contact as references. For students that have published: please let me know what you contributed to each paper. Please also send a sample of your writing - something that represents your best work (not necessarily published). I will begin reviewing applications on March 15th 2023, but please contact me to check in if you need

to make a quicker decision.

Samuel Yeaman <samuel.yeaman@ucalgary.ca>

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UCollegeDublin eDNA StreamBiodiversity

Two PhD positions available at University College Dublin

Project Title: HydroGen: Integration of DNA-based assessment tools into water quality and biodiversity monitoring. **Project Description:** Two opportunities have arisen for suitably qualified and motivated graduates to undertake a PhD within the EPA-funded HydroGen: Integration of DNA-based assessment tools into water quality and biodiversity monitoring project as part of a collaboration between the School of Biology and Environmental Science, UCD, the Norwegian Institute for Nature Research and Bowburn Consultancy in the UK. The overall objective of the research is to assess how environmental (e)DNA and other DNA based methods can supplement and support traditional monitoring methods for the Water Framework Directive (WFD) across a range of biological quality elements and for other regulatory targets related to biodiversity in rivers. The proposed project will capitalise on stakeholder knowledge across disciplines to ensure the project meets Ireland's needs into the future. The research will involve sampling and identification of a range of aquatic biota in rivers using traditional methods, water sampling for eDNA and subsequent laboratory analyses as well as— Next Generation Sequencing and bioinformatics.

Qualifications: The successful candidate will hold an honours degree (minimum H2:1) in Marine/Freshwater Biology, Biochemistry, Molecular Biology or equivalent. A good knowledge of aquatic ecology, molecular biology, bioinformatics or related subjects would be advantageous. The successful candidate will be required to undertake both field and laboratory work as necessary and will be required to work in an efficient manner to meet the objectives of the project. Molecular benchwork and stream sampling experience are desirable. **Research Environment:** The student will join a dynamic group of researchers at the Area 52 Research group, UCD and the Freshwater Research Laboratory. Based at UCD, the students will gain valuable experience working and

visiting with our international partners in Norway and England. Students will have access to state of the art equipment and facilities at the participating Institutions and will benefit from the collaboration with the international partners.

Project Start-Date: March 31 2023 **Project Duration:** 4 years **Conditions:** euro 18.500 per year & postgraduate fees for EU students **Please Note:** Candidates from outside the EU are eligible to apply, but may be expected to provide evidence of sources of additional funds to cover excesses associated with non-EU fees.

Closing Date for receipt of applications:— February 28, 2023

Applicants should submit a letter of interest and a detailed CV to: jens.carlsson@ucd.ie Interviews for the position are expected to take place in March. Further information on the project may be obtained from: Dr Jens Carlsson (jens.Carlsson@ucd.ie), or Prof. Mary Kelly-Quinn (mary.kelly-quinn@ucd.ie)

Jens Carlsson <jens.carlsson@ucd.ie>

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UDuisburg EssenGermany EcoEvoDynamics

Dear colleagues,

I am advertising a PhD position in my Ecological Modelling research group at the University of Duisburg-Essen (Germany). The topic is computational and statistical models to study eco-evolutionary dynamics, and will deal with statistical tools to fit observed data to theoretical models of rapid phenotypic evolution, community assembly, and metacommunity dynamics. The application deadline is March 15, 2023.

I am looking for a student with experience in ecology / evolutionary biology, with experience and interest in computational ecology & evolution and statistical ecology. We will use primarily R, though a candidate with experience in MATLAB / Python / Julia / C++ would be well qualified also. Candidates should have a strong interest in statistics, and we will use a Bayesian statistical framework for most of the project.

The information about the position and to apply is linked here in German:

<https://www.uni-due.org/karriere/wissenschaftliche-stellen/> https://www.uni-due.org/wp-content/uploads/2023/02/20230202_Aus_53-23_WMA_Biologie_Prof.-Pantel-Heckmann.pdf

And the information about the position and to apply is given here in English (linked here, and attached):

https://www.dropbox.com/s/suehvv23flwa4f6/-Pantel_PhD_Ad.pdf?dl=0 I am happy to discuss with potential candidates who wish to contact me directly.

Best,

Jelena Pantel

Prof. Dr. Jelena H. Pantel University of Duisburg-Essen Ecological Modelling, Faculty of Biology Universität $\frac{1}{2}$ tsstrai $\frac{1}{2}$ e 5 45141 Essen Germany

“Pantel, Jelena, Prof. Dr.” <jelena.pantel@uni-due.de>

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UGoettingen DrosophilaPopGenomics

PhD position in Population Genomics and Adaptation @University Goettingen within the IMPRS-Genome Science program

3-years position (65%) | E13 TV-L | contact: nposnie@gwdg.de

Project Title:

Identification of loci underlying local adaptation in European *Drosophila* populations

Project Description:

Organisms must cope with an ever-changing environment. Due to adaptations to local biotic and abiotic conditions, individuals within and between populations differ at the genomic and phenotypic level and population diversification is shaped by selection, as well as neutral events, such as genetic drift and migration. Most of our current understanding of genetic diversity in populations is based on analyses of specific genes or restricted genomic loci. The advent of population genomics based on next generation sequencing technologies facilitated assessing genetic differentiation on a genome-wide scale. In contrast, the assessment of quantitative population differences in organismal phenotypic traits

is often hampered because high-throughput screens are time consuming, and they require specialized equipment and expertise. Therefore, the phenotypes influenced by locally adapted genomic loci often remain elusive.

The European *Drosophila* Population Genomics Consortium (DrosEU) [1] has been collecting natural *D. melanogaster* populations across Europe since 2014 and first population genomics analyses revealed patterns of local adaptation [2,3]. In 2018, the consortium established 168 isofemale lines representing nine European *D. melanogaster* populations for an extensive phenotyping effort to quantify 18 life history, physiological, morphology and behavioral organismal traits. The analysis of this phenotypic dataset revealed clinal patterns for multiple traits, indicating local adaptation at the phenotypic level. We will harness this exciting resource by sequencing the genomes of all 168 isofemale lines to link observed phenotypic variation to genomic divergence. To gain mechanistic insights into the consequences of genetic diversity, we will study genome wide patterns of gene expression (RNAseq) and chromatin accessibility (ATACseq) for two tissues with relevance for observed adult phenotypes, namely the gut and wing imaginal discs.

The results of these experiments will shed light on local adaptation of natural populations. In addition, the use of state-of-the-art genomic and epigenomic methods will provide novel mechanistic insights into gene function in the context of local adaptation.

Research environment:

This project is a collaboration between the host lab at the University Goettingen and Sonja Grath (LMU Munich), Claudia Fricke (University Halle) and additional members of the DrosEU consortium. This highly interdisciplinary team provides an excellent research environment for this project. The position will be hosted at the Department of Developmental Biology at the University Goettingen and the successful candidate will join the International Max Planck Research School for Genome Science (IMPRS-GS), which provides a vibrant environment for PhD students.

Your Qualifications:

MSc degree in Biology, Bioinformatics or in other relevant fields such as Mathematics or Breeding Science. We expect bioinformatic and statistical skills to handle population genetics/genomics, quantitative genetics, RNAseq and ATACseq data and to integrate such multi-omics data. A willingness to get involved in data generation (wet lab) is a plus.

Application:

Please apply until February 10, 2023 through the online portal of the IMPRS-GS: <https://application.imprgs.uni-goettingen.de/public/> References:

[1] <https://droseu.net/> [2] Kapun M, et al. Genomic Analysis of European *Drosophila melanogaster* Populations Reveals Longitudinal Structure, Continent-Wide Selection, and Previously Unknown DNA Viruses. *Mol Biol Evol.* 2020;37:2661-78.

<http://dx.doi.org/10.1093/molbev/msaa120> [3] Kapun M, et al. *Drosophila* Evolution over Space and Time (DEST): A New Population Genomics Resource. *Mol Biol Evol.* 2021;38:5782-805.

<http://dx.doi.org/10.1093/molbev/msab259>
nico.posnien@gmail.com

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UHalle Germany EmergingDiseaseInvasiveAnt

3 year PhD position available (application deadline: 15 March 2023) within the project “EMINENT: Consequences of an EMerging parasite on an INvasive aNT in Europe” starting on the 01.08.2023 (flexible: 01.07.2023-01.10.2023).

Project description: Biological invasions and emerging infectious diseases are widely recognized as two of the most significant bio-logical threats to biodiversity. In Europe a novel disease, the likely invasive ectoparasitic fungus *Laboulbenia formicarum*, has recently emerged on the invasive garden ant *Lasius neglectus*. Aim of the project is to assess the impact of *Lab. formicarum* emergence for the success of the invasive garden ant and the well-being of European native ants using a combination of field monitoring with sampling (mainly in Lyon, France, for 3-6 months), laboratory experiments (host reproduction, survival, and disease transmission) as well as molecular work (population genomics via PoolSeq whole genome sequencing).

We require: We are seeking a highly motivated candidate with an inquisitive, solution- oriented and frustration-tolerant mind that has excellent organisational skills to independently plan and conduct laboratory and field work. The following qualifications are required:
- Applicants must hold a scientific University degree (MSc/Diploma) in biology or related fields - Previous

experience in field work, experiments involving insects and/or molecular techniques (DNA extraction, next generation sequencing, bioinformatics) is desirable - Fluency in English (lab working language) with good communication and social skills - French knowledge is a plus - Driver’s licence valid in France is mandatory and (ideally) access to a car for field work

We offer: -A friendly and inspiring working atmosphere in a young research group (for more information check out: https://www.zoologie.uni-halle.de/allgemeine_zoologie/staff/tragust/) with collaborative connections at the national e.g. the Freie Universität Berlin (Berlin) or the Centre for Integrative Biodiversity Research, iDiv (Leipzig) and international level (for field work in Lyon the applicant will work closely together with Dr. Bernard Kaufmann, Université Claude Bernard Lyon 1: <https://umr5023.univ-lyon1.fr/annuaire/-details/1/41-kaufmann-bernard>) - The group is embedded in the Department General Zoology sporting excellent, state of the art research facilities in the delightful, historic city of Halle with good and affordable living conditions and good connections to e.g Berlin (~1h by train), Leipzig-Halle airport (~15min by train) or Munich (~3h by train) - A project that will help to develop and foster the applicant’s academic profile combining diverse techniques in field, lab and molecular work.

Application: Please submit your full application in English with registration number Reg.-Nr. 5-1086/23-D until 15th of March 2023 via e-mail as a single PDF to simon.tragust@zoologie.uni-halle.de. For informal queries about the position or the project please contact Dr. Simon Tragust (simon.tragust@zoologie.uni-halle.de). Applications should include a cover letter detailing the applicant’s motivation to join the project and the group against the background of their research interests and experience, a CV, certificates (MSc/Diploma) and the names and email addresses of two potential referees. Interviews of applicants will take place until mid April.

Simon Tragust <simon.tragust@zoologie.uni-halle.de>

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UiT Norway Cryptogams eDNA sedaDNA

The Arctic University Museum of Norway and Academy of Fine Arts

PhD Fellow in ancient DNA of cryptogams in northern ecosystems

The position

A position as a PhD candidate in ancient DNA of cryptogams in northern ecosystems is available at the Arctic University Museum of Norway, UiT. You will conduct research as a part of the newly established Norwegian Centre for Arctic Ecosystem Genomics (ArcEcoGen) and will be part of the terrestrial working group.

The position is for a period of four years. The nominal length of the PhD programme is three years. The fourth year is distributed as 25 % each year and will consist of teaching and other duties. The objective of the position is to complete research training to the level of a doctoral degree. Admission to the PhD programme is a prerequisite for employment, and the programme period starts on commencement of the position.

See for more information <https://uit.no/research/-arcecoegen> Research at the ArcEcoGen focuses on the combined effect of humans, climate, and biota on northern ecosystem dynamics in the past, present, and future using environmental DNA (eDNA) techniques. A key goal of ArcEcoGen is to build up a diverse, rigorous, and internationally leading research group in ecosystem genomics. Norway has exceptionally well-covered DNA barcode reference libraries of local flora and fauna, totalling ~20,000 species covered. In addition, the large natural history collections at The Museum will be available for creating complementary reference libraries. Our collections also include sediment samples from arctic and alpine lakes as well as DNA extracts from sediments and organisms. We also have fully equipped laboratories and infrastructure for recovery and analyses of modern, ancient, and eDNA, as well as field equipment for sediment coring.

See the full details here: <https://www.jobbnorge.no/en/-available-jobs/job/239568/phd-fellow-in-ancient-dna-of-cryptogams-in-northern-ecosystems> Applications should be sent through online application systems stipulated in the advert.

For further inquiry please contact:

Associate Professor Dilli Prasad Rijal (email: dilli.p.rijal@uit.no) or Professor Inger Greve Alsos (email: inger.g.alsos@uit.no) or museum director Dr Geir Rudolfsen (email: geir.rudolfsen@uit.no)

Dilli Prasad Rijal <dilli.p.rijal@uit.no>

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UMainz PlantEpigeneticInheritance

PhD Position available (65% TV-L E13)

University of Mainz, Institute of Organismic and Molecular Evolution Supervisor: Jun-Prof Dr Meret Huber (<https://www.uni-muenster.de/Biologie.IBBP/-aghuber>) Starting date: 1.4.2023 or to be agreed upon Epigenetic inheritance in clonal plants Background: All organisms respond to the environment with gene regulation. But is gene regulation constrained to a single generation, or can genes be regulated across generations? And if genes are regulated across generations, what are the underlying molecular mechanisms? In our previous work, we found that the giant duckweed - one of the fastest reproducing flowering plants - can regulate its genes and acquire stress resistance across generations in the absence of genetic change.

In this Emmy Noether-funded project, we now search to elucidate the underlying molecular mechanisms.

We look for an enthusiastic and ambitious PhD student with strong interest in plant-environment interaction and epigenetic inheritance. The applicant should have a solid background in molecular biology or the analysis of high-throughput sequencing data, and have interest in combining molecular tools with experimental evolution. Experience in plant-environment interactions is advantageous. The applicant must be fluent in English and hold a MSc degree in Biology or related fields.

We offer a stimulating and interdisciplinary research environment including state-of-the-art facilities in a young and dynamic research group that ensures extensive supervision. The candidate can join the graduate school GenEvo ("Gene Regulation in Evolution") and fully benefit from its tailored programme. The Institute of Organismic and Molecular Evolution is located at the University Campus of Mainz, close to the vibrant city center of Mainz. Mainz is located in the picturesque Rhine valley, which can easily be explored through various cultural and outdoor activities.

How to apply: Please send a single pdf containing i) a motivation letter (max. 2 pages), ii) detailed CV, iii) copies of BSc and MSc degree, and iv) names and addresses of two referees to meret.huber@uni-mainz.de. The application review will start on 01.03.2023. The position will remain open until filled.

The successful candidate may start as soon as possible.

For further information, please contact : Jun-Prof Dr Meret Huber Institute of Organismic and Molecular Evolution Johannes Gutenberg University Mainz Johann-Joachim-Becher-Weg 7 D - 55128 Mainz Phone: 0049 (0)6131 3930260 meret.huber@uni-mainz.de

Meret Huber <meret.huber@uni-mainz.de>

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United Arab Emirates U USC Climate Adaptation Gene Expr

United Arab University (Manlik lab) in collaboration with the University of Southern California (Suzanne Edmands lab): Identifying the genes that matter to adapt to climate change: Gene expression in a marine copepod in response to climatic variables

The Manlik lab at the United Arab Emirates University has an opening for a PhD student to investigate gene expression in a marine copepod (*Tigriopus* sp.) in response to climatic variables:

* Start: Fall (August) 2023 (preferred), or Spring (January) 2024 * Application Deadline for Fall 2023 start: End of March, 2023 (currently February 28, but the deadline for the application will be postponed) * Application Deadline for Spring 2024 start: NA (on a rolling basis until fall/winter 2023). * Location: United Arab Emirates University (UAEU), Al Ain, Abu Dhabi, UAE; sample collection and some lab work/training to be done at the University of Southern California (USC), Los Angeles, CA, USA * Collaboration between UAEU & USC: * Dr. Oliver Manlik (P.I.; main supervisor), United Arab Emirates University (UAEU): <https://www.uaeu.ac.ae/en/cos/profile.shtml?email=oliver.manlik@uaeu.ac.ae> * Dr. Suzanne Edmands (Co-P.I.), University of Southern California (USC): <https://dornsife.usc.edu/cf/faculty-and-staff/faculty.cfm?pid=1003223> * Program: Doctor of Philosophy in Ecology and Environmental Sciences, UAEU * Funding: Stipend of AED 100,000/year for 4 years; tuition waiver is expected for successful candidate; research funding for the project, travel to the U.S. for sample collection and training also covered * Contact: E-mail to Dr. Oliver Manlik (oliver.manlik@uaeu.ac.ae)

Project summary:

The ongoing warming, acidification and altered salinity of the world's oceans, induced by climate change, poses

a major threat to marine biodiversity. The overarching objective of this PhD project is to identify active, functional genes that are important for local adaptation to climate change. To investigate the basis of adaptive processes in response to climate change, we will use an RNA-seq approach to compare genome-wide patterns of gene expression in populations of the intertidal copepod, *Tigriopus* sp. from locations in North America and the Arabian Gulf. Specifically, we will test gene expression in response to changes in temperature, pH and salinity variation induced by climate change, especially in the intertidal zone.

Minimum requirements:

* Master's and Bachelor's degree (in biology, ecology, evolutionary biology, environmental science or similar); * GPA: 3.0 (on 4.0 scale). * For non-native English speakers: IELTS* score of 6.5 or above (*International English Language Testing System) * Interest in ecology and evolutionary biology * Available for field work (i.e. sample collection at tidepools) in the U.S. and other countries. * Available for training at the University of Southern California (Suzanne Edmands' lab) * Available for lab work (cultivation of copepods, experimentation, RNA extraction, etc.)

More details on university admission requirements for PhD can be found here: <https://www.uaeu.ac.ae/en/cgs/admission.shtml> Desired qualifications:

* Previous experience with molecular work, especially RNA extraction * Previous experience with bioinformatic pipelines (especially to analyze RNA-seq data) * Excellent written and communication skills * Being an ambitious, but also nice and ethical person

If you are interested, please contact me (Oliver Manlik) by E-mail. I am available to informally chat (by Zoom) about the position, the project or living in Al Ain, UAE.

Dr. Oliver Manlik Biology Department, United Arab Emirates University, Al Ain, Abu Dhabi, UAE
oliver.manlik@uaeu.ac.ae

END of Message

Dr. Oliver Manlik

Assistant Professor of Molecular Ecology,

Coordinator, B.S. in Ecology and Organismal Biology Program,

Biology Department, College of Science,

United Arab Emirates University (UAEU), UAE

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ogy and Evolution Researchgate: < http://www.snapchat.com/add/uau_news > https://www.researchgate.net/profile/Oliver_Manlik Oliver Manlik <oliver.manlik@uaeu.ac.ae>

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UOslo Evolutionary Venomics

A PhD Research Fellow position in evolutionary venomics and comparative genomics is available in the Undheim group at the Centre for Ecological and Evolutionary Synthesis (CEES), at the Department of Biosciences, University of Oslo.

Bivalency is a well-known but poorly understood natural mechanism for improving the potency and selectivity of intermolecular interactions. Recently, a new class of bivalent peptide toxins from arthropod venoms was discovered that consist of two near-identical cysteine-rich peptide domains an architecture that results in several pharmacological properties of interest in drug design, such as high target avidity.

In a project funded by the Australian Research Council, we developed the necessary tools for identifying and exploring this molecular class, termed secreted cysteine-rich repeat proteins (SCREPs), and created a database (SCREP-yard) that is now available as an online tool for mining multidomain peptides with potential multivalent function. However, we have yet to explore in detail the underlying evolution and structural biology of SCREPs processes that are likely to explain the past failures to design synthetic multivalent peptides.

In this project, the candidate will study the genomic mechanisms and the structure-function constraints underlying the evolution of multivalency in animal venoms, working across a broad range of fields, including comparative genomics, transcriptomics, molecular evolution, structural biology, and pharmacology. The candidate will be based in the Undheim-group, but will be co-supervised by Prof Kjetill Jakobsen and spend time in the lab of project partner Prof Mehdi Mobli (University of Queensland, Australia). The project will also

involve collaborations with the Norwegian initiative for the Earth Biogenome project and research groups both nationally and internationally.

We offer - Salary NOK 501 200 - 544 400 per annum depending on qualifications and seniority as PhD Research Fellow (position code 1017) - Attractive welfare benefits and a generous pension agreement - Vibrant international academic environment - Career development programmes - Oslo's family-friendly surroundings with their rich opportunities for culture and outdoor activities

The candidate must have a Master's degree or equivalent in biology (required). Foreign completed degrees (M.Sc.-level) must correspond to a minimum of four years in the Norwegian educational system.

Application deadline is 28th February, and starting date is no later than October 1, 2023.

For additional details and to apply, see: <https://www.jobbnorge.no/en/available-jobs/job/239380/phd-research-fellow-in-evolutionary-venomics> For any other questions, please email

Eivind Undheim: e.a.b.undheim@ibv.uio.no

Eivind Andreas Baste Undheim
<e.a.b.undheim@ibv.uio.no>

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UOslo Zoo-archaeology Ancient DNA

PhD position in zoo-archaeology and ancient DNA available at the Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biosciences, University of Oslo.

The PhD fellow will be part of the interdisciplinary project "SAVECAVE: baselines for conservation from threatened cave archives" funded by the Faculty of Mathematics and Natural Sciences sustainability initiative. In this project we will compile an extensive record of Holocene palaeobiological and archaeological cave material from Fennoscandia based on catalogued and newly excavated sub-fossil material, in order to refine the chronology of Fennoscandian faunal dynamics in response to Holocene human activity. Faunal material will be identified using both osteological analyses and bulk-bone metabarcoding to maximise taxonomic resolution. Prehistoric succession and dynamics of community

composition with specific focus on currently red listed taxa will be evaluated. Communication of the scientific importance and fragility of Nordic cave environments with their faunal remains and artefacts is an important part of the project, with the ultimate goal to provide a rationale for strengthened conservation management and legislation for caves and associated contexts.

The SAVECAVE project is a collaboration between the CEES (IBV, University of Oslo) and the University Museum of Bergen. The SAVECAVE PhD fellow will also work closely with members of the Evocave project (<https://www.mn.uio.no/cees/english/research/projects/101491/>)

Please find the full advertisements with application instructions here: <https://www.jobbnorge.no/en/available-jobs/job/239399/phd-research-fellow-in-zoo-archaeology-and-ancient-dna> Application deadline: 28.02.2023. Starting date 14.08.2023 (with absolute latest start date 01.10.2023).

Questions about the position can be directed to Sanne Boessenkool (sanne.boessenkool@ibv.uio.no)

Sanne Boessenkool <sanne.boessenkool@ibv.uio.no>

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UOttawa Two EvolutionaryBiol

PhD: Conservation genomics of peripheral populations of plants

Ideal start date: September 2023

The Lee-Yaw lab at the University of Ottawa (<https://www.leeyawlab.ca/>) is looking for a PhD student who is enthusiastic about conservation genomics and plants. This is a co-supervised position with Dr. Jenny McCune from the University of Lethbridge (<http://jlmccune.weebly.com/>). The student will work alongside others who are establishing new populations of rare and at-risk plants in southern Ontario. As part of these efforts, we wish to understand a) how populations at the edge of the range in Ontario are related to more central populations in USA and b) whether populations in Ontario are genetically isolated from each other. One of the study systems is likely to be crooked-stem aster (*Symphyotrichum prenanthoides*) but work on other species is possible. Apart from these questions, the student will have an opportunity to develop a thesis more

generally exploring rarity, landscape genomics, genetic constraints on range limits, or other questions in ecology or conservation biology.

Eligibility:

The successful applicant will ideally have an MSc involving molecular lab work. Previous experience working with plant DNA and genomic data is preferred. Molecular work and PhD program requirements are to be completed at the University of Ottawa. However, the student has the option to spend time in the McCune lab at the University of Lethbridge in Alberta. Fieldwork in southern Ontario is optional during the first summer but data collection will take place in the lab. This position is open to both domestic and international students. Black and Indigenous students, People of Colour, and members of the LGBTQ2+ are encouraged to apply. The University of Ottawa is a bilingual French-English institution and bilingual students are very welcome.

Stipend support:

This position is primarily funded from an NSERC Alliance grant to J. McCune and supplemented by funding to both PIs. Minimum stipend support from TAships and research grants is \$23,000 CAD per year for four years (this is a starting point: additional top-up is possible contingent on scholarships and additional grant applications). Students are strongly encouraged to apply for external scholarships.

To apply:

Send an email to jleeyaw@uottawa.ca by March 15, 2023. Include: 1) A statement clearly outlining your research interests and career goals 2) A statement explaining how your previous experiences and training relate have prepared you for a PhD and relate to this project in particular 3) Your CV 4) A copy of your undergraduate (and MSc if applicable) transcripts (official transcripts are not needed)

General information:

The Lee-Yaw Lab is a new lab at the University of Ottawa. Research in the lab focuses on understanding species' geographic distributions and the impacts of global change on range limits. The lab also works closely with different partners on projects that directly support the conservation of at-risk species. We have a particular fondness for amphibians but have worked on a number of different systems. Our work generally makes use of observational field studies, population genomics, and geospatial data. We also engage in synthesis work addressing a range of questions.

Our values:

We value curiosity and creativity; collaboration and

teamwork within and beyond the lab; and engagement with projects that support the protection of biodiversity. We work hard to maintain an inclusive and supportive environment and value the diverse experiences and perspectives of our members. We are actively looking for more inclusive ways of doing ecology and welcome conscientious thinkers with new ideas in this regard.

The University of Ottawa and Lee-Yaw Lab are located on the unceded, unsundered territory of the Anishinaabe Algonquin Nation who have cared for this land since time immemorial. We also conduct fieldwork in Treaty 7 territory, which is the traditional territory of the Blackfoot people, including the Kainai, Piikani, and Siksika Nations, as well as the Métis Nation of Alberta. We honour these Nations and all Indigenous Nations and Peoples and recognize our responsibility to respect the land on which we live, work, and play, as well as to explore meaningful ways to contribute to decolonization and reconciliation.

The University of Ottawa:

The University of Ottawa is the largest bilingual (French-English) university in the world and found in the heart of downtown Ottawa next to many attractions, restaurants, and the famous Rideau Canal. Graduate students in the Department of Biology are part of the Ottawa-Carleton Institute of Biology and have access to courses and mentors from both institutions, as well as to government scientists in the capital region. Ottawa is a vibrant, capital city with several art galleries

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UPorto FishEvolution

Expression of interest for a PhD position in Deep-sea Fish Evolution

There are 20,000 marine fish species already known, and at least 20% of them can be found in deep-sea despite the challenging characteristics of this habitat. To get this achievement, they have developed a distinctive set of traits which includes bioluminescence, extraordinary longevity, loss or significant development of sensory organs, extreme feeding and reproductive strategies, and unique life stories. Therefore, deep-sea fish are perfect

models to study how environmental conditions shape the genome of organisms during their evolution at different levels; gene gain, gene loss, gene expression. This PhD aims to understand the adaptive and evolutionary phenomena that allowed teleost fish to live in the deep-sea from a molecular perspective and how they are related with the biological traits of these organisms. A better understanding of these processes will be useful for comparative purposes with other organisms, and help us to develop proper management policies in a time when deep-sea faces numerous challenges due to increased human activity that could affect the ecosystem services that the deep-sea provides to humanity; food, climate regulation, pharmaceuticals, waste absorption etc. The candidate enrolled in this PhD project will work in the following topics: 1- study of gene expression in different organisms and tissues; 2- study the evolution of family genes; 3- handle specimens of deep-sea fish species and collect tissues.

Requisites: Candidates should be fluent in English, and have a competitive CV (e.g., marks, experience). Candidates should have a strong interest in Evolution, Bioinformatics and Molecular Biology.

Application: Candidates are requested to apply by e-mail to Dr. David Barros-Garcia $\frac{1}{2}$ a (dbarros@ciimar.up.pt), sending a detailed CV and motivation letter. For more information about PhD scholarships and how to apply to this project, please contact Dr. David Barros-Garcia $\frac{1}{2}$ a (dbarros@ciimar.up.pt).

David Barros-Garcia $\frac{1}{2}$ a; PhD, Junior Researcher FCT

David Barros <davbarros1985@gmail.com>

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UPotsdam TenrecGenomicsPhylogenomics

PhD Position in: Phylogenomics and molecular convergence in insectivorous afrotherian mammals

A position is available in the Evolutionary Adaptive Genomics group at the Institute for Biochemistry and Biology, University of Potsdam, Germany. The position is part time (65%) and available as soon as possible. The salary will be according to German Public Service Salary Scale 13 TV-L. The position is limited to a period of 3 years and funded by the German Research Founda-

tion (DFG). As part of the assigned duties, there will be ample opportunity to conduct the independent scientific research necessary for the completion of a doctorate. Application deadline: February 20th 2023

Project Description With the emergence of phylogenomic data it could be shown that the morphologically-defined mammalian clade Insectivora, accepted for more than 180 years, contains two, not even closely related lineages of placental mammals: the Eulipotyphla (shrews, moles, hedgehogs) that originated on northern continents (Laurasia), and the Afrosoricida (tenrecs, golden moles, otter shrews) that originated in Africa. These surprising results suggested remarkable phenotypic convergence between African afrosoricidans and Laurasian eulipotyphlans, as both lineages independently evolved shrew-like, mole-like, hedgehog-like and semi-aquatic ecomorphs. Particularly on Madagascar, tenrecs diversified into multiple lineages and eco-morphological groups due to the lack of competitors (similar to the Malagasy radiation of lemurs, euplerid carnivorans, and nesomyine rodents). Due to the lack of molecular resources, the genomic basis behind this phenotypic convergence is poorly understood. In collaboration with collection researchers, field biologists and bioinformaticians, the project aims to de-novo assemble the genomes of multiple afrosoricidan species covering all phylogenetic and ecomorphological lineages (with special focus on Malagasy tenrecs) using state-of-the-art long-read sequencing technologies (e.g., PacBio HiFi). We specifically aim to (I) reconstruct the phylogenomic history of the group; (II) compare the rates of molecular and morphological evolution along the phylogenomic tree of afrosoricidans; and (III) identify genome-wide molecular convergence/parallelism among African and Laurasian insectivorans. The PhD candidate will particularly focus on genome assemblies and multiple-evidence genome annotation as well as comparative genomics and molecular convergence analyses. The position also includes the application of phylogenetic comparative methods to and total evidence estimations of morphological data to a minor degree.

Research Environment The PhD position is hosted in the Evolutionary Adaptive Genomics group at the University of Potsdam (head: Prof. Michael Hofreiter; <https://www.uni-potsdam.de/de/ibb-genomics/index>), housing a stimulating international team focused on comparative genomics, population genetics, phylogenomics, paleogenetics, systematics and taxonomy of living and extinct mammals (and other vertebrate groups). The lab has a long-term track record on the molecular evolution of afrotherian mammals (e.g., proboscideans, sirenians, macroscelideans). Parts of the project will be conducted in cooperation with the Senckenberg LOEWE Center for Translational Biodiversity Genomics.

Expectations - Master/Diploma degree in Biology, Biochemistry, Bioinformatics or in other relevant fields - first bioinformatic (e.g., Linux/bash, Python) and statistical skills to handle large-scale genomic sequencing data - strong interest in evolutionary research questions - willingness to get involved in data generation (wet lab) and integration of morphological data into phylogenomic framework - excellent communication skills and good proficiency in spoken and written English (German language skills are not a requirement, but a willingness to learn is desirable) - ability to work both independently and as part of a multidisciplinary team

Application Please send your application until February 25th 2023 as a single pdf file containing: a one-page cover letter outlining your motivation, research interests and skills; a detailed CV with a list of publications (if any); copies of transcripts, credentials and certificates; contact details of two potential referees. Please send your application to Dr Patrick Arnold (patrickarnold@uni-potsdam.de). Do not hesitate to get in contact if you have further questions. The University of Potsdam strongly supports equal opportunity and diversity. We welcome all applicants regardless of sex, nationality, ethnic or social background, religion or worldview, disability, age, sexual orientation or gender identity. We are committed to creating family-friendly working conditions.

“Dr. rer. nat. Patrick Arnold” <patrick.arnold@uni-potsdam.de>

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USouthBohemia ButterflyMeiosis LASTCALL

Laboratory of Chromosomics (University of South Bohemia, Czechia) is looking for excellent & highly motivated PhD candidates to join a project newly funded by the Czech Science Foundation.

Project: Mechanistic basis and evolution of meiotic idiosyncrasies in moths and butterflies (Lepidoptera)

Abstract: Evolution of meiotic sex still represents one of the most intriguing evolutionary mysteries. Meiosis is highly conserved in eukaryotes. Yet, its modifications are common and can provide important insights into the evolution of sex. Moths and butterflies (Lepidoptera) with their holocentric chromosomes are great candidates

for study of modified meiosis. Their chromosomes lack localized centromeres and thus should not be compatible with conventional meiotic segregation as they cannot control separation of sister chromatids. Alterations of meiosis, such as absence of recombination and inverted meiosis, can resolve the issue and were previously reported in Lepidoptera. However, our understanding of lepidopteran meiosis stems mainly from ultrastructural studies limited to only a handful of species. In the present project, we will employ immunofluorescence, Oligopaint fluorescence in situ hybridization, and linked reads and single-cell sequencing to holocentric chromosomes and variation in kinetochore coverage in Lepidoptera along with their meiosis and its modifications including female achiasmatic meiosis, male recombination landscape, and inverted meiosis.

We are a research campus with a strong tradition in biosciences focused on complex ecological, evolutionary & developmental aspects of LIFE. The Laboratory of Chromosomics (<http://bit.ly/3HtV7f4>) lead by Petr Nguyen (<https://orcid.org/0000-0003-1395-4287>) combines cytogenetic and genomic approaches to study drivers of karyotype and sex chromosome evolution. It is a part of the Department of Molecular Biology and Genetics which provide a vibrant scientific environment due to its close collaboration with research institutes of Biology Center of Czech Academy of Sciences.

The Faculty of Science represents an equal opportunity employer as certified by the European Commission's HR Excellence in Research Award.

This position will provide - study in the new Integrative biology PhD program (<http://bit.ly/3FS414Y>) - the PhD position funded by salary from the project for three years combined with a scholarship for four years - support for career development and mentoring - international team and collaborators with opportunities to travel (conferences and research internship abroad are mandatory part of the PhD curriculum) - flexible working time, 5 weeks of vacation, full health insurance, student benefits - a meal allowance, a discounted mobile tariff with a contract operator, and university kindergarten - administrative support with relocation & settling in the Czech Republic - work-life balance in a middle-sized university city offering low cost of living and high quality of life

Requirements - Master degree in relevant field of Life Sciences or Bioinformatics - strong interest in the research question - flexibility, and the ability to work both independently and in a team are essential - fluency in English - skills and experience we are looking for include: - experience in using molecular cytogenetic and/or standard molecular biology techniques - experience with

next generation sequencing and data analysis is highly appreciated - knowledge of widefield and confocal fluorescent microscopy and image data analysis is a plus but not required.

How to apply

To apply please submit your application via e-mail to jobs@prf.jcu.cz by January 6, 2023. The application should be sent as a single pdf-document and include: - CV - a letter detailing your motivation to apply with a concise summary of your previous research activities - contact information of one referee

Informal inquiries are welcome. For further information, please contact the principal investigator Petr Nguyen (petr.nguyen@prf.jcu.cz).

Please note that the selected candidate will also need to submit an application for admission as a graduate student. Formal applications for entry to the graduate programme are due January 20, 2023.

For more information, please visit the following websites: Laboratory of Chromosomics: <http://bit.ly/3HtV7f4> Petr Nguyen, principal investigator: <https://orcid.org/0000-0003-1395-4287> <http://bit.ly/3uP5ouK> The Integrative Biology graduate programme: <http://bit.ly/3FS414Y> Āeské BudĀ: <https://www.budejce.cz/en/> Petr Nguyen <nguyep00@prf.jcu.cz>

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USouthBohemia MeioticModificationsLepidoptera

Laboratory of Chromosomics, Faculty of Science, University of South Bohemia in Āeské BudĀis looking for excellent & highly motivated candidates for a PhD position who will investigate Mechanistic basis and evolution of meiotic idiosyncrasies in moths and butterflies (Lepidoptera) as a part of a project newly funded by the Czech Science Foundation.

The project will investigate holocentric chromosomes and variation in kinetochore coverage in Lepidoptera along with their meiosis and its modifications including

female achiasmatic meiosis, male recombination landscape, and inverted meiosis. Anticipated methodologies include immunostaining, ChIP, Oligopaint FISH, and whole genome and single cell RNA sequencing.

We are a research campus with a strong tradition in biosciences focused on complex ecological, evolutionary & developmental aspects of LIFE. The Laboratory of Chromosomics (<http://bit.ly/3HtV7f4>) combines cytogenetic and genomic approaches to study drivers of karyotype and sex chromosome evolution. It is a part of the Department of Molecular Biology and Genetics which provide a vibrant scientific environment due to its close collaboration with research institutes of Biology Center of Czech Academy of Sciences. The Faculty of Science represents an equal opportunity employer as certified by the European Commission's HR Excellence in Research Award.

This position will provide - study in the new Integrative biology PhD program (<http://bit.ly/3FS414Y>) - the PhD position funded by salary from the project for three years combined with a scholarship for four years - support for career development and mentoring - international team and collaborators with opportunities to travel (conferences and research internship abroad are mandatory part of the PhD curriculum) - flexible working time, 5 weeks of vacation, full health insurance, student benefits - a meal allowance, a discounted mobile tariff with a contract operator, and university kindergarten - administrative support with relocation & settling in the Czech Republic - work-life balance in a middle-sized university city offering low cost of living and high quality of life

Requirements - Master degree in relevant field of Life Sciences or Bioinformatics - strong interest in the research question - flexibility, and the ability to work both independently and in a team are essential - fluency in English - skills and experience we are looking for include: - experience in using molecular cytogenetic and/or standard molecular biology techniques - experience with next generation sequencing and data analysis is highly appreciated - knowledge of widefield and confocal fluorescent microscopy and image data analysis is a plus but not required.

How to apply

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For more information, please visit the following websites: Laboratory of Chromosomics: <http://bit.ly/3HtV7f4> Petr Nguyen, principal investigator: <https://orcid.org/0000-0003-1395-4287> <http://bit.ly/3uP5ouK> The Integrative Biology graduate programme: <http://bit.ly/3FS414Y> Āeské BudĀ: <https://www.budejce.cz/en/> Petr Nguyen <nguyep00@prf.jcu.cz>

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UTasmania EctothermicAgeing

Grad Student Positions:

The Behavioural and Evolutionary Ecology Research (BEER) Group at the University of Tasmania are looking for a PhD student. The ARC funded project centres on ageing in a wild reptile system with either a cellular or a life history focus - take your pick!

Lead supervisor: Professor Erik Wapstra (University of Tasmania, Australia)

Secondary supervisors: Dr Geoff While, Dr Luisa Fitzpatrick

1 Cellular focus option:

A core goal of evolutionary biology is to explain the remarkable diversity among organisms in patterns of growth, reproduction, senescence and survival. A potential biomarker of these patterns is the length of telomeres - repeat sequences at the end of chromosomes that protect important coding information. With each cell replication during growth and repair or with oxidative damage, telomeres become shorter until they are so short that the cell can no longer divide without errors. The cell becomes inactive or dies, ultimately affecting the whole-organism phenotype.

Telomeres mediate the links between internal and environmental stressors and growth rate, reproductive investment and lifespan. Differential changes in telomere length from development to senescence may regulate energy allocation 'decisions' that result in life history

variation within and between populations. Understanding how these cellular processes interact to influence individuals and populations requires study systems that are amenable to sophisticated experimental manipulation and that are grounded in an ecological and evolutionary framework. Ectothermic taxa with strong environmentally driven plasticity in growth and reproduction, and with extreme fluctuations in metabolic rate and oxidative stress, may hold the key to understanding ongoing selection on and evolution of telomere dynamics in the wild.

The candidate will measure the role of local adaptation plays in underpinning temperature-specific telomere dynamics. They will then use this information to predict the short- and long-term thermal effects of telomere erosion at the population level under a range of simulated climate change scenarios. This will involve the use of long-term field data, targeted physiological experiments and the development of protocols to measure cellular processes of ageing in a reptile model system.

2 Life history focus option:

A fundamental question in biology is how and why animals age. Patterns of senescence vary greatly between species, populations, and individuals. Understanding the factors that underpin divergent patterns of senescence both within and between populations has fundamental implications for our ability to predict how populations and species will respond to environmental variation, including climate change, as well as for informing evolutionary theories of ageing.

A common factor linking early life stress, ageing and time of death are telomeres, the protective regions at the end of each chromosome. However, we have a relatively poor understanding of how early life telomere dynamics mediate fitness later in life. This project aims to explicitly link an understanding of telomere dynamics in free-living ectotherm populations with experimental approaches to advance our understanding of parental and environmental effects on offspring telomeres and their effects later in life. This project will take advantage of one of the world's longest datasets on ectotherm responses to climate to provide new knowledge of how telomeres affect fitness and the role that the environment plays.

The candidate will model how evolution has shaped reptile climate-driven variation in life history and telomere dynamics through contemporary ecological timeframes. With experimental approaches, telomere dynamics will be explicitly linked to fitness by examining how parental and environmental effects influence telomere length at birth and the consequences of this for offspring fitness throughout life.

The project will involve seasonal fieldwork capturing skinks at sites around Tasmania and targeted laboratory experiments. The project will also involve the construction and analysis of a large pedigree dataset derived from 20 years of longitudinal samples. The candidate will develop skills in critical thinking, project management, fieldwork, data analysis, writing and communication.

Links to project advertisements below:

<https://www.utas.edu.au/research/degrees/available-projects/projects/biological-sciences/what-influences-ageing-in-an-ectotherm> <https://www.utas.edu.au/research/degrees/available-projects/projects/-biological-sciences/thermal-effects-on-cellular-ageing>

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UUm BeeVirusEvolution

University of Ulm, Germany

Institute of Evolutionary Ecology and Conservation Genomics

Wilfert group

This 3-year PhD is part of the ERC consolidator grant BeePath to Prof. Lena Wilfert, studying how the acquisition of vector-borne transmission has impacted the epidemiology and evolution of an important bee pathogen, Deformed Wing Virus. The project integrates evolution in natural populations of honeybees and bumblebees with experimental viral evolution in the lab, fitness assays in the virus and its hosts and modelling to understand the ultimate drivers of pathogen and host fitness. The project team includes two post-docs and labwork is supported by an experienced technician dedicated to this project. This position will focus on understanding the links between virus evolution and host fitness. It will include experimental infections and evolution using bee viruses, molecular evolution and modelling of host and pathogen fitness/health. The ERC-funded post is for 3 years (salary scale TV-L 13, 65%), with a preferred starting date in summer 2023.

Applicants will possess a relevant master's degree in a related field of study. Ideally, the successful appli-

cant should have expertise in host-pathogen interactions, molecular ecology or evolution. Experience in working with bees or insects as well as with bioinformatics and modelling approaches would be desirable. The successful applicant will be able to work autonomously but also collaboratively, and will have excellent oral and written English language skills. Expertise or an interest in working with our collaborator Prof. Mike Boots (UC Berkeley) on mathematical models would be welcome.

The position will be based at the University of Ulm, at the Institute of Evolutionary Ecology and Conservation Genomics. Ulm is a delightful historic city on the Danube in Southwestern Germany; it is one hour from the Alps, Lake Constance, Munich and Stuttgart. Additionally, the position offers the potential for an extended stay at UC Berkeley.

For further information, please contact Prof. Lena Wilfert lena.wilfert@uni-ulm.de. The closing date is the 2nd of April 2023.

The job advert with detailed information on profile and responsibilities, as well as the link to the online application system, can be found at <https://stellenangebote.uni-ulm.de/jobposting/-f80fd5949a17412c08422085a18f5732d1c26b18> Please note that applications have to be processed online!

Lena Wilfert <lena.wilfert@uni-ulm.de>

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UWaikato NewZealand SpiderMating

PhD Position: A complex systems approach to understanding the evolution of animal mating systems

Understanding the drivers of diverse animal mating systems remains a key challenge in evolutionary biology. In particular, monogyny, where males mate with a single female during their lifetime, remains an evolutionary puzzle because male animals typically maximise reproductive success by mating with multiple females. Monogynous mating systems consist of multiple life history and behavioural traits, including dramatic adaptations such as the lifelong fusing of tiny male anglerfish to a female or the spontaneous death of a male during mating to form a whole-body mating plug in garden spiders. However, intricate correlations between system

elements make it difficult to understand their roles in mating system evolution.

Using Dolomedes fishing spiders as a model system, the PhD candidate will gain insight into the evolutionary pathways to monogyny by first developing a framework that enables the use of complex systems analysis to explore mating system evolution. They will also conduct a series of field and lab assays to quantify the behaviour and life history of New Zealand Dolomedes spiders. Together with data from several other Dolomedes spiders from around the globe, the PhD student will then use network science and comparative phylogenetic methods to disentangle evolutionary patterns in mating systems.

This PhD position involves a combination of computer, lab and field work, with considerable opportunities to travel to field sites around New Zealand and the Chatham Islands. You will be supervised by Dr Chrissie Painting (University of Waikato), Dr Dion O'Neale (University of Auckland), Professor Eileen Hebets (University of Nebraska), and Professor Matjaž Kuntner (National Institute of Biology in Slovenia), with opportunities to collaborate with other researchers and communities in New Zealand and abroad.

We are seeking an independent and highly motivated applicant with: - An Honours or MSc degree in evolutionary ecology, animal behaviour or environmental science - Experience in ecological field work and/or lab and field experiments - Strong statistical analysis skills (preferably in R) - Excellent communication skills in English (written and spoken) - An open mind and a general willingness to learn and work in a team - A full driver's license

This is a fully funded PhD position for 3 years (an annual stipend of \$35,000, plus tuition fees and research costs). We encourage both international and domestic students to apply for this position, which will be based in the Invertebrate Behavioural Ecology lab at the University of Waikato in Kirikiriroa/Hamilton, Aotearoa New Zealand. Kirikiriroa is a relatively small but vibrant town to live and work, offering a fantastic mix of rural and city life. It is also centrally located in the North Island of New Zealand, making it a great base from which to travel the North Island. The successful student would ideally start by June 2023.

Interested candidates should send applications as a single PDF document comprising 1) a letter of motivation that clearly outlines your interest in the advertised project, 2) a curriculum vitae, including scientific publications if applicable, 3) academic transcripts, and 4) contact details for two academic references to Dr Chrissie Painting (chrissie.painting@waikato.ac.nz). Deadline for applications: 28th February, 23:00 NZST

For more information about the Invertebrate Behavioural Ecology lab: <https://chrissiepainting.com/>
 Noho ora mai Chrissie Dr Chrissie Painting (she/her) Senior Lecturer Te Aka Mātuatua - School of Science Environmental Research Institute Principal Investigator at Te Pāwhiri Matatini Ph: +64 7 837 9639 | Mobile: 0273061610 University of Waikato | Private Bag 3105 Hamilton 3240 | New Zealand <https://profiles.waikato.ac.nz/chrissie.painting>
chrissie.painting@waikato.ac.nz

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Vienna Population Genetics

reminder: PhD positions in Population Genetics - apply by Feb 15, 2023

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

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

Topics include:

- Adaptation from reduced genetic variation. - Development of haplotype-based inference methods. - Evolution from de novo mutations - influence of elevated mutation rates. - Evolution of sex-specific neuronal signaling. - Inference of selection signatures from time-series data. - Long-term dynamics of local *Drosophila* populations. - Speciation from standing genetic variation. - Studying the evolution of gene expression with single cell RNA-Seq. - The role of structural variation in adaptive radiation. - Understanding how selection acts on multiple tightly linked variants.

Only complete applications (application form, CV, motivation letter, university certificates, indication of the two preferred topics in a single pdf) received by February 15, 2023 will be considered. Two letters of recommendation need to be sent directly by the referees.

PhD students will receive a monthly salary based on 2.300,30 before tax according to the regulations of the Austrian Science Fund (FWF).

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

Vienna Graduate School of Population Genetics Coordinator

www.popgen-vienna.at <https://twitter.com/PopGenViennaPhD> c/o Institut für Mathematik, Universität Wien & Institut für Populationsgenetik, Veterinärmedizinische Universität Wien

T +43 1 25077 4302

Julia Hosp <Julia.Hosp@vetmeduni.ac.at>

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golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>)

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ing@mcmaster.ca)

BucknellU 1yr EvolutionaryBiology

Dear Colleagues,

We are hiring a Visiting Assistant Professor at Bucknell University in Lewisburg, PA, USA, specializing in ecology, evolution, organismal biology and/or a closely related field. Starting salary should be \$62,000 USD minimum, with strong benefits, including a 10% retirement match.

We're a collegial department with good resources and excellent students. There are lots of outdoor recreation opportunities in the area and we are ~3 hrs from NYC, DC, and Philadelphia. We'll begin reviewing applications in about one week.

Details here: <https://tinyurl.com/3npasuhs> <
<https://t.co/jNpos5BCRP> >

Some details: The Biology Department at Bucknell University invites applications for a one-year Visiting Assistant Professor position to begin Aug. 2023. We seek a broadly trained biologist with specialization in ecology, evolution, organismal biology and/or a closely related field. The successful candidate must have a strong commitment to undergraduate teaching and an equally strong commitment to diversity, inclusion, and student-centered pedagogical approaches. Documentation of the candidate's commitment to equity in education must be included in the application materials.

Thanks for spreading the word.

Steve

Steve Jordan, Professor of Biology Bucknell University
Lewisburg, PA 17837 Office: 302 Bio. Bldg. +1 570-
577-1254 Lab: 331 Bio. Bldg. +1 570-577-3816 Fax: +1
570-577-3537 <https://www.bucknell.edu/fac-staff/steve-jordan>
Appointments: <https://goo.gl/jTM71K> Steve
Jordan <steve.jordan@bucknell.edu>

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CRITFC Idaho FishGenetics

We seek qualified applicants for a Fisheries Geneticist with CRITFC (Columbia River Inter-Tribal Fish Commission) based out of Hagerman, Idaho USA. Please distribute to others that may be interested and application review begins Feb. 20, 2023. Further details on the position can be found on the CRITFC website: <https://critfc.org/jobs/fisheries-geneticist/> Fisheries Geneticist Position Details

Classification: Regular, Full time, Exempt Pay: \$77,464 - 85,212 (DOQ) Benefits: exceptional benefits package, including medical, dental, 401(k), paid time off Department: Fishery Science Location: Hagerman, ID Recruitment Period: Application review begins on 2/20/23 and will continue until position is filled. Applicants are encouraged to apply early. Contact Shawn Narum, Senior Scientist/Lead Geneticist if you wish to have an informal conversation in advance of a formal application.

We seek a Fisheries Geneticist with experience in population genomics and association mapping, and an in-depth knowledge of current molecular genomics techniques. This position is located with the genetics group at the Hagerman Fish Culture Experiment Station in Hagerman, ID. This research group tests conservation, evolution, and ecological theories related to salmonids and other fishes in support of CRITFC's fish restoration plan, Wy-Kan-Ush-Mi Wa-Kish-Wit "Spirit of the Salmon". The aim of this work is to assist with salmon recovery in the Columbia River basin to ensure that the four CRITFC member tribes (Nez Perce, Umatilla, Warm Springs, and Yakama) retain traditional salmon fisheries as they have through millennia. The Fisheries Geneticist will focus on applying empirical genetics/genomics data to address questions related to conservation and recovery of steelhead, Chinook, sock-

eye, and coho salmon, white sturgeon, Pacific lamprey, and other fishes of the Columbia River Basin. Please see the link below for full details including application instructions. <https://critfc.org/jobs/fisheries-geneticist/> Shawn Narum <nars@critfc.org>

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DukeU TriCEMAssistantDirector

Duke University is seeking applications for an Assistant Director of the Triangle Center for Evolutionary Medicine (TriCEM).

Assistant Director: Triangle Center for Evolutionary Medicine (TriCEM)

The Triangle Center for Evolutionary Medicine (TriCEM, www.tricem.org) at Duke University seeks to hire an Assistant Director. Applicants should have a Masters or Ph.D. and demonstrated experience in evolutionary medicine, scientific communication, and interdisciplinary research. Evidence of successful grant writing, an innovative mindset, excellent organizational abilities, and research experience in one of TriCEM's tracks (see below) are essential for the position. The applicant is expected to launch new initiatives that advance TriCEM's goals in education and research, including leading efforts to secure external grant funding and run funded projects. The Assistant Director will also play a major role in TriCEM programming, including events on campus, evaluation of research proposals, and organizing the Evolutionary Medicine Summer Institute (EMSI). The Assistant Director is expected to maintain TriCEM's social media and web presence and to engage in public outreach.

The position will be available initially for one year, with expectations that it will be renewed. Pay will be commensurate with experience level. The Assistant Director will receive training and mentoring from the TriCEM Director and Associate Directors, along with opportunities for additional training and networking opportunities such as workshops, conference attendance, and evolutionary medicine-relevant research consistent with TriCEM's mission and primary activities.

TriCEM is an incubator for interdisciplinary research that aims to improve understanding of human, animal, and plant health through the application of evolutionary and ecological principles. The center represents a

collaborative effort among Duke, NC State University, UNC Chapel Hill, NC A&T, NC Central University, and other NC-based institutions. TriCEM initiatives are organized around four "tracks" that capture central themes in evolutionary medicine: Pathogenic and Commensal Organisms, Cancer and Evolution, Brain Sciences, and Social and Biological Determinants of Health. TriCEM also supports research in One Health, i.e., the concept that the health of humans, animals and the environment are interconnected.

The position will start as soon as possible. Applicants should submit a CV and a cover letter that identifies relevant experience and interests in relation to the above description, and how this postdoctoral opportunity fits into the applicant's longer-term career goals. The cover letter should also include the names and contact information of up to three people who can be contacted to provide letters of reference (please do not send letters in advance of requests).

To apply to this position please upload a cover letter, C.V., and contact information for 3 references at <https://careers.duke.edu/job-invite/228056/>. No paper applications will be accepted unless specifically solicited. Questions may be directed to Dr. Charles Nunn at clnunn@duke.edu.

Duke is committed to encouraging and sustaining work and learning environments that are free from harassment and prohibited discrimination. Duke prohibits discrimination and harassment in the administration of both its employment and educational policies. Duke University is an Affirmative Action/Equal Opportunity Employer committed to providing employment opportunity without regard to an individual's age, color, disability, genetic information, gender, gender expression, gender identity, national origin, race, religion, sex, sexual orientation, or veteran status. Duke also makes good faith efforts to recruit, hire, and promote qualified women, minorities, individuals with disabilities, and veterans.

Rebecca Cook <rebecca.cook@duke.edu>

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FVA Freiburg ResAssoc OakForestAdaptation

Job offer: Research associate in ACORN-project at FVA, Freiburg, Germany

The Forest Research Institute (FVA) is the state-s research institution for forests and is under the responsibility of the Ministry of Food, Rural Areas and Consumer Protection of Baden-Württemberg (MLR).

The legal mandate of the FVA is to contribute to ensuring sustainable forest management on a scientific basis through application-oriented research in all forest-related matters.

With a dedicated team of more than three hundred employees, the FVA addresses practical issues of forest enterprises as well as questions of species protection, forest conservation or conflict management in recreational forests.

The Forest Conservation Department has an immediate vacancy for the position of a Scientific Employee (f/m/d) to be filled for the project ACORN on a full-time (100%) basis, limited until 31/03/2024. The ACORN project ("Seed Identification for Adaptive Oak Forests in Climate Change"; <https://www.acorn-biodiversa.net/>) is a transboundary BiodivERSa project. The goal of the project is to identify oak stands that exhibit adaptation to increased drought stress and to verify their contribution as seed sources to climate resilient forests. The project partners are the University of Natural Resources and Applied Life Sciences (BOKU, Vienna, Austria), WSL (Birmensdorf, Switzerland), Aristotle University of Thessaloniki (Greece), Middle East Technical University (METU, Ankara, Turkey), and the National Botanical Garden of Turkey (Ankara). The sub-project of the FVA is funded by the German Federal Ministry of Research and Education (BMBF). Within the framework of this sub-project, among other things, oak stands from Central Europe are genetically investigated. The time limit is according to the Science Temporary Contract Act of the Federal Republic of Germany.

Tasks - Scientific project work - Management and utilization of genetic (molecular markers) and genomic (whole genome sequences of DNA pools) data provided by an external service provider (e.g., sequence processing, SNP identification), environmental association analysis (associations between genotypes and environmental variables) - Development of a seed transfer concept based on the results of (i) the environmental association analysis and (ii) the associations between phenotypes and genotypes from the field experiment - Management and use of the recorded data in consultation with the partners based on the project data management plan - Writing reports and publications in collaboration with project partners - Participation in knowledge transfer

Requirements - A degree in biology, forestry and/or environmental sciences or in an equivalent field of study with a diploma or master's degree (university) or ac-

credited master's degree (university, the applicant must provide evidence of the accreditation of the course of study) - Expertise and scientific publications in the field of population genetics - Very good knowledge in statistics, R programming language and bioinformatics - Very good knowledge of English - High commitment and motivation to work in a team - Independent goal-oriented working style

Our Offer - Payment according to the salary group 13 TV-L (collective agreement for the public service of the federal states) - The compatibility of career and family is a particular concern of the FVA. In addition to flexible working hours and home office, the FVA has a day care centre for children with a focus on forest education.

- We support your mobility with the JobTicket BW.
- The FVA aims to increase the proportion of women and expressively invites women to apply.
- The position to be filled is basically divisible.
- Severely disabled persons will be given preferential consideration in case of equal suitability.

Application Please apply online via our application portal Bewerbungsportal by 12.03.2023.

Your documents will be destroyed or deleted after the completion of the application process in compliance with data protection regulations.

Contact Person(s) Jörg Kleinschmit (Department Head) Tel. 0761 4018-318 charalambos.neophytou@forst.bwl.de Charalambos Neophytou Tel.: 0761 4018-250 joerg.kleinschmit@forst.bwl.de

"Neophytou, Charalambos Dr. (FORST)" <Charalambos.Neophytou@Forst.bwl.de>

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JohnInnesCentre UK 10wks WheatCropScience

Wheat Experimental Seasonal Worker

Salary: 19,240 - 20,400 per annum depending on qualifications and experience.

Contract: 10 weeks, full-time

Location: John Innes Centre, Norwich, UK.

Closing date: 27 March 2023 Reference: 18029

Applications are invited for two individuals to join the John Innes Centre as a Wheat Experimental Seasonal Outdoor Worker.

About the John Innes Centre:

The John Innes Centre is an independent, international centre of excellence in plant and microbial genetics. We nurture a creative, curiosity-led approach to answering fundamental questions in bioscience, and translate that knowledge into societal benefits.

Our employees enjoy access to state-of-the-art technology and a diverse range of specialist training opportunities, including support for leadership and management.

Click here to find out more about working at the John Innes Centre.

The role:

We are seeking two Seasonal Workers to work almost exclusively outside at the JIC field trials site at Bawburgh, outside Norwich.

The main activities of the post will involve:

- Assisting with field-scoring, root anchorage and stem-strength testing and other field work prior to harvest as required
- Assisting with harvesting of wheat trials
- Sampling and analysis of seed post-harvest
- Occasional other duties as required.

The ideal candidate:

The ideal candidate will possess 5 GCSEs grades A*-C, or equivalent, and have a keen interest in plant science and husbandry. A degree in Biology or Agriculture is highly desirable, as is previous experience of work in field trials or agriculture.

A driving licence is essential as regular, independent travel to Bawburgh is a requirement of the post.

The candidate must be able to perform substantial physical work outdoors for long periods of time and in all weather conditions (reasonable adjustments will be considered for candidates with a disability).

Additional information:

These are full-time posts for a contract of 10 weeks, starting 15th May or 5th June 2023.

Please note that we reserve the right to close this vacancy at an earlier date. Interested applicants are strongly encouraged to submit an application well before the deadline to avoid disappointment

Please note, this post does not meet UKVI requirements to provide visa sponsorship.

For further information and details of how to apply, please visit our website <http://jobs.jic.ac.uk> or con-

tact the Human Resources team on 01603 450814 or nbi.recruitment@nbi.ac.uk quoting reference 18029.

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. We are proud to hold a prestigious Gold Athena SWAN award in recognition of our inclusive culture, commitment and good practices towards advancing of gender equality. We offer an exciting, stimulating, diverse research environment and actively promote a family friendly workplace. The Institute is also a member of Stonewall's Diversity Champions programme.

The John Innes Centre is a registered charity (No. 223852) grant-aided by the Biotechnology and Biological Sciences Research Council.

Kind regards,

Naomi Baxter HR Advisor (Recruitment) Human Resources

NBI Partnership, Norwich Research Park, Colney, Norwich, NR4 7UH

Email: naomi.baxter@nbi.ac.uk

Tel: 01603 450462 or Ext 2462

"nbi recruitment (NBI)" <nbi.recruitment@nbi.ac.uk>

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MonmouthU Marine eDNA

From: Adolf, Jason jadolf@monmouth.edu Sent: February 2, 2023 8:47 AM To: Golding, Brian golding@mcmaster.ca Subject: Marine eDNA / fisheries Senior Scientist job

Monmouth University is seeking applications for a EnvironmentalDNA/ Marine Fisheries Senior Scientist in the Biology department, which is part of the School of Science. This is a grant-funded position for up to five years (2023 - 2027) through a contract to Monmouth University for fisheries monitoring related to offshore wind development off the New Jersey coast. The incumbent will work as part of a growing team within the Dunton and Adolf laboratories at Monmouth University working on eDNA and acoustic telemetry monitoring of various offshore wind development areas. Please full job ad and apply at <https://jobs.monmouth.edu/postings/>

16424. Questions on the position may be directed to jadolf@monmouth.edu.

Thanks. J.

JASON E. ADOLF, PHD (he/him/his)

Endowed Professor of Marine Science Marine and Environmental Biology and Policy (MEBP) program

Biology Department and Urban Coast Institute

o732.263.5687

f732.263.5213

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Zoom meetings: <https://monmouth.zoom.us/j/2940751105> jadolf@monmouth.edu

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Morocco 3monthResAssist BustardConservation

Reneco International Wildlife Consultants: paid short-term research assistant position in Morocco.

We are urgently seeking a short-term research assistant to help conduct behavioural testing in a captive-bred population of North African houbara bustards (*Chlamydotis undulata undulata*) at the Emirates Centre for Wildlife Propagation (ECWP) in Missour, Morocco. The successful applicant will join an ongoing research project exploring links between individual behaviour, post-release movements and survival. The assistant tasks will involve behavioural testing of houbara bustards under captive conditions and possibly in the wild, to assess individual personality traits. Data entry and video analysis will also be part of required duties.

The position should start beginning of March 2023, with a duration of up to three months, depending on candidate availability. Besides a monthly salary commensurate with experience, travel expenses, onsite accommodation and food will also be covered.

Successful applicants should ideally have:

* Completed at least three years of undergraduate studies in animal behaviour/ethology or a closely related field. Experience with field/lab research is highly desir-

able. * Experience with testing and handling of animals, preferably birds. * Fluency in both English and French languages. * Excellent organizational skills and ability to work both independently and in a team. * Attention to detail and ability to closely follow and implement experimental protocols. * Data entry proficiency and, ideally, experience in video analysis

Reneco International Wildlife Consultants LLC. is a consulting company committed to the conservation breeding and translocation in the wild of threatened bird species, most notably the houbara bustard, and is active throughout North Africa, the Middle East and Central Asia. Reneco is managing the ECWP (<https://www.ecwp.org/>). To apply, send your CV together with a cover letter detailing your relevant experience and motivation, including contact information for two referees, all in a single PDF document to Dr Enrico Sorato: esorato@reneco.org. Review of applications will start immediately and will continue until a suitable candidate has been found.

Enrico SORATO Ecology Researcher RENECO INTERNATIONAL WILDLIFE CONSULTANTS LLC 3902, Sky Tower Al Reem Island, Abu Dhabi, UAE P.O. Box 61741 Office: +971 (0) 2 30 71 900 Mobile UAE: +971 (0) 50 258 6746 Email: esorato@reneco.org

SORATO Enrico <esorato@reneco.org>

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NewMexicoStateU Tech ViralEvolution

< <https://jobs.nmsu.edu/postings/49378> >

The Hanley lab seeks a research assistant to work on our studies of the evolutionary ecology of emerging viruses. This research assistant will be responsible for collecting and identifying, using morphology and molecular barcoding, insect vectors in New Mexico and possibly also in Mexico. This person may also be responsible for screening insect vectors for VSV. This person will also work on quantification of dengue and Zika virus in different samples. This individual will participate in general lab maintenance. Candidates should have basic knowledge of molecular biology and virology, especially PCR, and safety protocols and procedures inherent to working in a BSL2 laboratory. Our project welcomes participants of all races, ethnicities, cultural identities,

sexual orientations, and gender identities. Motivated, thoughtful, curious people with a deep-seated interest in infectious disease emergence are encouraged to apply. Department of Biology, Research Asst, Inter Posting 49378 is located at <https://jobs.nmsu.edu/postings/-49378>. NMSU is an Equal Opportunity and affirmative action employer.

Dr. Kathryn A. Hanley Regents Professor Department of Biology New Mexico State University Las Cruces, NM 88003

email: khanley@nmsu.edu telephone: 575 646 4583 website: <https://hanleyviruslab.com/> A virus is like love. It can happen to anyone at any time. Misquoting Maya Angelou

khanley@nmsu.edu

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NHM Vienna CuratorBotany

Dear Colleagues:

We, The Department of Botany (Herbarium W), Natural History Museum Vienna, Austria, are looking for an additional team member. Here is a link to our department webpage: <https://www.nhm-wien.ac.at/en/research/botany>. The role is that of a Research Associate, specifically, a curator for the seed plants and fern collection. Knowledge of the Austrian and Neotropical flora, and knowing your way around an herbarium are a plus. Please see this link <https://jobs.nhm.at/Research-Associate-at-the-Botanical-Department-mfx-de-j74.html> for the job advertisement and more detail on how to apply. Here are a few more things to keep in mind:

* Please be aware that you have to be considered eligible to work in Austria before employment can commence
 * German language skills are strongly recommended *
 We are looking for someone with strong teamwork skills
 * Application deadline: 28. Feb 2023 * Please submit a concise application letter, CV, and a scan of your graduation certificate

For enquiries email botanik@nhm-wien.ac.at using the subject line: curator position Feb2023.

Best wishes, The Curators of Herbarium W
 Naturhistorisches Museum Wien

Tanja.Schuster@NHM-WIEN.AC.AT

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NOAA SanDiego BiologicalSciTech

The Marine Mammal and Turtle Division of the NOAA/NMFS Southwest Fisheries Science Center is seeking applicants for a Biological Science Technician, ZT-0404-2 position; duty station of this position is San Diego, CA. This is a TERM appointment. The announcement has been posted under agency Merit Promotion procedures (open to Federal status candidates) and Delegated Examining procedures (open to all US citizens).

More details can be found below and if you want to be considered under both hiring authorities, you must apply to both announcements.

Status Candidates: NMFS SWFSC-23-11803690-ST - <https://www.usajobs.gov/GetJob/ViewDetails/-706904700> *All US Citizens:* NMFS SWFSC-23-11803688-DE - <https://www.usajobs.gov/GetJob/ViewDetails/706904900> -

*Eric Archer, Ph.D. *(he/him/his < <https://www.glsen.org/activity/pronouns-guide-glsen> >)
 Leader, Marine Mammal Genetics Program < <https://www.fisheries.noaa.gov/west-coast/science-data/marine-mammal-genetics-research> > Southwest Fisheries Science Center (NMFS/NOAA) 8901 La Jolla Shores Drive La Jolla, CA 92037 USA 619-837-3170

Adjunct Professor, Marine Biology < <http://profiles.ucsd.edu/frederick.archer> > Scripps Institution of Oceanography University of California, San Diego

GitHub: github.com/ericarcher ORCID: <https://orcid.org/0000-0002-3179-4769> “*The universe doesn’t care what you believe. The wonderful thing about science is that it doesn’t ask for your faith, it just asks for your eyes.*” - Randall Munroe

“*Lighthouses are more helpful than churches.*” - Benjamin Franklin

“*...but I’ll take a GPS over either one.*” - John C. “Craig” George

Eric Archer - NOAA Federal <eric.archer@noaa.gov>

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RZSS Edinburgh ResAssist ConservationGenetics

RZSS WildGenes Research Assistant Location: Royal Zoological Society of Scotland - Edinburgh Zoo

About Us The charity that owns both RZSS Edinburgh Zoo and RZSS Highland Wildlife Park are looking for committed, compassionate and conservation-minded individuals to join our expert staff team. RZSS aims to connect people with nature and safeguard species from extinction, a mission that sees us work both here in Scotland and around the world. From inspiring the next generation about wildlife in our parks to protecting chimpanzees in the Ugandan rainforest; looking after some of the world's most endangered species to saving the Scottish wildcat, RZSS is making a huge difference and we need your help to continue to grow.

The role The Royal Zoological Society of Scotland's WildGenes team are looking for a Research Assistant. Based at Edinburgh Zoo, the team uses genetic data to inform the conservation of 10-15 species annually. This role will involve supporting our research scientists in the analysis of genetic datasets. You will also be required to deliver towards reports for our conservation partners and input into project discussions at various stages. A key focus will be a project informing giraffe translocations in Uganda but RZSS has an aim to aid in the restoration of 50 species by 2030, so there are other project opportunities. You will be expected to work closely with the analysis team but also alongside our onsite genetics lab team that generates the datasets and our biobank that provides long-term preservation of genetic material. It is a full-time 3-year fixed term role working 37.5 hours per week.

Who we are looking for The successful candidate will hold an MSc (or equivalent) in a relevant scientific discipline plus job experience in a relevant role. Ideally, they will have experience in the bioinformatic analysis of genetic datasets but also of knowledge of standard molecular genetic laboratory techniques and the preservation of DNA. They will also have excellent communication skills for working with project partners including those in the university, zoo and conservation sectors.

Salary The position sits within Band D (i.e. £25,834 - i.e. £30,286 Per Annum)

Interested? For full information on how to apply, please

visit the RZSS vacancy page and follow the instructions: <https://www.rzss.org.uk/job-opportunities/> Closing date: Tuesday 28th February 2023

Invitation to interview will be by email during the 3rd week of March 2023.

For any questions and queries, please email Dr Kara Dicks at kdicks@rzss.org.uk quoting "Research Assistant" as the subject.

Our mission is to connect people with nature and restore threatened species.

The RZSS strives to be an equal opportunities employer. Registered Charity SC00406

Alexander Ball <aball@rzss.org.uk>

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SouthwesternOklahomaStateU ComparativeAnatomy

The Department of Biological Sciences at SWOSU seeks qualified individuals to serve as a full-time, Tenure-Track Assistant Professor of Biology. The candidate will be responsible for teaching a combination of Human Anatomy, General Education courses, Major's introductory and core courses, and upper-level courses in their area of expertise. We prefer a colleague with teaching experience in human anatomy or a similar course (e.g., comparative anatomy).

We seek a colleague who will contribute to a growing undergraduate research program and will work to integrate research into the biology curriculum. Ornithologists and mammalogists are especially encouraged to apply. Startup funds and research space are available. The candidate is expected to participate in department and university service.

The Department of Biological Sciences values collegiality and inclusivity as it strives to provide an excellent learning environment for students. Additional information about the department can be found at: <https://www.swosu.edu/academics/academic-departments/biological-sciences/index.php> . To apply visit: <https://swosu.csod.com/ux/ats/careersite/1/-home/requisition/303?c=swosu> . Rickey Cothran Associate Professor & Chair Department of Biological Sciences Southwestern Oklahoma State Univ. <https://>

[/rdcothran.wixsite.com/hyaella](http://rdcothran.wixsite.com/hyaella) “Cothran, Rickey”
<rickey.cothran@swosu.edu>

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SouthwesternOklahomaStateU EvolutionaryBiology

The Department of Biological Sciences at SWOSU seeks qualified individuals to serve as a full-time, Tenure-Track Assistant Professor of Biology. The candidate will be responsible for teaching a combination of Human Anatomy, General Education courses, Major’s introductory and core courses, and upper-level courses in their area of expertise. We prefer a colleague with teaching experience in human anatomy or a similar course (e.g., comparative anatomy).

We seek a colleague who will contribute to a growing undergraduate research program and will work to integrate research into the biology curriculum. We encourage organismal biologists to apply including vertebrate biologists, plant biologists and mycologists. Startup funds and research space are available. The candidate is expected to participate in department and university service.

The Department of Biological Sciences values collegiality and inclusivity as it strives to provide an excellent learning environment for students. Additional information about the department can be found at: <https://www.swosu.edu/academics/academic-departments/biological-sciences/index.php> . To apply visit: <https://swosu.csod.com/ux/ats/careersite/-1/home/requisition/303?c=swosu> . “Cothran, Rickey” <rickey.cothran@swosu.edu>

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TechnicalUMunich LabManager PlantBiodiversity

The Plant Biodiversity lab at the Technical University of Munich (Germany) is hiring a full-time lab manager

(m/f/d) for plant phylogenetic and phylogenomic research. The position is initially for two years but can be made permanent if performance is satisfying. The salary level is TV-L E8, which currently corresponds to 2.866 - 3.535 Euro per month (before taxes) depending on experience level.

Our primary study systems are the gourd family (Cucurbitaceae) and the flora of the Azores archipelago in the North Atlantic, where we study speciation processes. See more details on our webpage <https://www3.ls.tum.de/biodiv> Responsibilities include 1. DNA extraction from field and herbarium samples, PCR, sequencing (Sanger, Illumina, Nanopore). 2. Ordering supplies, managing the lab and maintaining equipment. 3. Training and helping undergraduate and graduate students in the lab. 4. Lab safety management. 5. Help with herbarium management (TUM herbarium is small, with c. 100.000 specimens). 6. Participating in lab meetings and seminars when appropriate. 7. Participation in field work and collecting trips is optional.

We look for an independent and focused person with problem-solving skills and genuine interest in research. The preferred candidate should have a B.S. or higher degree in Biology or demonstrated experience as lab manager or lab technician. The applicant should be a team player, fluent in English, and have a good working knowledge of molecular biology, and genetics, as well as basic computer skills.

If interested, please contact Hanno Schaefer (hanno.schaefer@tum.de) and include a CV and a short statement of research interests and experience in a single pdf (max. size 1 MB). Informal inquiries are also welcome. Applications will be accepted until March 10, 2023, review of applications will begin immediately.

Hanno Schaefer <hanno.schaefer@tum.de>

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ing@mcmaster.ca)

TexasAMU 2yr EvolutionaryBiology

Excellent opportunity for early career scholars (earned their doctoral degrees between January 1, 2019 and July 1, 2023) for a two-year faculty position in the Department of Ecology and Conservation Biology at Texas A&M University (<https://eccb.tamu.edu/>), with the expectation of transitioning to tenure-track. The department has a strong focus on evolution and many faculty

members are part of the interdisciplinary Ecology and Evolutionary Biology program (<https://eeb.tamu.edu/>). We are committed to building a diverse and inclusive community and strongly encourage candidates from underrepresented groups or who have experience working with a broadly diverse student population to apply.

<http://apply.interfolio.com/112395> Accountability, Climate, Equity, and Scholarship (ACES) Assistant Professor - College of Agriculture & Life Sciences

Texas A&M University: College of Agriculture and Life Sciences: Ecology and Conservation Biology

Location College Station, TX

Deadline Feb 15, 2023 at 11:59 PM Eastern Time

Description Texas A&M University's Accountability, Climate, Equity, and Scholarship (ACES) Faculty Fellows Program is a faculty hiring program that connects early career faculty advancing outstanding scholarship with relevant disciplinary units on campus. Faculty are hired as ACES Assistant Professors with the expectation of transitioning to tenure track (pending departmental review) by the end of the fellowship period. ACES is administered by the Office for Diversity in partnership with the College of Agriculture and Life Sciences.

The ACES Faculty Fellows Program promotes the research, teaching, and scholarship of early career scholars who embrace the belief that diversity is an indispensable component of academic excellence. From this experience at Texas A&M, fellows should develop an understanding of the value of diversity and inclusion and the power that it holds for students, faculty, and staff to enrich their lives.

As a public, land-grant, Hispanic-serving (HSI) research university, Texas A&M upholds its responsibility to accountability, campus climate, equity, and scholarship by maintaining a campus that affirms equity and fosters inclusion and belonging. Significantly, Texas A&M holds itself accountable to improve campus climate and equity goals through clear, accessible measures. ACES Assistant Professors are afforded access to invaluable academic and professional development experiences to advance their careers as scholars. The objective is for ACES Assistant Professors to transition to tenure-track faculty by the end of the fellowship. ACES Assistant Professors will benefit from: prescriptive mentoring, access to instructional best practices, a vast array of world-class research and productivity resources, and a robust network of renowned Texas A&M scholars from across disciplines.

ABOUT THE ACES FACULTY FELLOWS PROGRAM

* Texas A&M University's ACES Faculty Fellows Program is up to a two-year (24 month) fellowship for early career PhDs. Applicants' degrees should be completed no more than four years from the time of application. ACES Assistant Professors begin their appointment in August. * The benefits and stipend are department specific. Benefits including medical, dental, and vision are available. The faculty fellowship period generally begins August 1 and ends on July 31. Start dates are negotiable, but must commence between July 1 and August 10. * ACES Assistant Professors will receive reimbursement for one-time relocation fees, a research and travel allowance as specified in the position description, and a private office. * ACES Assistant Professors will teach one course per academic year, thereby benefiting from dedicated research time. Fellows will hold the title of ACES Assistant Professor. * A hallmark of the Texas A&M University's ACES Faculty Fellows Program is the mentoring ACES Assistant Professors will receive, as well as its attention to community-building.

Qualifications

Texas A&M University's ACES Faculty Fellows Program is up to a two-year (24 month) fellowship for early career PhDs. Applicants' degrees should be completed no more than four years from the time of application. Applicants' should have earned their doctoral degrees (PhD) between January 1, 2019 and July 1, 2023.

Applications are welcome from scholars with a strength in, and evidence of, a respect for diversity and inclusion. We invite applications from scholars whose work aligns with a field in the College of Agriculture and Life Sciences in Ecology and Conservation Biology (ECCB).

Application Instructions

Prior to beginning the online application, individuals are encouraged to review the instructions and the requested materials. Applications

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**Trinidad FieldCrewManagers
FishEvolution**

Research Manager - Ecology and Evolutionary Biology

Research managers (2) are needed to help lead a multi-disciplinary, multi-investigator, experimental study of the evolution of species interactions in Trinidad, West Indies. The research is led by Professors David Reznick (University of California, Riverside), Joseph Travis (Florida State University), Tim Coulson (University of Oxford), and Ron Bassar (Auburn University). We seek to integrate multiple biological fields for the study of these interactions in experimental populations of guppies and killifish in Trinidad. Major duties include coordinating logistics and research activities at the field station in Trinidad, leading a monthly censuses of guppy populations in montane streams, and supervising junior interns.

There are potential start dates in April 2023. We will pay a monthly stipend, cover travel, living expenses, and provide housing. Managers are expected to complete a 3-month initial training as a junior intern prior to becoming a manager.

Qualifications: Research will take place in semi-remote areas of Trinidad, sometimes under inclement weather conditions. The monthly censuses include long hours in the field and laboratory. Successful applicants will have excellent organizational and interpersonal skills, be able to drive manual transmission and 4wd vehicles, and be able to carry heavy backpacks over slippery and steep terrain. Applicants must be in good physical condition and be able to meet the demands of field research under these conditions. Applicants with first-aid/first responder training, skills in automobile maintenance, and construction skills are highly desirable. Please address these skills when applying.

Please see our website www.theguppyproject.weebly.com for more information on the project and access to reprints. Be sure to check out our video menu, which includes a “guppy censuses” as submenu VII. It details the main tasks associated with the internship.

Applicants should send a cover letter, CV, and the names and e-mail addresses of three or more professional references to David Reznick (gupy@ucr.edu). At least two of the references should be academics.

rdbassar@gmail.com

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UGroningen TheoreticalBiology

The Groningen Institute for Evolutionary Life Sciences at the University of Groningen in the Netherlands has a vacancy for a tenure-track position in Theoretical Biology with particular emphasis on teaching innovation. More information can be found here: <https://www.rug.nl/about-ug/work-with-us/job-opportunities/?details=00347-02S0009WEP>. Prof. dr. Rampal S. Etienne Theoretical and Evolutionary Community Ecology Groningen Institute for Evolutionary Life Sciences University of Groningen

“Rampal S. Etienne” <r.s.etienne@rug.nl>

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ULiverpool Four EvolutionaryEcologists

Can I draw your attention to four open positions at the University of Liverpool three at the Lectureship / Senior Lectureship level (roughly equivalent to Assistant / Associate Professor in the U.S. system) and one Professorship in ecology, broadly defined.

Eco-evolutionary biologists, or evolutionary biologists who incorporate ecology into their may potentially be good fits.

Please see below for brief descriptions and links to the application portal the deadline is March 16th. Happy to answer informal enquires if I can.

Best wishes, Andrea

Lectureships / Senior Lectureships in Ecology (3 posts) Evolution, Ecology & Behaviour 053866 43,415 - 69, 654 pa 16-Mar-2023 23:30 We are seeking to appoint three Lectureships / Senior Lectureships in Ecology to pursue internationally excellent programmes of externally funded ecological research that aligns with research strengths in the Department of Evolution, Ecology and Behaviour, particularly our Adaptation to Environmental Change research theme.

We welcome applicants working on microbial, animal or plant ecology, and at levels from population or community ecology, to the ecosystem, landscape, or global level. You may employ mathematical, experimental manipulation, field work or macroecological approaches in your research.

The Department is research intensive and your programme of research will make a major contribution to our continued scientific excellence and impact. The Department has notable ecological facilities, including the Buxton Climate Change Impact Lab and the Brian Moss Aquatic Mesocosm facility, and close links to the Liverpool-based Centre for Genomic Research and the NERC Omics facility and we would welcome applicants whose research can benefit from these facilities.

https://my.corehr.com/pls/ulivrecruit/-erq_jobspec_version_4.display_form?p_company=1&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=053866

Professor of Ecology Evolution, Ecology & Behaviour 053867 Negotiable 16-Mar-2023 23:30 We are seeking to appoint a Professor of Ecology to pursue an internationally excellent programme of externally funded ecological research that aligns with research strengths in the Department of Evolution, Ecology and Behaviour, particularly our Adaptation to Environmental Change research theme.

We welcome applicants working on microbial, animal or plant ecology, and at levels from population or community ecology, to the ecosystem, landscape, or global level. You may employ mathematical, experimental manipulation, field work or macroecological approaches in your research.

The Department is research intensive and your programme of research will make a major contribution to our continued scientific excellence and impact. The Department has notable ecological facilities, including the Buxton Climate Change Impact Lab and the Brian Moss Aquatic Mesocosm facility, and close links to the Liverpool-based Centre for Genomic Research and the NERC Omics facility and we would welcome applicants whose research can benefit from these facilities.

You will contribute to undergraduate education largely within the Biological Sciences and Zoology degree programmes.

https://my.corehr.com/pls/ulivrecruit/-erq_jobspec_version_4.display_form?p_company=1&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=053867](#)
“Betancourt, Andrea” <aabt@liverpool.ac.uk>

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UMinnesota TeachingPlantEvolution

The Department of Agronomy and Plant Genetics at the University of Minnesota in St. Paul seeks outstanding applicants for a full-time, contract faculty Teaching Assistant Professor position. This is a 9-month (academic year), non tenure-track faculty position with a 100% time teaching role. Teaching professors fulfill essential and ongoing roles in the department’s teaching mission by delivering courses in various focus areas of our curriculum and advising students in the Plant Science and Food Systems and Sustainable Agriculture majors. Also, contributing to the education objectives of large multi-institutional grants is expected. This position is considered a long-term position with established promotional guidelines (Assistant, Associate, and Full Teaching Professor) and opportunities within the department. Performance of teaching professors is reviewed annually and approximately every four years for promotion.

Teaching will be in the Plant Science and Food Systems and Sustainable Agriculture undergraduate majors. At least 12 credits of teaching is the expectation with other opportunities supporting the education objectives of large multi-institutional grants which could include developing educational modules, and leading efforts directed at broader impacts. Courses will be in the general area of agronomy/agroecology, plant development, crop physiology, international agriculture, and professional development.

A demonstrated commitment to diversity, equity, and inclusion in the workplace is essential for this role. The University recognizes and values the importance of diversity and inclusion in enriching the employment experience of its employees and in supporting the academic mission. The University is committed to attracting and retaining employees with varying identities and backgrounds.

Salary is competitive and commensurate with experience, and comes with a comprehensive benefits package.

Read the full listing and apply online at: <http://employment.umn.edu/> (search for Job Opening ID #353553). The application deadline is March 31, 2023.

I am available to remotely connect with you in the following ways: email <freym083@umn.edu>, google chat, phone call (651-247-0572) or Google hangout (please schedule calls and hangouts via Google Calendar)

Kristen Opitz Senior Administrative Director University of Minnesota Department of Agronomy and Plant Genetics < <https://agronomy.cfans.umn.edu/> > Department of Plant Pathology < <https://plpa.cfans.umn.edu/> >

420 Borlaug Hall 1991 Upper Buford Circle St. Paul, MN 55108 (612) 625-9226 freym083@umn.edu

Connect with Plant Pathology:

< <http://plpa.cfans.umn.edu/> > < <https://www.facebook.com/umnplantpathology/> > < <https://twitter.com/UMNPlantPath> > < <https://www.youtube.com/user/plpathmn> > < <https://www.flickr.com/photos/plpathmn/> > < <https://instagram.com/umnplantpath/> > < <https://www.linkedin.com/groups/8418442> >

Kristen Opitz <freym083@umn.edu>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

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UNebraska EvolutionaryBiologist

Assistant or Associate Professor, Evolutionary Biologist/Ecologist, Biology, #55511

Job Description or Duties: The Department of Biology at the University of Nebraska at Kearney is inviting applicants for a tenure-track position at the Assistant or Associate Professor level for the Fall of 2023. The successful applicant will be broadly trained in evolutionary biology or evolutionary ecology and will be expected to pedagogically address and respond to the learning needs of students from diverse backgrounds that have been historically underrepresented. Duties will include (1) teaching on-campus undergraduate courses in evolution (required), biostatistics, and ecology (preferred), (2) instructing and developing online graduate courses (in-

cluding evolution), (3) creating a successful independent research program involving students, and (4) performing service to the department, university, and profession. Applicants must demonstrate proficiency in teaching and the ability to develop an externally funded research program that involves students.

Duties will include (1) teaching on-campus undergraduate courses in evolution (required), biostatistics, and ecology (preferred), (2) instructing and developing online graduate courses (including evolution), (3) creating a successful independent research program involving students, and (4) performing service to the department, university, and profession.

Required Qualifications: Earned doctorate (by the start date) in biology or relevant area; two recent (within the last three years) publications in peer-reviewed journals; and teaching experience

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

HOW TO APPLY: To ensure full consideration, please submit all application materials before review date March 22, 2023. Questions regarding the position can be submitted to Melissa Wuellner at wuellner@unk.edu. Questions regarding the application process can be directed to 308-865-8615 AA/EO/ADA www.unk.edu. For more information and to apply visit UNK Employment Opportunities < https://urldefense.com/v3/_https://unk.peopleadmin.com/_;!!PvXuogZ4sRB2p-tU!WdQ0bi-pSFPIEY5pMFoX5jOHgy9NtCEYA5T2NQ1g3mqjeh1lkRXnMERI7Vr >.

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

The University of Nebraska at Kearney, serving over 6,000 students, is one of four University of Nebraska campuses. Established in 1905, the University has a tradition of emphasis in scholarly teaching at the undergraduate and graduate levels in a variety of disciplines. Kearney, a progressive city of over 33,000, is the educational, medical, cultural, commercial, and agricultural center of a large mid-state area. <http://www.unk.edu/>. The University of Nebraska at Kearney is responsive to University issues which support a diverse work and academic environment. The University of Nebraska at Kearney does not discriminate based on race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation in its programs, activities, or employment. This policy is applicable to all University administered programs including educational programs, financial aid, admission policies and employment policies. UNK is an Affirmative Action Equal Opportunity employer. Veterans and persons with disabilities encouraged to apply. The University affirms a policy of equal educational and employment opportunities, affirmative action in employment and nondiscrimination in providing services to the public. University employees, students and others associated with the University who have not received the benefits of these policies,

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UNotreDame DatabaseLabManager AmboseliBaboonProject

A full time database and lab manager position is available in Dr. Beth Archie's research group at the University of Notre Dame, centering on data from the Amboseli Baboon Research Project (ABRP; <https://amboselibaboons.nd.edu/>). The manager will support ABRP faculty, students, and staff by maintaining and growing BABASE, an extensive PostgreSQL database that serves as the repository for the Amboseli baboon project's long-term data. Tasks and skills include data entry, database design, data analysis, problem solving, communication, and teamwork. The manager will also contribute to administration and organization in the

Archie lab at Notre Dame, including purchasing, organizing supplies, training students in data-related tasks, and administrative support.

BACKGROUND ON THE AMBOSELI BABOONS. Founded in 1971, the ABRP is among the longest-running studies of wild primates in the world. We are a highly collaborative, supportive, international team, with members in North America, Europe, and Kenya. We collect detailed and wide-ranging data on baboon ecology, diet, social interactions, reproduction, and survival. The ABRP is directed by Beth Archie at University of Notre Dame, in collaboration with Susan Alberts (Duke University) and Jenny Tung (Max Planck Institute for Evolutionary Anthropology/Duke University). The full team includes field researchers, data managers, students, postdocs, and other trainees who interact frequently in person and online. The ABRP has had a considerable impact on biology, primatology, and evolutionary anthropology, contributing over 300 peer-reviewed papers over the years. Our research is greatly facilitated by BABASE, which the data manager will play a large role in maintaining and growing, together with project leaders and managers at Duke and Max Planck.

LAB ENVIRONMENT. The Archie lab offers a congenial research environment that encourages scientific inquiry, intellectual curiosity, friendliness, and fun. We provide an inclusive and equitable environment, and we encourage all applications regardless of gender, race, ethnicity, country of origin, immigration status, age, religion, sexual orientation, socioeconomic status, other aspects of identity, and their intersections. Notre Dame is committed to creating work and learning environments that are free from harassment and discrimination.

CANDIDATE PROFILE. The ideal candidate will have excellent attention to detail, experience curating high quality data sets to support scientific research, experience in coding (especially SQL, R, or Unix), strong communication and problem-solving skills, and initiative on data and lab management-related projects. The position can be tailored to suit different educational levels (Bachelor's to PhD) and backgrounds (e.g., ecology, anthropology, evolution, computer science etc.). Salary is commensurate with experience.

TO APPLY. To apply, please email Beth Archie at earchie@nd.edu and include a CV, cover letter, and the names and contact information for three references. Informal inquiries are also welcome. Applications will be accepted until March 31, 2023. Review of applications will begin immediately.

Elizabeth Archie (she/her) Professor Department of Biological Sciences University of Notre Dame

Notre Dame, IN Tel. (574) 631-0178 Office. 179 Galvin <http://blogs.nd.edu/archielab/> Beth Archie <Elizabeth.A.Archie.2@nd.edu>

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adkern@uoregon.edu

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UOregon ScientificProgrammer

We seek qualified applicants for a Scientific Programmer to join the collaborative lab group of Drs. Andrew Kern and Peter Ralph in the Institute of Ecology and Evolution at the University of Oregon. We are looking for an experienced software developer who will work with us on a number of ongoing directions within the group including: 1) the development of deep learning methods for population genomic inference, 2) method development and implementation for spatial population genetics, and 3) the development and implementation of population genetics methods that capitalize on recent, breakthrough representations of whole genome genealogies (i.e. tree sequences).

The candidate will have obtained a Bachelor degree or higher, 5+ years of experience with python development, experience with a compiled language such as C, and a working familiarity with modern Open Source Software development platforms (e.g., Github).

Preferred qualifications include:

- previous experience with high performance computing.
- previous experience with machine learning / deep learning
- previous experience with computational statistics or other mathematical modeling
- previous unix administration experience

More information about the Kern-Ralph colab can be found here: <https://kr-colab.github.io/> . More information about the Institute for Ecology and Evolution can be found here: <https://ie2.uoregon.edu/> . The lab is located on the gorgeous University of Oregon campus. Eugene is wonderful small city with an excellent quality of life, that affords abundant outdoor opportunities in the nearby Cascade mountains and Oregon coast.

Review of applications will begin immediately and continue until the position is filled. Interested candidates should submit an electronic application here: <https://careers.uoregon.edu/en-us/job/531086/-software-developerresearch-scientist> Questions about the position should be addressed to Andrew Kern (adkern@uoregon.edu) and Peter Ralph (plr@uoregon.edu)

UPennsylvania MachineLearning

Faculty Job: Assistant Professor: Machine Learning in Biology

The Department of Biology at the University of Pennsylvania is searching to hire a tenure-track assistant professor who develops machine learning for biological questions and systems. The search is open with respect to biological subfield, with areas of interest including: natural language processing applied to protein structure or protein engineering; physiological processes and dynamics inferred by machine learning; computer vision applied at organismal, cellular or subcellular scales; machine learning applied to ecosystem, community, behavioral, or microbial ecology; and the relationship between machine learning and neural computation.

The Department of Biology in Penn's School of Arts & Sciences is a vibrant community of faculty and students who share a broad construction of Biology and its intellectual extent. Collegiality and inclusivity are essential to the ethos of the Department, which also values collaboration and creative connections with scholars in diverse fields across the entire University.

The appointment is expected to begin on July 1, 2023. A Ph.D. or equivalent degree is expected at the start of the appointment, as well as evidence of self-motivated research using machine learning to study biological systems. Candidates should submit a cover letter, curriculum vitae, research statement including 2-3 representative publications, teaching statement, diversity statement, and at least three letters of recommendation to <http://apply.interfolio.com/121069> . Review of applications will begin on March 15, 2023 and continue until the position has been filled. The Biology Department at the University of Pennsylvania is an equal opportunity employer and is committed to creating an intellectually vibrant, culturally inclusive, and diverse community of scholars, students, and staff that reflects the diversity of the world we live in. We create working and learning environments that are affirming, equitable, and inclusive. As a community, we value dynamic interactions, thoughtful discussions, and strive for an environment where everyone is supported and val-

ued. We especially welcome applications from scholars with backgrounds that have historically been under-represented in the academy. For information on the School of Arts and Sciences' inclusion and anti-racism initiatives, please see: <https://www.sas.upenn.edu/2020-inclusion-and-anti-racism-initiatives> Leah Dennis

leahd@sas.upenn.edu University of Pennsylvania Biology Department Academic Office

“Dennis, Leah L” <leahd@sas.upenn.edu>

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UPennsylvania MachineLearningInBiology

Faculty Job: Machine Learning in Biology University of Pennsylvania, School of Arts and Sciences, Department of Biology

The Department of Biology at the University of Pennsylvania is searching to hire a tenure-track assistant professor who develops machine learning for biological questions and systems. The search is open with respect to biological subfield, with areas of interest including: natural language processing applied to protein structure or protein engineering; physiological processes and dynamics inferred by machine learning; computer vision applied at organismal, cellular or subcellular scales; machine learning applied to ecosystem, community, behavioral, or microbial ecology; and the relationship between machine learning and neural computation.

The Department of Biology in Penn's School of Arts & Sciences is a vibrant community of faculty and students who share a broad construction of Biology and its intellectual extent. Collegiality and inclusivity are essential to the ethos of the Department, which also values collaboration and creative connections with scholars in diverse fields across the entire University.

The appointment is expected to begin on July 1, 2023. A Ph.D. or equivalent degree is expected at the start of the appointment, as well as evidence of self-motivated research using machine learning to study biological systems. Candidates should submit a cover letter, curriculum vitae, research statement including 2-3 representative publications, teaching statement, diversity statement, and at least three letters of recommendation to <http://apply.interfolio.com/121069> . Review

of applications will begin on March 15, 2023 and continue until the position has been filled. The Biology Department at the University of Pennsylvania is an equal opportunity employer and is committed to creating an intellectually vibrant, culturally inclusive, and diverse community of scholars, students, and staff that reflects the diversity of the world we live in. We create working and learning environments that are affirming, equitable, and inclusive. As a community, we value dynamic interactions, thoughtful discussions, and strive for an environment where everyone is supported and valued. We especially welcome applications from scholars with backgrounds that have historically been under-represented in the academy. For information on the School of Arts and Sciences' inclusion and anti-racism initiatives, please see: <https://www.sas.upenn.edu/2020-inclusion-and-anti-racism-initiatives> Equal Employment Opportunity Statement The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania is an equal opportunity and affirmative action employer. Candidates are considered for employment without regard to race, color, sex, sexual orientation, gender identity, religion, creed, national or ethnic origin, citizenship status, age, disability, veteran status or any other legally protected class. Questions or concerns about this should be directed to the Executive Director of the Office of Affirmative Action and Equal Opportunity Programs, University of Pennsylvania, 421 Franklin Building, 3451 Walnut Street, Philadelphia, PA 19104-6205; or (215) 898-6993 (Voice) or (215) 898-7803 (TDD).

COVID-19 Vaccination Policy

COVID-19 vaccination is a requirement for all employees at the University of Pennsylvania. New hires are expected to be fully vaccinated before beginning work at the University. Visit the Penn COVID-19 Response website for the latest information about Penn's vaccine requirements.

Joshua B. Plotkin Walter H. and Leonore C. Annenberg Professor of the Natural Sciences University of Pennsylvania <http://evolution.sas.upenn.edu/> “Plotkin, Joshua B” <jplotkin@sas.upenn.edu>

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USouthCarolina PlantBiology

The Department of Biological Sciences in the College of Arts and Sciences at the University of South Carolina invites applications for a postdoctoral fellow as part of the inaugural cohort of the University's new "Bridge to Faculty" program. We invite applications from outstanding scholars who investigate fundamental concepts and mechanisms in *Plant Biology*. We welcome applications from researchers in any area of plant biology. Research interests of potential faculty mentors include (but are not limited to) plant development, environmental stressors, ecology, and evolution.

Scholars will have completed a PhD in Biological Sciences (or a related field) by July 1, 2023. The Department of Biological Sciences is committed to building and supporting a diverse, inclusive, and equitable community of scholars and students and shares the University's goals regarding faculty diversity and excellence. **Designed to attract, support, and retain scholars from groups historically underrepresented in their departments or fields, the Bridge to Faculty program is the University of South Carolina's newest and most promising initiative.** Manifesting the university's commitment to "cultivating a more diverse, equitable, and inclusive campus where every individual has the opportunity to flourish and thrive," the program seeks to recruit early-career scholars who, if successful during the post-doctoral period, will have the opportunity to transition directly to a tenure track faculty line at USC starting in the 2025-2026 academic year.

The Bridge to Faculty Program will enable scholars to deepen their research expertise, expand their scholarly profiles, undertake academic research in Plant Biology, and strengthen the College's and University's research community through their diverse perspectives. The Bridge to Faculty scholar in Biological Sciences will join eleven other scholars from across the university who will form a dynamic and supportive community of scholars.

Situated in USC's Office of Diversity, Equity, and Inclusion, Bridge to Faculty Scholars have a unique opportunity to receive:

* Professional development to prepare the fellow for a full-time faculty position * Training and development in research, pedagogy, and strategic engagement * Additional mentorship from senior professors and University administrators * Networking and connection-building

with university administration * Opportunities to engage and practice as an active member of the USC community

The Bridge to Faculty Scholar is expected to: 1) establish a robust program of research, 2) participate in the intellectual life of the department, 2) meet regularly with faculty mentors, 3) participate in professional development opportunities and 4) collaborate across the college and institution when deemed appropriate. The scholar will have access to institutional and departmental resources specifically designed to support their readiness for a tenure-track position.

Qualifications: The selection committee welcomes applications from candidates who contribute to increasing diversity in their fields as historically underrepresented persons in higher education.

Qualified candidates should submit the following: * A cover letter describing the applicant's research interests, specifically at USC, with relevant personal and professional background. In addition, candidates should identify 1-2 faculty members who could act as their post-doctoral supervisor while they are in residence at USC * A curriculum vitae * Academic Transcripts (showing completion of PhD by August 16, 2023) * A statement of research interests (2-3 pages) * Names, addresses, and email addresses of three professional references * A statement of any required accommodations OPTIONAL: A statement sharing your experiences related to diversity, equity, and inclusion and how they can help advance the University's goal of "cultivating a more diverse, equitable, and inclusive campus" (1-3 pages). Varied socioeconomic and cultural experiences, teaching goals that emphasize diversity, and first-generation college graduate status should be highlighted in the statement.

Fellowship applicants must be US citizens or permanent residents. To ensure full consideration, application materials should be submitted on [uscjobs.sc.edu](https://uscjobs.sc.edu/postings/139877): <https://uscjobs.sc.edu/postings/139877> and should be received by February 28, 2023. If you have any questions about the application process or this position, please contact Dr. Beth Krizek, Search Committee Chair, Department of Biological Sciences (krizek@biol.sc.edu) or Carrie Wessinger, Search Committee Member, Department of Biological Sciences (wessinc@mailbox.sc.edu).

Fellowship salary is competitive (\$55,000-\$60,000 commensurate with experience) and the position includes a generous benefits package with access to medical, vision, dental, and life insurance. Each award is for

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mcmaster.ca/~brian/evoldir.html

UTexas Austin Managing Director Field Station Network

The University of Texas at Austin Field Station Network seeks a forward-looking Managing Director to develop and plan the operations and research activities across a growing network. While each field station provides significant research opportunities, the value of a field station network is fully realized when research and learning activities use the distributed sites synergistically to allow inference at larger scales and to address regional and global questions. They will be responsible for driving the development, operations and research coordination of UT Austin field stations. The Managing Director will consult with faculty user groups and College administration to optimize use for research, education and outreach. For more information about the University of Texas at Austin's Field Stations, please go to <https://biodiversity.utexas.edu/>. RESPONSIBILITIES

Coordinate the use of facilities and access for education and research. Work with the field station managers to ensure safe access and use. Participate with classes and outreach events. Coordinate user research requests.

Support the development of the Field Station Network and Programs. Update the Mission and Strategic Plans. Develop policies and Standard Operating Procedures to implement the plans and improve user experiences. Participate in the expansion of the Field Station Network with College, Development and Donors. Organize and/or participate in planning groups with the College, Advisory groups, Biodiversity Center Leadership and external organizations such as the Organization of Biological Field Stations.

Maintain and improve infrastructure of the field labs. Update and implement habitat management plans for stewardship and research. Coordinate activities of station managers for effective maintenance and safe operation of facilities. Oversee efficient maintenance through contractors and UT service facilities.

Infrastructure development. Participate in planning and implementation of new infrastructure across the field stations. This includes master plan development, securing funding from internal and external sources, and coordinating the development projects.

Provide technical support (geodatabase, maps, statistics,

molecular lab) for users. Implement the data management plan, provide user access to geodatabases and data products. Provide user support such as molecular lab services, greenhouse and fish tank cultures, research plot maintenance.

Establish and support long-term research studies across the Network, working with Graduate and Undergraduate Research Assistants and interns. Long-term studies include baseline plant, arthropod and soil microbial diversity and phenological surveys, networked ecosystem studies, and other studies initiated by field station research staff.

Develop and support outreach efforts. Coordinate K12 and public events, organize volunteer and docent programs. Provide a strong social media presence.

Manage budgets for maintenance and operations, for new infrastructure and for research and teaching programs. Enhance internal funding mechanisms for fee recovery and use of central funding resources. Write proposals to secure new funding for infrastructure and research. Apply for grants from foundations, local, state, and federal funding agencies. Prepare technical and financial reports.

Manage personnel matters through recruitment, training, supervision and co-ordination of staff and student associates.

CANDIDATE PROFILE

PhD in biology, environmental science, or related fields.

Three or more years of suitable experience in field of specialization.

Three or more years of experience managing staff, budgets, and operations of a relevant organization or research program.

PREFERRED QUALIFICATIONS

Experience with infrastructure development for research and teaching facilities.

Experience with institutional administration and donor relations.

Excellent leadership skills for team development and strategic planning.

Ability to implement operations and infrastructure activities within budget and on time.

Excellent communications skills with faculty, administration and donors.

Ability to secure funding through proposals and donor development.

Stewardship of land to support diverse ecosystems for

research and teaching.

SALARY RANGE

\$120,000 + depending on qualifications

TO APPLY:

Please visit this link:

https://utaustin.wd1.myworkdayjobs.com/en-US/-UTstaff/job/Managing-Director-UT-Field-Station-Network_R_00024880 You will be asked to submit the following materials:

Resume/CV, 3 work references with their contact information (at least one reference should be from a supervisor), Letter of interest

Applications will be accepted until March 6, 2023. Review of applications will begin immediately.

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

Vetmeduni Vienna SystemGenetics

Vienna has a vibrant evolution community (<https://www.evolvienna.at>) and welcomes the application of outstanding candidates to further strengthen our profile.

informal enquiries can be sent to Christian Schlötterer (christian.schloetterer@vetmeduni.ac.at)

here is the official blurb:

The Department for Biomedical Sciences seeks to appoint a

Professor for “System Genetics”

in accordance with the appointment procedure for university professors established by § 98 of the Austrian Universities Act 2002.

Envisaged Job Starting Date: January 2024

Deadline for applications: 12.04.2023

Field of activity

The core purpose of this role is the representation and further development of the subject of systems genetics in research and teaching. Establishing a distinct, internationally recognised research focus in the field is

considered particularly important, as is encouraging and promoting young researchers. State-of-the-art research facilities and outstanding opportunities for teaching and research are available.

The successful candidate will be expected to develop an independent research programme with sufficient external funding. A research profile in functional and cross-species relationships between DNA sequence, nucleic acid structures, epigenetic code, gene expression, signalling pathways (modules), metabolism and phenotypes is desired. Statistical/bioinformatic integration of multidimensional data types with genetic variation will be accompanied by high-resolution experimental approaches.

Collaboration with the clinical area of veterinary medicine including laboratory animal medicine with interdisciplinary approaches in comparative genetics, animal health and human medicine is expected.

In teaching, the successful candidate will coordinate and perform tasks in the Diploma Programme in Veterinary Medicine and Bachelor/Master Programmes in Biomedical Sciences, as well as in postgraduate scientific training.

The job holder’s responsibilities will also include working with university bodies and participation in national and international expert committees. Once appointed, the professor will also be expected to promote joint work within the department, with the university clinics, and with other internal and external facilities.

Required education, qualifications and experience

§Completed studies in human medicine or veterinary medicine or natural sciences

§Completed relevant Doctorate / PhD and comparable scientific qualifications with a focus on system genetics

§Evidence of excellent research in the field of comparative systems genetics with a focus on molecular mechanisms, as well as their overlaps/matches and species specificities

§Outstanding publication track record in line with the career level

§Evidence of having successfully obtained funding from domestic and international funding providers, and of having led projects conducted using those fundings

§Demonstrated experience in the application and development of high-resolution experimental and statistical/bioinformatics methods

§Teaching qualifications and experience in supervising and training undergraduate and postgraduate students

§Proven experience in working collaboratively in translational teams and an international, interdisciplinary professional network

§Good command of English (B2)

Required general skills and abilities

§Excellent communication and presentation skills

§Strong leadership and social skills

§A commercial and strategic mindset

§Decision-making ability and assertiveness

§Strong commitment to the continuing success and development of Vetmeduni

Additional desired qualifications and skills

§Experience in technology transfer for biomedical/biotechnology applications

§Practical competence and advice in breeding hygiene

§Good command of German (non-German-speaking applicants are expected to reach at least level B1 within 2-3 years)

What we offer

§Top university: Vetmeduni is one of the leading academic education and research institutions in veterinary medicine in Europe

§Stable employer

§Attractive campus

§Personal and professional training and development opportunities

§Health Care

§Diversity- and family-friendly university culture

§Children’s day care and holiday care options

§Numerous attractive fringe benefits

§Employee events

Minimum salary

The minimum salary according to the Collective Bargaining Agreement for University Staff is EUR 5.826,50 gross per month (14 monthly salaries). A higher salary may be agreed during the appointment negotiations.

Applications

Application documents must include:

1. Letter of application with a brief description of:

§Current research interests and research plans for the immediate future

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

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CallForProposals SatelliteEvoDevoMeetings

Dear Friends and Colleagues of the Evo-Devo Community,

Hope you had a great start into 2023!

As in previous EED conferences we will have the opportunity to have Satellite Meetings on specific organisms or topics in the two days before the EED conference. For example, there were Satellite Meetings on Amphioxus, Cnidaria, Platynereis and Tribolium in the past.

If you are interested in organising a satellite meeting for your community please submit a proposal until *March 31st 2023*:

<https://forms.gle/rvTfscLzXWCg34xd7> The Satellite Meetings will take place at the premises of the University of Helsinki on 24.6 and/or 25.6.2024 and we will have rooms of different sizes (hence we ask for rough estimates regarding participants). This means there is also infrastructure for coffee breaks and lunches. Satellite Meetings are open to all registered delegates and charged at a supplement fee and should have an expected attendance of 30 or more. It will be possible to make the bookings for the Satellite Meetings via the main registration form.

More information about EED 2024 can be found here: <http://www.euroevodevo2024.fi> Feel free to contact us for additional information (euro-evo-devo-2024@helsinki.fi).

Jukka Jernvall (EED President)

Annette Becker (EED Vice-President)

Sylvie Ri₂taux (EED Program Officer)

Tom Van Dooren (EED Treasurer)

Rainer Melzer (EED Secretary)

Carlos Guerrero Bosagna (EED Marketing and Sponsorship Officer)

Claudius Kratochwil (Chair of the EED 2024 Local Organising Committee)

Gerd Mi₂ller (former EED president)

Society Homepage: <https://evodevo.eu>
EuroEvoDevo2024 Homepage: <http://www.euroevodevo2024.fi>
EuroEvoDevo2024 Twitter: @EED2024

EuroEvoDevo2024

Mastodon:

@EED2024@ecoevo.social

EED Society <eed.soc@gmail.com>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>) golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>)

CallProposals PhilTransB

Dear all,

The next deadline for proposals for theme issues of the journal Philosophical Transactions B is 18 April.

This journal publishes high-quality theme issues on topics of current importance and general interest within the life sciences, guest-edited by leading authorities and comprising new research, reviews and opinions from prominent researchers. It's a great opportunity to highlight an emerging research area and create a lasting, influential resource for your field.

Find out more about the benefits of guest-editing, what we're looking for and how to submit a proposal at <https://royalsocietypublishing.org/rstb/submit-proposal>, or contact the Commissioning Editor Helen Eaton philtransb@royalsociety.org

Helen Eaton <helen.eaton@royalsociety.org> Helen Eaton <helen.eaton@royalsociety.org>

FieldworkVolunteers PyreneesPlantEvolution

Call for fieldwork volunteers 2023 - Plant evolution in the Spanish Pyrenees

Nick Barton's group at the Institute of Science and Technology (ISTA) (<https://bartongroup.pages.ist.ac.at/>) is looking for volunteers to assist with fieldwork on plant speciation in the Spanish Pyrenees this coming summer (1st June - 1st August). This is a great opportunity for anyone looking to obtain experience in fieldwork related to evolutionary biology, speciation and plant ecology.

We study evolutionary dynamics and speciation in snapdragons. The study, which has been running since 2009, involves fieldwork in natural hybrid zones between two

subspecies with flower colour differences. The goal is to understand how different evolutionary forces like natural selection have shaped this diversity.

We are seeking volunteers to assist with the fieldwork, which involves working in teams to map locations of individual plants (GPS) (the plants are primarily found on the roadsides), tag and sample them for leaves and flowers, measure traits, and process material for later DNA extraction. There may also be opportunities to be involved in other aside projects. The work is outdoors as well as indoors - about one-third of the of time will be spent indoors curating leaf samples and organizing and preparing sampling equipment. The work is highly team orientated, typically in groups of 2-3 in the field and larger groups processing samples back at the research station. Since we aim to sample all living individuals in the hybrid zone during the flowering season, the daily workload can vary significantly. At peak season, we are often very busy and our daily routines change accordingly.

The field site is near Planoles in a beautiful part of the Pyrenees in North Eastern Spain (Catalonia). We stay in comfortable apartments overlooking a picturesque valley, with close access to hiking trails and small villages.

The ideal applicant is an enthusiastic, hardworking biology student with strong interest in working outdoors. You must be meticulous with recording data and also be comfortable working as part of a team. Experience with field-based projects and plants is helpful but not essential. Climbing experience is useful as a small amount work is conducted on ropes. We are looking for volunteers between the 1st June and the 1st August. We ask people to commit to stay for 3 weeks. Applicants must be located in Europe or the UK.

We cover all food, lodgings, Covid testing and travel within Europe/UK are covered.

How to apply? By the closing date of March 20th please send (i) your CV, (ii) a short explanation about why you are interested, and (iii) your availability between the above dates to field.volunteer.2023@gmail.com. Please send any questions to the same address.

For fieldwork photos and more information, please visit the Barton Group fieldwork page: <https://bartongroup.pages.ist.ac.at/fieldwork-2023/> Rosina Soler Schaller <Rosina.Soler@ist.ac.at>

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InfectiousDisease PhilTransB

Royal Society Publishing has recently published a special issue of Philosophical Transactions B: Infectious disease ecology and evolution in a changing world compiled and edited by Kayla King, Matthew Hall and Justyna Wolinska and the articles can be accessed directly at www.bit.ly/PTB1873

A print version is also available at the special price of £40.00 per issue from sales@royalsociety.org

Felicity Davie Royal Society Publishing

T +44 20 7451 2647

The Royal Society 6-9 Carlton House Terrace London SW1Y 5AG <http://royalsocietypublishing.org> Registered Charity No 207043

Felicity.Davie@royalsociety.org

LinneSys SystematicsResearchFund

Dear all,

The joint fund of the Linnean Society of London (<https://www.linnean.org/>) and the Systematics Association (<https://systass.org>), the LinneSys: Systematics Research Fund provides grants annually in the value of up to $\frac{1}{2}$ 1,500 for small-scale research and education projects in the field of taxonomy and systematics on any organism group from microscopic to macroscopic past and present.

It is eligible to request funding towards fieldwork expenditure, laboratory consumables, purchase of scientific equipment, time on analytical equipment and services for preparation of specimens, and cover of sequencing costs. It is possible to request funding towards publication of books, monographs and field guides.

Projects involving education, training courses or citizen science activities are eligible if they focus on taxonomy and systematics. Applications for education activities or training courses must include the target audience/s, approximate number of participants and anticipated learning outputs. Citizen science applications must describe how the project team will be working together

and/or co-design with the public, as well as listing the desired outcomes.

An applicant must be a current member of the Systematics Association or Linnean Society of London. More information on guidelines provided here: <https://systass.org/grants-and-awards/linnesys/> Deadline: 23 February 2023

Any questions please email: LinneSys@systass.org

Dr Anne D. Jungblut

Grants and Awards Officer

Systematics Association

Anne Jungblut <a.jungblut@nhm.ac.uk>

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LouisianaStateU PostbaccTrainingProgram Mar31

Applications to the Louisiana Graduate Network in Applied Evolution (LAGNiAppE) are open!

The research training program is a designed for recent college graduates to explore and develop research skills in evolutionary biology. Scholars will conduct original research under the mentorship of two faculty members from LSU and other partner universities, participate in professional development activities, and expand high demand technical skills in preparation for a diverse array of STEM careers. LAGNiAppE emphasizes recruitment of scholars who lack significant past research experience, especially those from underrepresented backgrounds.

Our website and application information can be found here: <https://lsu.edu/science/biosci/programs/-postbacc-research/index.php>. The application deadline for this year's cohort is March 31, 2023.

For any further questions, please feel free to contact us to evo_lagniappe@lsu.edu

LAGNiAppE Network <evo_lagniappe@lsu.edu>

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MolEcologyPrize Nominations

Nominations for Molecular Ecology Prize

We are soliciting nominations for the annual Molecular Ecology Prize.

The field of molecular ecology is young and inherently interdisciplinary. As a consequence, research in molecular ecology is not currently represented by a single scientific society, so there is no body that actively promotes the discipline or recognizes its pioneers. The editorial board of the journal Molecular Ecology therefore created the Molecular Ecology Prize in order to fill this void, and recognize significant contributions to this area of research. The prize selection committee is independent of the journal and its editorial board.

The prize will go to an outstanding scientist who has made significant contributions to molecular ecology. These contributions would mostly be scientific, but should also include other kinds of contributions that were crucial to the development of the field. The previous winners are: Godfrey Hewitt, John Avise, Pierre Taberlet, Harry Smith, Terry Burke, Josephine Pemberton, Deborah Charlesworth, Craig Moritz, Laurent Excoffier, Johanna Schmitt, Fred Allendorf, Louis Bernatchez, Nancy Moran, Robin Waples, Scott Edwards, Victoria Sork, Fuwen Wei, and Kerstin Johansson.

Please send your nomination with a short supporting statement (no more than 250 words; longer submissions will not be accepted) and the candidate's CV directly to Joanna Freeland (joannafreeland@trentu.ca) by Friday, March 31, 2023. Organized campaigns to submit multiple nominations for the same person are not necessary and can be counterproductive. Also, note that nominations from previous years do not roll over.

With thanks on behalf of the Molecular Ecology Prize Selection Committee

Joanna Freeland <joannafreeland@trentu.ca>

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NewPhytologist TansleyMedalWinners

Dear all,

We are delighted to announce that the 2022 New Phytologist Tansley Medal for excellence in plant science < <https://www.newphytologist.org/awards/tansleymedal> > has been awarded jointly to Leander D.L. Anderegg and Moi Exposito-Alonso.

Leander < <https://nph.onlinelibrary.wiley.com/doi/10.1111/nph.18725> > is an Assistant Professor at the University of California Santa Barbara (USA) whose work is driven by his fascination of the landscape-scale consequences of plant physiology. In his Tansley insight 'Why can't we predict traits from the environment?' < <https://nph.onlinelibrary.wiley.com/doi/10.1111/nph.18586> >' Leander reviews the eco-evolutionary processes that drive trait variation at various ecological scales and their implications both for how we look for trait-environment relationships and for how we interpret trait variation.

Moi < <https://nph.onlinelibrary.wiley.com/doi/10.1111/nph.18735> > is a Carnegie Staff Associate at the Departments of Plant Biology and Global Ecology at the Carnegie Institution for Science and Assistant Professor (by courtesy) of Biology at Stanford University (CA, USA). Moi's expertise in plant evolutionary ecology, biology and genetics, combined with computational approaches, informs his research programme, which aims to forecast the evolutionary outcomes of populations under climate change, and to ultimately anticipate potential future biodiversity losses. These themes are explored in Moi's Tansley insight 'Understanding local plant extinctions before it's too late: bridging evolutionary genomics with global ecology' < <https://nph.onlinelibrary.wiley.com/doi/10.1111/nph.18718> >'.

We also congratulate two outstanding Tansley Medal runners-up:

Y. Anny Chung is a Haines Distinguished Assistant Professor in Field Botany (Belowground) in the Departments of Plant Biology and Plant Pathology at the University of Georgia, Athens, GA, USA. Anny's Tansley insight is titled 'The temporal and spatial dimensions of plant-soil feedbacks' < <https://nph.onlinelibrary.wiley.com/doi/10.1111/nph.18719> >'.

J. Grey Monroe is an Assistant Professor in the Department of Plant Sciences at the University of California Davis, USA. Grey's Tansley insight is titled 'Potential and limits of (mal)adaptive mutation rate plasticity in plants' < <https://nph.onlinelibrary.wiley.com/doi/full/10.1111/nph.18640> >'.

The New Phytologist Tansley Medal for excellence in plant science < <https://www.newphytologist.org/awards/tansleymedal> > is awarded annually in recognition of outstanding contributions to research by individuals in the early stages of their career. We offer our warmest congratulations to Leander, Moi and their fellow finalists, and wish them continued success in their future careers.

The judging panel for the 2022 Tansley Medal was comprised of New Phytologist Editors Amy Austin (Buenos Aires, Argentina), Ian Dickie (Canterbury, New Zealand) Liam Dolan (Vienna, Austria), Elena Kramer (Cambridge, MA, USA) and Shuhua Yang (Beijing, China).

Supporting early career scientists

The New Phytologist Foundation supports early career plant scientists, through a number of initiatives including the annual Tansley Medal competition < <https://www.newphytologist.org/awards/tansleymedal> > and the New Phytologist next generation scientists symposium < <https://www.newphytologist.org/nextgenevents> >. This year's symposium will be held in Singapore, 2-5 July 2023. Applications to attend will close on 26 February. The 2024 Tansley Medal competition will open later this summer, with an application deadline of 1 November 2023.

We encourage applications from across the breadth of the plant science community - please share these opportunities with your colleagues and students world-wide!

The New Phytologist Foundation is a not-for-profit organisation committed to the advancement and dissemination of knowledge and research in plant science. The Foundation currently fulfils this objective by publishing the scholarly journals New Phytologist and Plants, People, Planet and by funding a wide range of activities, such as the international New Phytologist Symposia and Workshop

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

Nicaragua Cetacean Training Program

Dear EvolDir community,

Association ELI-S is a small non-profit organization based in France that was created in 2013. Our organization aims at promoting, protecting and conserving cetaceans in Central America. We are running the Cetacean Conservation Project of Nicaragua since 2016. This pioneer project aims to generate knowledge on cetacean presence, population size, distribution and habitat use patterns. The expected output is to generate: 1) scientific data on whales, dolphins and sea turtles in Nicaragua to assess distribution and movement patterns, behaviours and, 2) environmental awareness to the local communities in order to create a socio-economic relevance in conserving and protecting their natural environment and 3) responsible eco-tourism by participating to beach clean-up.

Association ELI-S is offering a training program on marine mammal research techniques both online and in the field according to your availability.

You can participate in our online training program in January and in our field training program between March and April (season 1) and August-September (season 2) 2023 in San Juan del Sur. Duration: typically 2 weeks (or more)

Team

- Joëlle De Weerd, PhD Candidate Vrije Universiteit Brussel (VUB), Project director of Cetacean conservation of Nicaragua
- Leslie Blanchet, MSc, Research Assistant in Association ELI-S

WHAT WE OFFER:

- A unique experience in Central America to study cetaceans
- Online training covering following topics: Cetaceans Ecology and Biology, Research methods and Fieldwork (23rd to 27th of January)

A High- quality training program of two weeks including at least 4 field trips

- Experience research and conservation in the field from a researcher and local community perspective

- Valuable experience to pursue a marine research career
- Possibilities of entering research community and developing scientific and professional web
- Real field experience giving additional value to your CV
- Possibilities to learn a new language (French or Spanish)

This training is a unique opportunity to participate in a pioneer research project on cetacean conservation in Central America under the supervision of experienced marine biologists, which gives the opportunity for the participants to develop both professionally but also personally thanks to the unique experience to live within local communities.

Location: San Juan del Sur, South-West of Nicaragua

Project length: 1st of March to 15th of April and 1st of August to 30th of September (deadline: June 30th) with a minimum of 2 weeks commitment.

Age: minimum 21 years old

WHAT TO EXPECT: - Assist in boat-based surveys and data collection on cetaceans - Photo-identification of whale and dolphin species including matching and grading (computer based) - Data entry of collected field data - Participate to public outreach and events

Knowledge you need to participate:

- Enthusiastic, conscientious and proactive (!)
- Interest in marine wildlife and conservation

Be able to solve problem in unanticipated situations

Have an attention to detail and follow policies and procedures

- Being comfortable on a small boat and spend long hours on a boat in the sun

- Being able to work in a small team

- Be able to swim

- Spoken language: English (mandatory), French (not mandatory) or Spanish (optional)

Successful candidates will:

- Gain valuable and unique experience in cetacean survey techniques including behavioural studies, biopsy sampling procedures and acoustic data collection

- Work in a very dynamic environment

- Get insight in running a research project in developing countries

DATES AND FEES

15 February - 28 February

1st March - 15 March

15 March - 31 March

1st April - 15 April

1st August - 15 August

15 August - 31 August

1st September - 15 September

15 September - 30 September

(min. 2 weeks commitment)

500\$ for two weeks

What is included :

- A membership to Association ELI-S for a year
- An online training on field methods and protocols of 10 hours (23rd to 27th of January)
- A full marine biologist training (photo-identification, acoustic, data collection, behaviour ...)
- Fieldwork including boat surveys
- Team support for travel logistics and local activities

What is not included:

- Accommodation (an extra of 300\$ for 2 weeks is asked for an accommodation)
- Meals
- Travel to the study site (international flight and national transportation) but we'll help you to organise your trip if needed.
- Personal expenses: restaurants, bars, telephone, laundry, etc.
- Travel health insurance
- VISA fee (10\$)

To apply: Please email your CV and cover letter outlining your experience and motivations. Send this to leslie.blanchet@eli-s.com with "Training program 2023" in the subject line. Interviews via Skype or Zoom.

Leslie Blanchet (MSc) Research Assistant in Association ELI-S

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

OmennPrize BestEvolutionaryMedicineArticle

Nominations for the \$5000 Gilbert S. Omenn Prize are open until April 1, 2023. Full details at <https://isemph.org/Omenn-Prize> The nomination form is here <https://airtable.com/shrkwknmQWbx5mB1x> The International Society for Evolution, Medicine and Public Health website is at <https://isemph.org> The \$5000 Gilbert S. Omenn Prize is awarded by the International Society for Evolution, Medicine, and Public Health <https://isemph.org> for best article published in the previous calendar year on a topic related to evolution in the context of medicine and public health.

Nominations are open until April 1, 2023 for the best article in any peer-reviewed journal on a topic related to evolution in the context of medicine and public health with a final publication date in 2022. The winning article is announced in May and the prize is awarded to the first author of the article at the ISEMPH annual meeting. The prize includes travel, lodging, and an invitation to present at talk at the ISEMPH annual meeting.

All peer-reviewed articles that use evolutionary principles to advance understanding of a disease or disease process are eligible. The prize committee will give priority to articles with implications for human health, but many basic science or theoretical articles have such implications. Authors are encouraged to nominate their own articles, but nominations of articles by others are also welcome.

Please use this form to submit your nomination. <https://airtable.com/shrkwknmQWbx5mB1x> The prize is made possible by a generous donation by Gilbert Omenn, M.D., PhD. Director of the Center for Computational Medicine and Bioinformatics at the University of Michigan where he is a Professor of Internal Medicine, Human Genetics, and Public Health. Dr. Omenn served as Executive Vice President for Medical Affairs as Chief Executive Officer of the University of Michigan Health System from 1997-2002. He is a past president of the American Association for the Advancement of Science and a member of the Institute of Medicine of the National Academy of Sciences.

This year's prize committee is chaired by Caleb Finch; members include Koos Boomsma, Raghavendra

Gadagkar Steve Austad, Connie Mulligan, and Carol Worthman. Articles by author's with close associations with members of the prize committee are not eligible.

Randolph Nesse <nesse@asu.edu>

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Tribute to Professor Michel Vervoort

Dear all,

You will find via the following link a tribute in honor of Professor Michel Vervoort, who passed away on December 8th. <https://stemdevevo.wordpress.com/2023/02/01/tribute-to-michel-vervoort/> Sincerely - "Stem Dev Evo" team

Eve Gazave, PhD Chargé de Recherche CNRS CR - HDR iquipe Cellules Souches, Développement et Evolution Institut Jacques Monod, CNRS UMR 7592 Université de Paris Bâtiment Buffon. 2e étage; pièce 285b 15 rue Henri Leclerc Brion 75205 Paris cedex 13 France E-mail: eve.gazave@ijm.fr Tel (33) 1 57 27 81 01

<http://www.ijm.fr/recherche/equipes/cellules-souches-developpement-et-evolution/> <https://stemdevevo.wordpress.com/> @stemdevevo

ATTENTION : new email eve.gazave@ijm.fr

Eve Gazave <eve.gazave@ijm.fr>

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Undergraduate Diversity at Evolution

Apply Now: Undergraduate Diversity at Evolution Program

The Society for the Study of Evolution (SSE) Undergraduate Diversity at Evolution < <http://www.evolutionsociety.org/content/education/-undergraduate-diversity-at-evolution.html> > (UDE) program sends undergraduate students to the annual Evolution meeting < <https://www.evolutionmeetings.org/>

>, held this year online June 2-3 and in Albuquerque, NM, USA from June 21-25.

At the in-person part of the meeting, awardees will present a poster, receive mentoring, and participate in a career-oriented Undergraduate Futures in Evolutionary Biology panel and discussion. Awardees will receive free meeting registration, travel, and lodging, a meal stipend, and a ticket to the Super Social.

Applicants must be current undergraduates or very recent graduates. As a group, selected applicants must increase diversity among undergraduates at the meeting. Applicants demonstrating a need for funds to attend, and applicants preparing to attend graduate school in ecology, evolutionary biology, or related fields will be given preference.

Learn more and apply < <http://www.evolutionsociety.org/content/education/-undergraduate-diversity-at-evolution.html> > on the SSE website.

Deadline: March 13, 2023 Want to volunteer as a mentor? Contact Dr. Richard Kliman at education@evolutionsociety.org.

*Kati Moore*she/her *Communications Manager* *Society for the Study of Evolution* communications@evolutionsociety.org www.evolutionsociety.org SSE Communications <communications@evolutionsociety.org>

WillametteU USR Evolutionary Ecology

The Smith Lab at Willamette University is seeking multiple summer research students to participate in a 9-week field and laboratory experience from May 15, 2023 - Jul 14, 2023. Research projects will focus on the ecology, evolution, and genetics of Yuccas and their yucca moth pollinators (Prodoxidae: Tegeticula). Students will have the opportunity to select and design their own research projects within the constraints of the study system and laboratory resources. Potential topic areas include questions in bioinformatics, climate change, phylogenetics, plant physiology, population ecology, and population genetics.

The program will begin with a 2-week field experience in the Mojave Desert, followed by six weeks in the lab at Willamette University in Salem, Oregon. Participants will receive a stipend, plus housing, meals, and travel

expenses.

Participants should be currently enrolled as degree-seeking students at the undergraduate level in a 2- or 4-year institution and should have past coursework at the college-level in biology or an allied field. Participants should be prepared to work in a desert environment during late spring weather, walking up to ten miles per day over uneven terrain while carrying a backpack.

Interested students should submit an application by March 10 via the following google form: <https://forms.gle/Yyuy25oyCpmSfQ7y8> The application should include an unofficial transcript, a resume or CV, the names and contact information for three professional references, and an essay of not more than 1000 words describing both a proposed research topic (links to relevant papers and resources are provided on the application page) and how participating will promote the applicant's career goals.

Willamette University is a diverse environment composed of people with various ethnic, racial, gender iden-

ties, and sexual orientations, including English language learners and large LGBTQ+ and international student populations, as well as many first generation college students. Applicants will be required to submit a statement describing how they will strengthen this community.

Christopher Irwin Smith *He/His/Him (Or any respectful pronouns)* Professor of Biology Willamette University Salem, OR 97301 ph: 503-370-6181 fax: 503-375-5425 Make an appointment: Google Calendar <<https://tinyurl.com/524h2625> >

Joshua Tree Genome Project. JoshuaTreeGenome.org Watch the Joshua Tree Genome Project Documentary on Great Big Story < <https://www.youtube.com/watch?v=REPABdXQHc0&feature=youtu.be&t=35m15s> >

Christopher Smith <csmith@willamette.edu>

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AarhusU PrimateSpeciationGeneticConflicts

Postdoctoral position on Sex chromosomes, genetic conflicts and speciation in primates, application deadline March 1, 2023

Are you interested in identifying mechanisms behind the large effect of sex chromosomes on speciation in primates, then there is an opening for a 2-year postdoc in the research group of Mikkel Heide Schierup, Bioinformatics Research Centre at Aarhus University (Denmark). An ERC advanced grant funds the postdoc position.

You have a PhD and proven research experience in PhD in either bioinformatics, molecular genetics, population genetics, statistics, or similar qualifications, population and/or statistical genomics. You will join a multi-disciplinary group, where you will contribute both new analytical frameworks and data analysis of both publicly available and in-house generated data. The data will consist of genome-wide sequencing data from many individuals from each of 200 primate species. This includes whole genome resequencing data from species that have regularly hybridized, e.g. different species of baboons, macaques and gibbons.

Expected start date and duration of employment This is a 2-year position with the earliest start date of May 15, 2023 or as soon as possible after that.

Job description It is flexible whether you will focus on methods development, data analysis, or both. We value independence and offer substantial latitude for you to define your own research project within the broader scope of the project.

Possibilities include, but are not restricted to

Contrasting X chromosome and autosomal evolution across primates, including differences in adaptive evolution and diversity and relate to breeding system Developing new approaches that identify barriers to introgression in hybridising species with a specific focus

on X chromosome Analyse single cell transcriptomics data from testes of several primate species and develop approaches to combine this transcriptional layer with the population genetics analysis The research group of Mikkel Heide Schierup currently include six PhD students and two post docs that all address evolutionary questions on mutation rate evolution, natural selection, and the evolution of the transcriptome using population genomics and transcriptomics data with a primary focus on primates

Your profile Applicants should hold a PhD in either bioinformatics, molecular genetics, population genetics, statistics, or similar qualifications. The following skills will be an advantage

Proven experience in handling and analysing large genomic datasets Proficient knowledge of coding in R/Python and high performance cluster environments. Interest in evolutionary genetics. High communication (verbal and written) and organizational skills

The department At the Bioinformatics Research Centre we focus on developing computational methods for collecting, handling and analyzing genomic data. Research ranges from formulating models and theories about genome evolution, to constructing algorithms and developing computer programs to implement new analytical methods. We have has a strong emphasis on molecular and genome evolution, molecular population genetics, firmly grounded in statistical and algorithmic approaches to bioinformatics. Our research spans from addressing purely theoretical questions, to program development, applications to large empirical datasets.

See <https://birc.au.dk/> What we offer The Bioinformatics Research Centre (BiRC) offers:

State of the art genomic data and computing facilities, an exciting interdisciplinary environment with many national, and international collaborators a research climate encouraging lively, open and critical discussion within and across different fields of research a work environment with close working relationships, networking and social activities a workplace characterised by professionalism, equality and a healthy work-life balance.

Place of work and area of employment The place of work

is Bioinformatics Research Center Universitetsbyen 81, 3. Building 1872 DK-8000 Aarhus C.

Contact information Mikkel Schierup (mheide@birc.au.dk, +4527782889)

Application procedure Shortlisting is used. This means that after the deadline for applications - and with the assistance from the assessment committee chairman, and the appointment committee if necessary, - the head of department selects the candidates to be evaluated. All applicants will be notified whether or not their applications have been sent to an expert assessment committee for evaluation. The selected applicants will be informed about the composition of the committee, and each applicant is given the opportunity to comment on the part of the assessment that concerns him/her self. Once the recruitment process is completed a final letter of rejection is sent to the deselected applicants.

Letter of reference If you want a referee to upload a letter of reference on your behalf,

— / —

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>

Bolzano Italy BarkbeetleSymbionts

A Postdoctoral position is available at the Free University of Bozen-Bolzano (Italy) in the lab of Hannes Schuler. The project is funded for up to three years and aims to study the European spruce bark beetle *Ips typographus* and its association with microorganisms, nematodes and mites.

The European spruce bark beetle *Ips typographus* is one of the most important forest pests in Europe. Symbiotic associations with fungi and bacteria are an important factor in the biology of this species. The focus of this project is to study the associations of bark beetle populations with symbiotic bacteria and fungi to obtain a more holistic understanding of the biology, ecology and harmful potential of this beetle. Moreover, we aim to study the role of nematodes and mites on the fitness of this pest species. The project is in collaboration with Martin Schebeck and Christian Stauffer (Boku, Vienna), Andrea Battisti (University of Padova) and Peter Biedermann (University Freiburg).

We are looking for an enthusiastic candidate with a strong background in molecular biology and experience with bioinformatic analyses of bacterial and/or fungal communities associated with insects. The candidate will be responsible to perform amplicon-sequencing as well as whole genome sequencing for bacteria and fungi.

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

The project is expected to start in April 2023, but the starting date is negotiable.

Application deadline is 01.03.2023 (noon)

All documents for the application procedure can be found at: <https://www.unibz.it/en/home/position-calls/positions-for-academic-staff/6298-general-and-applied-entomology-prof-hannes?group=> For informal inquiries, and for questions about the hiring process, please contact Hannes Schuler hannes.schuler@unibz.it

Prof. Hannes Schuler Competence Centre for Plant Health Faculty of Science and Technology Free University of Bozen-Bolzano Università $\frac{1}{2}$ tsplatz 5 I-39100 Bozen-Bolzano Tel: +39 0471 017648 <http://hschuler.people.unibz.it> Schuler Hannes <Hannes.Schuler@unibz.it>

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BournemouthU eDNA Biodiversity

A PostDoc position is available at Bournemouth University

Please see : Post-Doctoral Research Fellow in Molecular Ecology (Fixed-Term) | Bournemouth University <<https://www.bournemouth.ac.uk/about/jobs/post-doctoral-research-fellow-molecular-ecology-fixed-term-0>>

Bournemouth University's vision is worldwide recognition as a leading university for inspiring learning, advancing knowledge and enriching society through the fusion of education, research and practice. Our highly skilled and creative workforce is comprised of individuals drawn from a broad cross section of the globe, who reflect a variety of backgrounds, talents, perspectives and experiences that help to build our global learning community.

We are seeking to appoint a Post-Doctoral Research Fellow (PDRF) in molecular ecology to conduct work on biodiversity monitoring using metabarcoding and genomic based techniques. The aim of the project is to use eDNA based metabarcoding methods to understand how environmental perturbations drive changes in species communities. We will be looking at changes in terrestrial and aquatic communities using water, soil and fecal samples.

The research fellow is expected to have well developed competencies in genomic data generation (genomic library preparation) and analysis of these data using appropriate methods to a standard appropriate for publication. Applications with expertise in some of the following methods are expected: extensive lab experience, genomic library preparation, metabarcoding, and bioinformatic data analysis. The ability to apply these methods to answering questions on species movement and biodiversity monitoring is essential.

The project is part of the wider larger research project 'Resolving the extinction crisis: sustainable and technological solutions for biodiversity and society', which sits within the Department of Life and Environmental Sciences. As part of this project, the molecular ecology fellow will work alongside three other research fellows covering topics on movements, and physiological and behavioural changes.

The appointment will be made based on research expe-

rience and track record.

This position is available on a fixed-term basis until 1 February 2026.

For further and informal discussions, please contact the Principal Investigator of the project, Professor Robert Britton, at the Department of Life and Environmental Sciences, email: rbritton@bournemouth.ac.uk or technical lead Dr Emilie Hardouin at ehardouin@bournemouth.ac.uk.

Dr. Emilie Hardouin Deputy-Head of Department Life and Environmental Sciences Associate Professor in Conservation Genetics Bournemouth University Faculty of Science and Technology Fern Barrow, Poole House Talbot Campus, Poole, BH12 5BB, Dorset, UK

Emilie Hardouin <ehardouin@bournemouth.ac.uk>

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CharlesU Prague ConvergentGenomeAdaptation

***ERC funded postdoc in population and structural genomics of convergent plant adaptation

Group of Ecological Genomics (Filip Kolář) Department of Botany, Charles University, Prague, Czech Republic
<https://botany.natur.cuni.cz/ecolgen> Deadline Feb 17

Duration: 2 years (with possibility for an extension)

We seek a highly motivated, independent early career researcher interested in leading a research program within the context of a high-competitive Starting ERC and Junior Star projects with a possibility to apply for further independent early-career projects. The project is broadly focused on genomic basis of convergent plant adaptation (for details see below). The successful candidate will join the interdisciplinary team of Ecological Genomics at Charles University in Prague, lead by Filip Kolář and will be integrated into a broad network of local and international collaborators.

Requirements

**keen interest in leading an independent research program within a collaborative research group **experience in handling large scale short- or long-read sequence data a strong background in structural, statistical, and/or population genomics **PhD in evolutionary biology, genetics, bioinformatics, or related fields (previous ex-

perience in leading an independent postdoctoral project is advantageous, but not required)

We offer

****competitive salary well-above local averages **work in a young, dynamic and international environment, located in an inspiring historical city centre **involvement in international collaboration including stays in collaborating labs**

Optional - further possibilities for strengthening academic career

****taking part in teaching relevant courses **co-supervision of PhD student involved in the project and supervision of master project(s) in the Bioinformatics or Evolutionary Biology program **participating in fieldwork in Europe **opportunity to develop independent research follow-up project in evolutionary genomics or molecular genetics **application for additional self-funded projects in national (designated Junior Researcher projects within The Czech Science Foundation) and international funding schemes (e.g. Marie Curie, EMBO fellowship) is highly encouraged and supported**

Project details

Evolution is driven by a combination of deterministic forces and stochasticity, whose relative importance, however, remains a matter of debate. Knowing how predictable evolution can provide insights into predictive evolution of crops, pathogens or species under climate change.

This project will address genomic basis and ecological consequences of convergent genome evolution in natural environments. By leveraging fascinating natural diversity of European Brassicaceae plants which repeatedly adapted to exceptionally strong selective pressure, toxic serpentine soils, the project aims at uncovering general mechanisms determining which portion of the genome evolves in a predictable manner. The successful candidate will use long-read sequencing data of multiple plant species to assemble novel references and identify structural variation. By integrating these findings with available short-read population-level data, they will identify convergent adaptive gene candidates and use comparative genomic approaches to infer the drivers of genomic convergence across species. The project builds on our previous research in natural Arabidopsis populations (e.g. Konečná et al. 2021 Nat. Comms doi:10.1038/s41467-021-25256-5, Bohutínská et al. 2021, PNAS doi:10.1073/pnas.2022713118.) but will extend well beyond this system in order to discern generality. Alongside the head-start with available data, the candidate is expected to be fully involved in the overall

project design and will lead the analytical part of the project.

Please send your CV, contact details for two referees and a half-page motivation letter in a single pdf file to Filip Kolář (filip.kolar@natur.cuni.cz). Review of the applications will begin on February 17th 2023 and will continue until the position has been filled.

For more info on the project and application procedure see <https://botany.natur.cuni.cz/ecolgen/node/60> RNDr. Filip Kolář E-mail: filip.kolar@natur.cuni.cz

Katedra botaniky; Pøírodovědská fakulta Univerzita Karlova v Praze Pøírodovědská fakulta Albertov 6, 128 43 Praha 2 www.natur.cuni.cz Department of Botany; Faculty of Science Charles University in Prague Faculty of Science Albertov 6, 128 43 Praha 2 www.natur.cuni.cz/en Filip Kolář <filip.kolar@natur.cuni.cz>

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Chile Genomics Seaweed Holobionts

The Millenium Nucleus for Marine Agronomy of Seaweed Holobionts (MASH) is an interdisciplinary research group dedicated to the study of the biology, microbiology, and genomics of seaweed holobionts, and oriented towards the development of a marine agronomy for seaweed aquaculture. MASH research focuses on three pillars of marine agronomy: understanding and controlling traits of interest for seaweed aquaculture, designing breeding strategies that maximize selection efficiency to obtain improved strains, and managing the genetic resource for sustainable seaweed cultivation. Seaweed holobiont biology, resulting from the interaction of seaweeds and their associated microbial communities, is at the core of our research.

See <https://mileniomash.cl/en/> for further details.

MASH seeks applications for a postdoctoral research scholar in the biological interactions between seaweeds and their associated microbiota. Candidates should have a degree in Biology, Biochemistry, Biotechnology, Engineer or Biocomputing Science and be educated at PhD level. Experience on metagenomic data analyses, microbiomes studies or environmental microbial ecology using NGS is required. Basic knowledge of seaweed biology is expected but not mandatory. The candidate will be expected to dedicate fully to research in an active and interdisciplinary research-oriented environment.

Position is for one year, renewable for up to two years. Appointments should preferably start as soon as possible.

Applicant will be requested to apply for national grant FONDECYT for postdocs. The postdoctoral researcher will be working essentially at the GEMA Center for Genomics, Ecology & Environment, Universidad Mayor (Campus Huechuraba, Santiago, Chile), with Dr. Nicole Trefault (<https://gema.umayor.cl/nosotros/-investigadores/nicole-trefault>) who oversees microbial ecology and genomics in MASH. He will also interact with other MASH researchers dedicated to seaweed population genetics and genomics, ecophysiology and mathematical modelling of metabolic networks of the seaweed holobionts.

Monthly salary will be \$1.500.000 (Chilean Pesos) before taxes, about US\$ 1.800.

Evidence of the candidate's capacity to independently conduct interdisciplinary research, strong skills and interest in data analysis, manuscript writing and presenting at national and international conferences is required.

The postdoctoral research scholar will take on the following leadership roles in the project: - Analyses, integration, and interpretation of NGS data of microbial communities, in association with host seaweeds' genetic diversity and genomic features for an in-depth characterization of the seaweed holobiont in farms and natural populations. - Writing manuscripts and peer-reviewed articles, reports and other materials for the Millenium Nucleus. - Research support with other activities that further the Nucleus objectives.

Complete applications will be reviewed beginning February 27, 2023 until the search is closed. To apply, please submit to nicole.trefault@umayor.cl, with subject: Postdoc Application MASH, and attach the following information: - Cover letter - Detailed CV - Contact details for three references

Sylvain Faugeron

IRL3614 Evolutionary Biology and Ecology of Algae
Facultad de Ciencias Biologicas Pontificia Universidad
Catolica de Chile Av. Bernardo O'Higgins 340

Santiago - Chile

+56-223 54 26 47

Sylvain Faugeron <sfaugeron@bio.puc.cl>

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Chile InstBiodiversity

The Institute of Biodiversity of Antarctic and Subantarctic Ecosystems (<https://www.institutobase.cl/en/>) seeks to provide postdoctoral positions in Metagenomics and Niche Models or Species Distribution Models.

(1) For the postdoctoral position of Niche Models or Species Distribution Models (SDMs), a person is sought for biodiversity research in Antarctic and Subantarctic areas, with management of software in the field of Geographic Information Systems, preferably ArcGis. In addition, with medium-advanced handling of R Language, knowledge of modeling packages and script development.

<https://drive.google.com/file/d/1edX42BRh2G0pIyTV3TS0E-OpECXtRvhM/-view?usp=sharing>

(2) For the scientific postdoctoral position in Metagenomics, a professional is sought for studies of the biodiversity of microbial and benthic, Antarctic and Subantarctic communities, through the bioinformatic analysis of massive sequencing data (metabarcoding and metagenomics). Experience in metagenomics and metabarcoding data generation and analysis, skills in metagenomics and metabarcoding analysis, bioinformatics software, and database mining are required.

https://drive.google.com/file/d/14xgMjd1NlpUr6O3DMtPwF0-WHS_zDIB2/-view?usp=sharing Applications will be open until February 28, 2023

Feel free to distribute this announcement widely.

Dr. Elie POULIN Laboratorio de Ecología Molecular (LEM) Instituto Milenio Ecosistemas Antárticos y Subantárticos (BASE) Instituto de Ecología y Biodiversidad (IEB) Departamento de Ciencias Ecológicas Facultad de Ciencias, Universidad de Chile Las Palmeras 3425 CP 7800003, Santiago, Chile

*<https://www.institutobase.cl/> *<http://www.antarcticgenomics.cl/>
*https://www.researchgate.net/profile/Elie_Poulin *<http://www.ieb-chile.cl/> Phone: (56)-2-29787298 E-mail: epoulin@uchile.cl

Elie Albert Poulin <epoulin@uchile.cl>

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CNRS Montpellier Phenotypic Integration

Postdoctoral position in plant ecology and evolution

Context

Phenotypic integration is defined as the study of trait covariation at different organizational scales (Pigliucci, 2003). A trait is said integrated when it results from the effect of one or several other traits considered at “lower degrees of phenotypic integration” (Arnold 1983, Violle et al., 2007). Yet, we still lack quantification of phenotypic integration in plants in particular, which would have tremendous impacts from both applied and theoretical perspectives. One reason is that the study of phenotypic integration in comparative ecology has largely been led independently of the study of trait inheritance in evolutionary biology.

A direct consequence of trait stratification in an integrated phenotype is that the more integrated traits are expected to exhibit stronger non-additive inheritance, that is a deviation of the offspring from the mean parental phenotype. Empirical studies on plant hybrids generally support this idea: performance-related traits such as fruit and seed production exhibit stronger deviation to the parents compared to morphological traits (/e.g./, plant biomass and height, leaf width), which in turn exhibit more deviation than developmental traits (/e.g./, flowering time, number of leaves).

The linkage between phenotypic integration and trait inheritance can be explained by the multiplicative effect of traits across organizational scales. For instance, grain yield is the product of the number of fruits per individual, the number of seeds per fruit and seed weight. Consequently, it was observed that phenotypic deviation (compared to their parents) of total grain yield in barley hybrids was disproportionately higher than the deviation of the underlying components. Thus, a possible - but so far neglected - solution to understand phenotypic integration is to compare the intensity of non-additive inheritance between traits at different organizational levels (cell, tissue, organ, organism). This question also echoes a major caveat of current approaches in functional ecology: the widespread focus on single functional traits rather than whole phenotype has strongly limited our understanding of the functioning of organisms and beyond.

Myriads of multivariate methods developed as part of the field have brought partial solutions to this issue only. For instance, the multiplicative effect of traits on phenotypic integration can be captured by allometric relationships, which have been found to explain, and even predict, trait inheritance and hybrid vigour in *Arabidopsis thaliana* (Vasseur et al., 2019). Insights on phenotypic integration from genetics and evolutionary biology would contribute to the emergence of new questions in functional ecology—(Vasseur et al., 2022). In this context, the use of model species (e.g., *Arabidopsis thaliana*, crop species) is a very promising avenue. Moreover, studying phenotypic integration through trait covariance such as allometric relationships can, in turn, help to model and predict trait inheritance.

*Key references***

Arnold, S. J. (1983). Morphology, performance and fitness.—*American Zoologist*,—23(2), 347-361.

Pigliucci, M. (2003). Phenotypic integration: studying the ecology and evolution of complex phenotypes.—*Ecology letters*,—6(3), 265-272.

Violle, C., Navas, M. L., Vile, D., Kazakou, E., Fortunel, C., Hummel, I., & Garnier, E. (2007). Let the concept of trait be functional!.—*Oikos*,—116(5), 882-892.

Vasseur, F., Fouqueau, L., de Vienne, D., Nidelet, T., Violle, C., & Weigel, D. (2019). Nonlinear phenotypic variation uncovers the emergence of heterosis in *Arabidopsis thaliana*.—*PLoS biology*,—17(4), e3000214.

Vasseur, F., Westgeest, A. J., Vile, D., & Violle, C. (2022). Solving the grand challenge of phenotypic integration: allometry across scales.—*Genetica*,—150(3-4), 161-169.

*Research questions***

By studying a large set of already-acquired trait measurements in hybrids and parents in model species (/ *Arabidopsis thaliana* /, sorghum, and maize), the hired postdoc will compare the degree of non-additive inheritance among multiple traits at different scales. Trait covariation network will be compared between species and genotypes to explore frontier questions from functional ecology, genetics, and evolutionary biology. Moreover, the postdoc will examine trait-trait relationships between different organizational scales in order to explain, and ultimately predict, hybrid phenotype and performance. Taking advantage of the mathematical formalization developed in the field of plant allometry, the postdoc will examine trait-trait relationships from the cell to the whole organism. This represents a cutting-edge perspective of the project, with key consequences for our understanding of the physiological mechanisms

of plant performance and trait inheritance.

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CollegeStation Texas CropGenomics

Post-doctoral Fellow Crop Molecular Biology and Genomics

https://tamus.wd1.myworkdayjobs.com/-AgriLife_Research_External/job/College-Station-TX/Post-doctoral-Fellow-Crop-Molecular-Biology-and-Bioinformatics_R-058997 Department Institute for Advancing Health through Agriculture-Project Management

Proposed Minimum Salary Commensurate

Job Location College Station, Texas

Job Type Staff

Job Description Texas A&M University, in collaboration with the Paape lab, studies genetics, genomics, and evolution in plants and microbes. The post-doctoral fellow will be part of the new Institute for Advancing Health Through Agriculture, with a focus on responsive agriculture which seeks to identify molecular targets in plants and microbes that can enhance nutritional quality of crops, including removal of environmental toxins. Areas of interest include micronutrient uptake and assimilation, synthesis of phytonutrients, heavy metal detoxification, and plant-microbe interactions. We use a wide range of interdisciplinary tools such as genome wide association studies, QTL mapping, RNAseq, computational genomics, molecular cloning, quantitative PCR, ionomics, and metabolite analysis. The post-doctoral fellow will conduct laboratory research, mentor students, and publish research findings.

Responsibilities: In consultation with the PI, design and execute experiments in plant and microbial genomics.

Plant growth, microbe culturing using sterile techniques. Identify molecular compounds that comprise phytonutrients using metabolomics, ionomics, and plant genomics.

Perform statistical analysis of research experiments and results. Supervise and provide training to junior- and

mid-level technical support staff, graduate students, and/or undergraduate students.

Lead the writing of research-based publications. — Follow appropriate laboratory safety procedures for handling, disposing of and keeping inventory of hazardous chemicals and.

Assist in coordinating lab inventory and equipment.

Required Education: A PhD degree in biology, biochemistry, genetics, microbiology, or other closely related fields.

Required Experience: Laboratory-based PhD research in plant genetics, genomics, crop physiology and/or evolution.

Knowledge, Abilities, and Skills: Experience with standard molecular methods, including PCR, —gel electrophoresis, qPCR, cloning.

Experience growing and researching model species or crop plants including Arabidopsis, sorghum, maize, rice, Medicago

Experience with sterile technique and microbial culturing.

Familiarity with Microsoft Word and Excel; experience in other statistical analysis software (R, JMP, Geneious, experience using python is also desirable).

Experience with the analysis of next-generation sequence (NGS) data to some degree. Candidates who do not have experience in this area will be expected to learn NGS data analysis, with guidance from the PI and collaborators. Some experience with basic command line software and Linux servers is desirable.

Experience with data analysis and interpretation.

Effective verbal and written communication skills.

Willingness to attend workshops, seminars, and conferences.

Proven ability to collaborate with others.

All positions are security-sensitive. Applicants are subject to a criminal history investigation, and employment is contingent upon the institution's verification of credentials and/or other information required by the institution's procedures, including the completion of the criminal history check.

Equal Opportunity/Affirmative Action/Veterans/Disability Employer committed to diversity.

thank you Tim Paape

Tim Paape <timpaape@yahoo.com>

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CRAG Barcelona PlantAncientDNA

POSTDOCTORAL POSITION ON PLANT ANCIENT DNA IN BARCELONA THROUGH THE BEATRIU DE PINOS FELLOWSHIP

The Botigue group on Genomics of ancient crops and domestication focuses on the analysis of modern and ancient plant genomes to understand plant domestication, the spread of agriculture and the process of adaptation to new ecosystems that the dispersal of the new domestic crops had to overcome. We combine DNA-seq and RNA-seq analysis with population genetics theory and statistics to investigate population structure, model genome evolution and find the genomic signals of positive selection. We are located at the Centre for Research in Agricultural Genomics (CRAG) near Barcelona city. You can find more information on the group in the link below: <https://www.cragenomica.es/research-groups/genomics-ancient-crops-and-domestication> **JOB DESCRIPTION** The postdoctoral researcher will lead the analysis of ancient flax genomes that we have generated in collaboration with Nathan Wales (University of York), Ferran Antolin (German Institute of Archaeology) and the Egyptian Museum in Berlin. Ancient flax genomes will be put into context with modern genetic variability of domestic and wild accessions and will be compared with other ancient flax genomes from Europe that the group is currently processing. The first goal will be to understand modern population structure and how it relates with the ancient one. Next, identify possible introgressions of wild flax to the modern and ancient domestics and finally investigate whether flax was used for oil or fibre production.

Contact laura.botigue@cragenomica.es for further details.

REQUIREMENTS A PhD in Evolutionary Biology, Genomics, Bioinformatics or similar fields is required.

Good programming skills, good organizational skills and good writing and oral communication skills are required.

Experience with whole-genome analysis, population genetic analysis and high-performance computers (clusters) are desirable.

THE BEATRIU DE PINOS FELLOWSHIP

The Beatriu de Pinos programme (posdocBP) focuses on the attraction of post-doctoral research talent. The programme, funded by the Direcció General de Recerca de la Generalitat de Catalunya (General Directorate for Research in the Government of Catalonia) and managed by AGAUR, was launched in 2005. The goal of the calls in the Beatriu de Pinos programme is to provide individual funding support for the recruitment and incorporation of post-doctoral researchers in the Catalan system of science and technology. Researchers are allowed to freely choose their own research project in any field. Candidate selection is performed through an independent, transparent and competitive evaluation process.

The posdocBP programme is aimed at the professional development of research staff in three areas: leadership, independence and consolidation. Besides, it promotes international mobility, multidisciplinary and intersectoral collaboration, and fosters supplementary training of researchers in transversal skills.

DEADLINE 09 March 2023

More information: <https://agaur.gencat.cat/en/beques-i-ajuts/convocatories-per-temes/Ajuts-per-a-la-incorporacio-de-personal-investigador-postdoctoral-al-sistema-catala-de-ciencia-i-tecnologia-dins-del-programa-Beatriu-de-Pinos-BP-2022> For queries contact laura.botigue@cragenomica.es

“Laura R. Botigue; $\frac{1}{2}$ ” <laura.botigue@cragenomica.es>

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CUBoulderMuseum DiatomSymbiosisEvolution

The University of Colorado Museum of Natural History invites applications for a 30-month Postdoctoral Associate appointment. This appointment is funded by the National Science Foundation and will focus on the evolution of the symbiotic relationship between members of the diatom (Bacillariophyta) order Rhopalodiales and Cyanobacteria. We seek an individual with expertise and interest in the generation, assembly, annotation, and analysis of organellar and nuclear genomes, the evolution of symbiosis, and the congruence (or incongruence) of molecular and morphological data. We seek someone who is an excellent writer, has great communi-

cation skills, and is interested in collaborating with an international team of faculty and students. The candidate should also show a strong interest in teaching and mentoring students.

The postdoctoral associate will be expected to take on the following responsibilities:

- Generating, assembling, annotating, analyzing, and managing genomics data, especially based on mitochondrial, chloroplast and individual nuclear genes sequences.
- Analysis and construction of phylogenetic trees using nextgen and Sanger sequencing data.
- Generating manuscripts.
- Oversight of the lab.
- Student Mentoring.
- Teaching in Workshops.
- Project management.

Applicants should meet the following qualifications:

- PhD in Biology, Evolution, Molecular Biology or similar areas.
- Expertise in generating, assembling, annotating, analyzing, and managing genomics data, especially based on mitochondrial, chloroplast and individual nuclear genes sequences.
- Experience in the analysis and construction of phylogenetic trees using nextgen and Sanger sequencing data.
- Proficient in R, Python, and other related bioinformatics tools.

The University of Colorado Museum of Natural History is a world-class natural history institution, nestled against the foothills of the Rocky Mountains on the campus of Colorado's flagship university in Boulder, Colorado. Currently, more than five million objects are part of the museum. A public museum, research labs and a comprehensive collection and library of diatoms will allow this Postdoctoral Associate to excel in research and outreach, mentor graduate and undergraduate students, and assist in teaching NSF-funded workshops. The team on this project includes faculty / curators in the Museum at CU-Boulder (with joint appointments with the Department of Ecology and Evolutionary Biology) as well as faculty at the University of Montana and Grand Valley State University. International collaborators include universities and research institutes in China, India, Indonesia and Argentina.

Detailed information about this position and application instructions can be found here:

<https://jobs.colorado.edu/jobs/JobDetail/?jobId=-43036> For any inquiries, please contact Dr. Kociolek: patrick.kociolek@colorado.edu

Jingchun Li Assistant Professor & Curator of Invertebrates CU Natural History Museum Dept. of Ecology & Evolutionary Biology University of Colorado Boulder, CO 80309

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<http://jingchunli.weebly.com/>
<Jingchun.Li@Colorado.EDU>

Jingchun Li

DukeU PrimatesMalaria PopulationGenetics

The Goldberg lab at Duke University is hiring a postdoc in the population genetics of wild primates and/or malaria parasites. Flexible start date.

Projects include a range of projects in theoretical and empirical population genetics, computational methods development, and zoonotic malaria. Current projects include mathematical models of malaria transmission, machine learning methods to detect selection in admixed populations, primate immunogenetics, and genome-structure evolution in primates.

The Goldberg lab combines theory and computational data analysis; interest in biological applications of programming, statistics, and/or mathematics is required. We are a computational lab with occasional wet lab or field collaborators. We are associated with the departments of Evolutionary Anthropology, Biology, and Mathematics at Duke University. With the knowledge that multiple groups continue to face barriers to inclusion and equity in the sciences, including BIPOC and LGBTQ+ people, we strive to be a supportive environment for everyone.

More information: <http://www.goldberglab.org/> To apply: email Amy Goldberg with a CV and brief statement of research interests. Candidates should be specific about their interests in our work.

Amy Goldberg <agoldberg701@gmail.com>

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ETH Zurich ModellingBacterialEvolution

Postdoc in modelling bacterial ecology and evolution at ETH Zurich

* Two years with possibility of extension * Flexible start date, ideally by September 2023 * Annual salary >90k

CHF * Apply by 31.3.2023

Join the Evolutionary Epidemiology group to work at the intersection of evolutionary theory and public health. We combine mathematical modelling with genomic and epidemiological data to answer fundamental questions about the behaviour of clinically important traits, such as antibiotic resistance, in bacterial populations.

We are looking for a postdoctoral researcher to join our team. You will have freedom to shape your project within our research topics. Possible directions include: * How does within-host bacterial competition shape epidemiological dynamics? * How does competition between plasmids affect the evolution of antibiotic resistance? * What maintains bacterial strain structure in the face of recombination?

The Evolutionary Epidemiology team is led by Sonja Lehtinen and part of the Theoretical Biology group at ETH Zurich. The group is very friendly, with people from diverse backgrounds working on a range of projects relating to microbial evolution and dynamics. This creates unique opportunities for collaborations and learning across disciplines.

We are interested in people who approach science with curiosity and intellectual rigour. If you like our papers, we want to hear from you!

Your profile * A PhD in a relevant topic, such as evolutionary theory, computational biology, or infectious disease dynamics, by the start date. * Expertise in mathematical modelling and/or genomics. * Excellent written and oral communication skills in English.

What we offer * An exciting opportunity to shape your research working at a top research university in a great city. * A supportive and stimulating working environment with a strong culture of mentorship and collaboration. * Access to top-notch resources and opportunities for independent funding and fellowships. * Excellent support for further learning and professional development. * Plenty of opportunities for collaboration, attending scientific conferences and building your scientific network.

Applications by email to sonja.lehtinen@env.ethz.ch by 31.3.2023. Include: * A cover letter (1-2 pages) outlining your background and experience, expertise, research interests and motivation for applying for the position. * A copy of your most relevant paper or preprint. * A CV including a list of publications and contact details of two referees.

We welcome informal enquiries at: sonja.lehtinen@env.ethz.ch.

Evolutionary Epidemiology group: <https://tb.ethz.ch/>-

[research/lehtinen-group.html](https://tb.ethz.ch/research/lehtinen-group.html) Theoretical Biology group: <https://tb.ethz.ch/> Lehtinen Sonja <slehtinen@ethz.ch>

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IBE Barcelona Two Evolution

BIOINFORMATICS POSTDOCTORAL POSITION AT THE EVOLUTIONARY AND FUNCTIONAL GENOMICS LAB

Research at the Evolutionary and Functional Genomics lab focuses on understanding the genetic and molecular basis of adaptation. Towards this end, we combine -omics approaches, including DNA-seq, RNA-seq, ChIP-seq and Hi-C, with detailed molecular (e.g. in vivo enhancer assays, in vivo CRISPR/Cas9 editing) and phenotypic analyses (e.g. survival analysis, stress-response analysis), to identify and characterize adaptive mutations. More details about our research are available at <http://gonzalezlab.eu>. We are located at the Institute of Evolutionary Biology (IBE), a joint institute of the Spanish National Research Council (CSIC) and the Pompeu Fabra University (UPF) in Barcelona city. The IBE is a member of the Barcelona Biomedical Research Park (PRBB).

Job Description The postdoctoral researcher will be part of a team of two postdoctoral researchers and one laboratory technician, carrying out a research project that aims to understand the molecular mechanisms underlying gene-environment associations in the context of the current global change. The team will identify and characterize gene-environment associations in *Drosophila melanogaster* natural populations using both bioinformatic and experimental approaches. Whole genome sequences from natural populations collected mainly in Europe, US and Africa will be available at the start of the project, while other -omics datasets will be produced during the course of the project. The postdoctoral researcher will be responsible for the bioinformatic analyses of the project including the identification of genetic variants, both SNPs and transposable element insertions, in all the genomes available; ChIP-seq and RNA-seq analyses; the identification of gene-environment associations across space and time (seasonal and across years); the analysis of the environmental variables most relevant for adaptation; and the analysis of the candidate genes identified, among other related tasks.

Contact josefa.gonzalez@csic.es for further details.

REQUIREMENTS A PhD in Evolutionary Biology, Genomics, Bioinformatics, or similar fields is required.

Good programming skills, good organizational skills and good writing and oral communication skills are required.

Experience with variant calling, whole-genome scans for population differentiation, and available tools to identify gene-environment associations, such as BayPass, are desirable.

Experience with high-performance computing or use of clusters (SLURM) is desirable.

Previous knowledge on *Drosophila melanogaster* and transposable element biology is desirable.

CONTRACT DURATION AND BENEFITS Duration: 2 years Starting date: The position is available immediately. Starting date is negotiable.

Type of contract: Full time (37.5 hours per week)

Salary Range: Depending on experience and according to CSIC salary scales.

Benefits: The candidate will join a research team that has expertise both in experimental and bioinformatics methodologies. Several projects are currently ongoing in the laboratory which allows for collaborative opportunities. The Evolutionary and Functional

Genomics lab also offers extensive networking opportunities as we are co-leaders of the European *Drosophila* Population Genomics Consortium (<https://droseu.net>) that brings together 74 research labs across 28 countries, the Spanish excellence network in Adaptation

Genomics (<https://adaptnet.es>), the CSIC LifeHub network (<https://lifehub.csic.es>), and we are part of the TE hub initiative (<http://tehub.org/>).

APPLICATION PROCESS Send your CV and a brief letter of motivation explaining qualifications and interest in the position to Dr. Josefa González at josefa.gonzalez@csic.es. Please include "Bioinformatics position" in your e-mail subject.

APPLICATION DEADLINE Send your application by March 4th 2023 CET.

FUNDING The position is part of the Project TED2021-130483B-100, funded by MCIN/AEI/10.13039/501100011033 and by the European Union "NextGenerationEU"/PRTR.

CONTACT josefa.gonzalez@csic.es

Josefa González | CSIC Tenured Scientist Institute of Evolutionary Biology, CSIC, UPF Passeig Marítim de la Barceloneta 37-49/ 08003 Barcelona/ Spain.

www.gonzalezlab.eu |

@GonzalezLab_BCN

Co-organizer of the European *Drosophila* Population Genomics Consortium (DrosEU) Science Outreach La Ciència Al Teu Mon | euroscitizen.eu

melanogaster.eu

Most recent preprints/publications: Gene-TE chimeras bioRxiv | Copper stress-response BMC Biology | TEs and long-read seq Nature Communications

WET-LAB POSTDOCTORAL POSITION AT THE EVOLUTIONARY AND FUNCTIONAL GENOMICS LAB

Research at the Evolutionary and Functional Genomics lab focuses on

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IGB-Berlin Does Global Warming Promote Infections

Reminder: application deadline - 15.02.2023

Project: "Can parasite evolution reinforce the effects of climate warming? (Paradapt)" (duration: 20 months)

It is commonly believed that global warming will result in a "sicker world", with infectious diseases increasing in prevalence and virulence. However, these predictions are based on short-term experiments that have not recognized evolution that could lead to thermal adaptation. This project aims at answering the question whether parasites' prevalence is altered under elevated temperatures and if long-term exposure to warming amplifies this effect. The successful candidate will analyse field samples (eDNA of water, *Daphnia* samples) that have been collected from a set of five artificially heated lakes that receive warm water from two power plants and have experienced an elevation in water temperature of ca. 3-4°C for the last 60 yr. These will be compared with eDNA and *Daphnia* samples that have been collected from five nearby non-heated control lakes, to generate new predictions regarding the evolution of (plankton)

parasites in a warmer world. There are also possibilities to run experiments, with host (zooplankton Daphnia) and parasite isolates from these different sets of lakes. The successful candidate will join the Disease Evolutionary Ecology < <https://www.igb-berlin.de/en/wolinska> > research group. The position is located at IGB in Berlin < <https://www.igb-berlin.de/en> >.

Your tasks

* Generate and analyse sequence data from eDNA and Daphnia field samples * Lead at least two high-quality publication in the project area * Collaborate with other team members, including supervising students and sharing skills

Your profile

* PhD in ecology, evolution, bioinformatics or related field * Demonstrated experience in molecular/genomic work * Ability to perform metabarcoding, metagenomic, or other bioinformatic analyses * Publication experience * Collaborative team-worker * Very good communication skills in English, including scientific writing

Our offer

We offer an exciting position in an international and dynamic team of researchers, and an attractive scientific working environment including excellent equipment and technical support. We foster flat hierarchies and active participation and offer a variety of training opportunities < <https://www.igb-berlin.de/en/human-resources-development-hrs> >. We actively support the reconciliation of work and family life < <https://www.igb-berlin.de/en/equal-opportunities> >. Qualified women are particularly encouraged to apply. The IGB is committed to diversity < <https://www.fv-berlin.de/en/careers/diversity> >. We welcome every application, regardless of gender and gender identity, origin, nationality, religion, belief, health and physical disabilities, age or sexual orientation. Disabled applicants with equal qualification and aptitude will be given preferential consideration.

This is a full-time position with 20 months duration and a tentative start date of 01.04.2023 (or shortly thereafter). Salary is paid according to the German salary scheme for the public sector for postdoctoral research (TVöD Bund E13). The working language at IGB is English.

Are you interested?

We look forward to receiving your application (letter of motivation indicating research interests and experience, CV, certificates, contact information of two potential referees) by 15.02.2023. Please state the job reference number 03/2023 and apply exclusively

via our recruitment platform at www.igb-berlin.de/en/jobs. Enquiries can be directed to Prof. Justyna Wolinska < <https://www.igb-berlin.de/en/wolinska> > at justyna.wolinska@igb-berlin.de.

Justyna Wolinska Group Leader (IGB) & Professor for Aquatic Evolutionary Ecology (Freie Universität Berlin)
justyna.wolinska@igb-berlin.de

+49 30 64181-686

Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB) Müggelseedamm 310 12587 Berlin

www.igb-berlin.de <https://www.igb-berlin.de/en/profile/justyna-wolinska> Justyna Wolinska
<justyna.wolinska@igb-berlin.de>

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JagiellonianU Poland InsectSymbiosisEvolution

Postdoctoral position to study the diversity and evolution of insect microbial symbionts

We are looking for a motivated and enthusiastic candidate for a Postdoctoral position in Biology at Jagiellonian University in Krakow, Poland. The postdoctoral researcher will be involved in the NCN Opus project “The patterns, factors, and drivers of insect microbiome variability”. The project is a collaboration between dr hab. Anna Michalik (Institute of Zoology and Biomedical Research) and dr hab. Piotr ukasik (Institute of Environmental Sciences: symbio.eko.uj.edu.pl).

The successful candidate will join a dynamic international team researching the diversity and evolution of insect symbiotic microorganisms, combining high-throughput next-generation sequencing (NGS) and microscopic techniques. The aim of the proposed project is to understand the factors and processes shaping the variability of insect microbiota. The research will focus on hoppers (Auchenorrhyncha), a diverse and ecologically and economically significant clade of hemipterans (true bugs) that includes planthoppers, leafhoppers, treehoppers, spittlebugs, and cicadas. Their nutrient-limited diet of plant sap is supplemented by specialized heritable bacterial symbionts that produce amino acids and vitamins. These symbionts co-diversify with hosts - but in many insect lineages, they were joined or replaced by other microbes that contribute nutritional functions,

affect insect reproduction, resistance to natural enemies, or ability to vector plant pathogens. There is rapidly accumulating evidence that infections with these important microbes may vary among insect clades, species, populations, and even individuals sampled at the same time, at the same site. Unfortunately, we know very little about these diversity patterns or their biological importance.

The Postdoc will address questions using a combination of field collections across Central Europe and Baltic countries, high-throughput sequencing, and bioinformatic analysis of host and symbiont metagenomes. The Postdoc will focus on bioinformatic analyses of NGS data (genome assembly and characterization, comparative analyses of symbiont genomes, and phylogenomic analyses), and the writing of manuscripts. Depending on their interests and skills, it will be possible to get involved in research on other aspects of insect symbioses, using a wider range of approaches (fieldwork, microscopy).

The Postdoc will be encouraged to work closely with other team members and project collaborators in Poland and abroad and supported in pursuing their own ideas. The Postdoc will be based at one of the top research institutes in the fields of Ecology and Evolution in Central Europe, in a medieval city known as the cultural capital of Poland, with good access to outdoor recreation opportunities and well-connected to the rest of Europe. We have generous funding for research and research travel. Jagiellonian University offers comprehensive benefits packages to its employees, including benefits in the form of a Multisport card, sports activities, medical packages, group insurance, and opportunities for professional development. There are also numerous funding opportunities that the candidate may pursue to acquire their own funding.

The candidate must have a Ph.D. in Bioinformatics, Biological Sciences, or a related field. They should be able to demonstrate experience with molecular techniques and bioinformatic analyses of NGS data and be fluent in English. An ideal candidate will be able to demonstrate interest and scientific achievements related to the planned project, in particular, regarding the diversity and biology of host-microbe interactions and the analysis of microbial communities using NGS data. Laboratory experience in the preparation of NGS libraries, familiarity with the Linux / Unix shell and scripting languages such as Python / Perl / R, and interest in participating in international collaborations and research travel preferred.

The candidates are asked to e-mail a cover letter explaining their background, skills, and interest in the project,

a CV, and contact details of two academics who can provide a confidential reference to dr hab. Anna Michalik (a.michalik@uj.edu.pl). The review of applications is ongoing; please apply by 10th March 2023 to ensure full consideration. The selected candidate or candidates will be assisted with a formal application for a postdoctoral position through the Jagiellonian University recruitment system.

dr hab. Anna Michalik Zak³ad Biologii Rozwoju i Morfologii Bezkręgowców Instytut Zoologii i Badań Biomedycznych Uniwersytet Jagielloński Gronostajowa 9 30-387 Kraków

Anna Michalik, PhD Department of Developmental Biology and Morphology of Invertebrates Institute of Zoology and Biomedical Research Jagiellonian University, Gronostajowa 9, 30-387 Krakow, Poland

Anna Michalik <a.michalik@uj.edu.pl>

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KielU Computational Evolutionary Microbiology

In the Evolutionary Microbiology Group of Prof. Tal Dagan at the Institute of General Microbiology at Kiel University, Germany, a Postdoc position (m/w/d) in the field of computational evolutionary microbiology is available for a period of 36 months at the earliest possible date. The weekly working time corresponds to 100% of full employment (45 hours. If the legal requirements under collective bargaining law are met, the tariff grouping is carried out up to pay scale 13 TV-L.

The Evolutionary Microbiology Group research interests are focused on microbial genome evolution with an emphasis on the study of horizontal DNA transfer. In our research we use both computational and experimental approaches (see www.uni-kiel.de/genomik).

Well-motivated and highly-qualified postdocs from all countries are welcome to apply. We are looking forward to your application for a postdoc fellowship in the beautiful landscape of Northern Germany.

Your profile: - PhD degree in Molecular Evolution / Microbiology / Bioinformatics or related fields. - Expe-

rience in programming and analysis of genomic data. - Any of following expertise is an advantage: biostatistical analysis, phylogenetic reconstruction, comparative genomics. - Good oral and written communication skills in English. - Motivation to perform research in basic science. - Experience in writing and publishing research articles is an advantage. - Experience in tutoring students is an advantage.

The working language of the group is English

The position is offered for 3 years with a possibility of extension. The project is funded via an ERC Consolidator grant on the evolution of prokaryotic plasmids. The recruited postdoc is expected to develop a project on the topic of plasmid genome evolution. See related publications: doi: 10.1371/journal.pgen.1009656 and doi: 10.1093/molbev/msab283.

The Christian-Albrechts-University sees itself as a modern and cosmopolitan employer. We welcome your application regardless of your age, gender, cultural and social background, religion, ideology, disability or sexual identity. We promote equality of the sexes.

The Christian-Albrechts-University is committed to the employment of people with disabilities. Preference will be given to applications from severely handicapped persons and persons of equal standing, provided they are suitable.

We expressly welcome applications from people with a migration background.

For enquiries regarding the position and research topic please contact Prof. Tal Dagan: tdagan@ifam.uni-kiel.de.

Applications should be submitted by email to Prof. Tal Dagan as a single PDF and include: (1) a letter of motivation (max 2 pages, Arial 11, line spacing 1.15), (2) CV, (3) Master certificate. Please use 'postdoc application' as a subject.

Please, refrain from sending us application photos.

Application deadline: 24.3..23

If you have any questions regarding the position please do not hesitate to contact us (email below).

Prof. Dr. Tal Dagan

Genomic Microbiology Group Institute of General Microbiology Christian-Albrechts-University Kiel ZMB, Am Botanischen Garten 11 24118 Kiel, Germany

Tel: +49 431 880 5712 Fax: +49 431 880 5747 e-mail: tdagan@ifam.uni-kiel.de web: www.uni-kiel.de/genomik
Tal Dagan <tdagan@ifam.uni-kiel.de>

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golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>)

LouisianaStateU FungalPopulationGenomicsEvolution

Postdoctoral Researcher in Mycology/Fungal Genomics

A postdoctoral research position is available to work principally on epidemiology, population genomics, and genome sequencing of *Cercospora* leaf blight (CLB) pathogens of soybean and wild hosts. This project also includes the development of assays for the detection of resistance to DMI, QoI, and SDHI fungicides. The research projects are collaborative efforts across the labs of Drs. Jonathan Richards, Vinson Doyle, and Sara Thomas-Sharma.

The postdoc will work on population biology/genomics of *Cercospora* spp. associated with CLB and *Phytophthora sojae*. This project aims to understand population dynamics and genomic signatures of host adaptation and fungicide resistance evolution of CLB pathogens across the mid-southern United States. This project will primarily be focused on computational and lab work. Lab/computational work will include reference genome development (nanopore, Pacbio sequencing), RNAseq, differential gene expression analysis, demographic analysis, etc. This project will also leverage population genomic data to design assays for rapid screening of fungicide resistance (for QoI, DMI, and SDHI fungicide chemistries) and identify additional SNPs that might be associated with fungicide resistance. Field work may include sampling from agricultural and non-agricultural habitats and experimental field plots.

The successful candidate will be expected to participate in scientific meetings, publish findings in peer-reviewed journals, and apply for independent funding opportunities.

Qualification Requirements: PhD degree in biology, mycology, botany, ecology, plant pathology or other related field. Demonstrated experience (publications) carrying out evolutionary or genomics studies is preferred. Preference will be given to candidates with bioinformatics experience. Excellent interpersonal, oral and written communication skills and a willingness and ability to interact and collaborate with other scientists are essential to the success of the research. A valid Louisiana State driver's license and ability to drive is required at the time of appointment.

Salary and Benefits: Salary will be commensurate with education and experience. The LSU AgCenter has an attractive benefits package with a wide variety of benefit options. Benefits offered include retirement, multiple medical insurance options, supplemental insurances (dental, life, long-term disability, accident, vision, long-term care, etc.), Tax Saver Flexible Benefits Plan (saves tax dollars on some child care and medical expenses), university holidays (14 per year, typically includes a week off at Christmas), generous annual (vacation) and sick leave benefits, Employee Assistance Program, and possible educational leave and tuition exemption for coursework at campuses of the LSU System. Specific benefits depend on job category, percent effort, and length of employment.

Date Available: Upon completion of the selection process.

Application Deadline: March 1, 2023 or until a suitable candidate is identified.

Application Procedure: Apply online at <https://lsu.wd1.myworkdayjobs.com/LSU> (or through Workday for internal applicants) by attaching cover letter along with a current resume/CV, letter of interest describing why you are interested in this position and your experiences that may be relevant to this project (maximum one page), official university transcripts, and two letters of reference. Paper, faxed or e-mailed application materials will not be accepted, except that in lieu of attaching the reference letters online, they may be sent directly to all 3 contacts below along with any questions:

Dr. Vinson P. Doyle

Associate Professor of Mycology

Department of Plant Pathology and Crop Physiology

Louisiana State University Agricultural Center

302 Life Science Building

vdoyle@agcenter.lsu.edu

Dr. Jonathan K. Richards

Assistant Professor

Department of Plant Pathology and Crop Physiology

Louisiana State University Agricultural Center

302 Life Science Building

jrichards@agcenter.lsu.edu

Dr. Sara Thomas-Sharma

Assistant Professor

Department of Plant Pathology and Crop Physiology

Louisiana State University Agricultural Center

302 Life Science Building

sthomassharma@agcenter.lsu.edu

Vinson P. Doyle, Ph.D. Associate Professor of Mycology Department of Plant Pathology & Crop Physiology Louisiana State University - AgCenter 302 Life Sciences Building Baton Rouge, LA 70803

Vinson <sonofvin@gmail.com>

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LundU Sweden MicrobialEvolution

Dear colleagues,

We have an open position for a post-doctoral researcher in the Department of Biology at Lund University (Sweden). In this project, we'll be exploring the molecular basis and evolution of symbiotic interactions between bacteria and single-celled eukaryotes in low-oxygen environments.

More details about the position and how to apply can be found in the following link. Please feel free to share within your networks and encourage applicants to reach out if they have any questions.

MORE INFORMATION ABOUT THE POSITION (and our group!): <https://thelabupstairs.online/open-positions/> CONTACT INFORMATION: Courtney.stairs@biol.lu.se

Thank you and kind regards, Courtney

Courtney Stairs, PhD

Associate Senior Lecturer (Biträdande universitetslektor) Department of Biology Lund University Sweden

Tw: @cstairs Hp: thelabupstairs.online

Courtney Stairs <courtney.stairs@biol.lu.se>

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MNHN Paris ExtinctionRisk PopGeneticTimeSeries

Postdoctoral position in population genetics - Using a genetic time series and historical DNA to understand extinction risk

ANR project Suscept-Ext: Understanding susceptibility to extinction using historical museum specimens as a genetic time series

French National Museum of Natural History (ISYEB, MNHN), Paris

Scientific Coordinator: Ben Warren Project members planned to advise the postdoc in analyses: Stefano Mona, Guillaume Achaz, Lounes Chikhi.

Collaborator : Zhangyi He (BICR, UK).

Co-investigators: Catherine Theves and Ludovic Orlando (CAGT, Toulouse), Julian Hume (NHM, UK).

Evolutionary history is expected to play a major role in determining which species decline in population size to extinction in response to environmental change, but the processes by which this comes about are poorly understood. Although population genetic studies provide much promise to understand the microevolutionary processes behind macroevolutionary patterns of extinction risk, inferences can be limited by our confidence in the timescales inferred, and by the scale of such studies, which frequently include only one lineage. As a key-player in project ANR Suscept-Ext, the postdoc will tackle both of these issues, benefitting from a unique genome-wide time series including pre-human reference points for multiple Mascarene island bird lineages that differ in abundance and other biological traits.

Islands in the Mascarene archipelago (Mauritius & Réunion), Indian Ocean, are unusual among sizable and biologically diverse landmasses worldwide, in that they had no human population until European arrival 400 years ago. Therefore, there exist museum samples and subfossils spanning the full duration of anthropogenic environmental change, allowing a real-time assessment of genetic response to environmental changes of known timing and across multiple species following first human presence.

The postdoc will be in charge of population genetic analyses aimed at making inferences of selection (in parallel to inferences of demographic history), and comparing

selective responses to common (and severe) environmental changes across multiple species that differ in abundance - common species versus rarer ones (most of which are IUCN threatened). Collaborator Zhangyi He has already tailored a new method employing selection coefficients for this purpose. Another aim is to test the significance of correlations between the timing of genetic and environmental changes. The postdoc will work alongside a PhD student who started in January 2022, who is conducting demographic analyses for the same time series. Furthermore, there is much potential for the postdoc to contribute to demographic analyses or method development, in collaboration with the PhD student and others. Such demographic analyses should be used to inform inferences of selection.

The genome-wide time series includes modern genomes, and historical sequences (genomes and ~ 3000 hyRAD loci) that vary in completeness being based on both sub-fossils (especially pre-human reference points) and museum skin specimens (multiple post-human time intervals). The postdoc will complete the bioinformatics for modern and historical DNA for at least four out of eight rare-versus-common species pairs, using an existing bioinformatic pipeline.

Work is to be conducted at the Paris Museum (MNHN, ISYEB research centre), interacting with the Paris-based part of the team. We have funding for around 14-20 months postdoc contract depending on experience and where our HR department position the recruit on the postdoc salary scale.

Candidates should have a strong interest in the broad theme of the study - understanding the role of evolutionary history in determining which species decline towards extinction in response to environmental change. They should also be interested in relevant population genomic methods, in particular those involved in making inferences of selection, and ideally have extensive experience of using them as well as in running pre-requisite bioinformatic pipelines to obtain genome-wide variants.

Start date: September 2023 is likely ideal (between August 1st and October 1st 2023).

Applications should ideally be submitted by April 15th (deadline April 30th).

For informal enquiries please contact: Ben Warren (bwarren@mnhn.fr) and Stefano Mona (stefano.mona@mnhn.fr).

To apply please upload the following two documents to the MNHN job application webpage in PDF format:

1) a detailed CV with publication list, and the names and email addresses of three referees who can comment

on your expertise; 2) a letter of motivation explaining why you are interested in this position, and your specific qualifications and experiences relevant for the project.

The precise link for application will soon be available at the following website: <https://recrutement.mnhn.fr/-front-offres.html> Sub-select :

— / —

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>

Montpellier AvianClimateAdaptation

We have an 18 months funding for a postdoc within our project AdapTit funded by de I-SITE MUSE i₂ Montpellier Universiti₂ d'i₂ Excellence i₂ which aims at studying the interacting effects of global warming and urbanisation on Great tit (*Parus major*) behaviour and physiology.

We are seeking a highly motivated candidate with a strong background in animal metabolism, and ideally with experience in respirometry. This postdoc will be located in our Centre for Functional and Evolutionary Ecology (CEFE) in Montpellier. Starting date can be between 01/05/2023 and 01/09/2023. The postdoc would be working with Dr Anne Charmantier & Dr Samuel Caro, with many opportunities of interaction with students, postdocs and researchers from our group (see the Montpellier tit project website: <https://mesangecefe1.wixsite.com/mesangecefe>), as well as the 80 members of the Evolutionary and Behavioural Ecology Department at CEFE.

Further details on this postdoc project here: <https://euraxess.ec.europa.eu/jobs/74489>.

To apply, please send CV+cover letter to anne.charmantier@cefe.cnrs.fr & samuel.caro@cefe.cnrs.fr BEFORE 31/03/2023 (disregard info on website)

Best wishes to all,

Anne Charmantier & Samuel Caro

Anne Charmantier <anne.charmantier@cefe.cnrs.fr>

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golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>)

NatlParkService TreeAdaptation

Postdoctoral Researcher in Conservation and evolutionary Genomics

We invite applications for a postdoctoral researcher to work on a collaborative project funded by the National Park Service, BLM-Montana and Northern Arizona University.

This project brings together existing and new genomic resources to build a powerful platform for the study of genomic diversity and potential for adaptation to climate change and resistance to white pine blister rust in natural populations of whitebark pine. Whitebark pine (*Pinus albicaulis*) is a five-needle pine species severely affected by disease and pests, as well as drought and fires. This research project aims to estimate genome-wide levels of diversity that will inform conservation and restoration activities. The postdoctoral researcher will be based at Dr. De La Torre's Forest Genomics lab at Northern Arizona University (NAU), with the potential to visit several National Parks in western North America. This position can be fully in-person or hybrid, includes health benefits and annual salary of \$54,779.

Job description:

- * Analyze and interpret molecular data using bioinformatic tools
- * Summarize research results for distribution/communication to the scientific community through peer-review publications in high- impact factor journals and conference presentations.
- * Train undergraduate students in molecular techniques to extract DNA/RNA and preparation of libraries for sequencing.

Minimum Qualifications:

- * PhD degree in Biology, Genetics, Forestry, or related field of study.
- * Proficiency in R (Perl or Python is a desirable but not mandatory)
- * Experience with large datasets and high-performance computing
- * Molecular lab experience
- * Ability to travel for sample collections or attendance to conferences

How to apply:

Look for position 606828 in “Current Openings” at the link below <https://in.nau.edu/human-resources/current-job-openings/> Employment - Careers at NAU | Human Resources < <https://in.nau.edu/human-resources/current-job-openings/> > in.nau.edu

Northern Arizona University is devoted to student success. We - faculty, staff, and administrators - work together to support each other's diverse strengths and ...

Deadline for applications is February 8th, 2023.

Start date: as soon as possible (flexible).

For more information, please contact:

Dr. De La Torre, Amanda.de-la-torre@nau.edu

Amanda De La Torre, PhD

(she/her/hers)

Assistant Professor of Forest Genomics

Director, Forest Genomics Lab < <https://treegenomicslab.com> >

School of Forestry

Northern Arizona University

Flagstaff AZ86011, Arizona, US

twitter @forest_genomics < https://twitter.com/forest_genomics >

Instagram @nau_fgl < https://www.instagram.com/nau_fgl/ >

Amanda De La Torre <Amanda.de-la-Torre@nau.edu>

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NHM London CranialSutureEvolutionInMammals

<https://careers.nhm.ac.uk/templates/CIPHR/-jobdetail.internal.2743.aspx> Leverhulme Trust-funded Postdoctoral Research Associate Salary: £39,558 per annum Location: London, South Kensington

About the role: This post is funded by a Leverhulme Trust research grant focused on the evolution of cranial sutures through the synapsid to mammal transition. The mammal skull performs numerous critical functions, from prey capture and feeding to protecting the brain to fighting. These functions impose enormous pressures which are buffered by the skull's shock absorbers: cranial sutures. These highly variable joints between skull bones are intimately linked with ecology and development, but their complex 3D anatomy makes them tricky to capture using traditional methods. As a result, we

know almost nothing about their evolution. Bridging imaging, machine learning, cranial function and evolution, this project will reconstruct suture evolution and its role in one of the most important events in the history of life: the rise of mammals. This post will be based in the Goswami Lab within the Science Group at the Natural History Museum in London, with project collaborators based at London South Bank University, the University of Liverpool, the Field Museum of Natural History, and North Carolina Museum of Natural Sciences.

The successful applicant for this post will be responsible for developing and analysing a 3D dataset of suture morphology spanning extant mammals and their extinct relatives back to the earliest synapsids. Working with another project PDRA who is developing machine learning and computer vision tools for the automated extraction of cranial suture morphology from 3D meshes, the successful applicant will lead delivery of the biological and evolutionary aspects of this project, including expanding an existing 3D scan dataset spanning hundreds of living and extinct synapsid (including mammal) species, continuing development of a training dataset for the AI pipeline by annotating sutures on 3D scans, and conducting phylogenetic comparative and macroevolutionary analyses of suture evolution through time, as it relates to key innovations in mammal evolution and diversification.

The successful applicant will be expected to travel to international collections to build the 3D dataset, work closely with all project team members and collaborators, including organising project meetings, and lead on scientific publications and conference presentations describing the evolutionary analyses, as well as promoting the project at various outreach events at the NHM and outside the museum as the opportunity arises. There will be opportunities for supervising students and for developing independent collaborations, as part of supporting career development of the successful candidate. We provide a friendly, flexible, and collaborative environment to accommodate and support diverse circumstances, backgrounds, and needs.

About you: The successful candidate will have a PhD in Evolutionary Biology or related subject, either completed or submitted by the time of starting this position. You should have familiarity with mammal evolution and cranial anatomy and experience with 3D data and models, morphometrics, and phylogenetic comparative analysis in R. You should be willing to travel to work with collaborators and collect data in international institutions. You should have a track record of presenting research at conferences and publishing in peer-reviewed journals, demonstrating strong communication skills.

You will have the ability to work independently, but also as part of a team, including contributing to wider lab activities and discussions. You must demonstrate ability to complete a research project and be eager to lead research in new areas and with new methods. International applicants welcome, and funds are available to support visa costs and NHS surcharge.

How to apply: If that sounds like you, please apply online on the Natural History Museum's careers portal, at <https://careers.nhm.ac.uk/>. Please include a full curriculum vitae and cover letter detailing your interest and relevant experience.

Closing date: 9am, March 3 Interviews expected w/c March 13

For further information and any queries, please contact: Prof. Anjali Goswami The Natural History Museum Cromwell Road, London SW7 5BD UK a.goswami@nhm.ac.uk goswamilab.com (0)20 7942 5063

Anjali Goswami <a.goswami@nhm.ac.uk>

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Norwich Bioinformatics

Dear Evoldir,

We are looking for an enthusiastic postdoctoral researcher, that is interested in the evolution of whole microbial communities. Infrastructure for this project is excellent (novel datasets, plenty of HPC and newest seq tech, large assortment of bioinformatic & microbiology focused groups at Institutes) and the post is for 3+2 years to build a research career with care & intent.

Postdoctoral Research Scientist in Metagenomics | Earlham Institute < <https://www.earlham.ac.uk/vacancy/-postdoctoral-research-scientist-metagenomics> >

Kind regards, Falk

Dr Falk Hildebrand PI at Quadram Institute Bioscience & Earlham Institute Norwich Research Park www.falk.science "Falk Hildebrand (QIB)" <Falk.Hildebrand@quadram.ac.uk>

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OregonStateU FisheriesGenomics

The State Fisheries Genomics Lab at Oregon State University (OSU) invites applications for a Postdoctoral Research Associate position. This Research Associate will work with a team of researchers to address the science and management needs of OSU's Coastal Oregon Marine Experiment Station and the Oregon Department of Fish and Wildlife. Research will primarily focus on evaluating the genetic basis of adult run timing in Chinook salmon and steelhead, population genomics of marine fishes, and the reintroduction of threatened Chinook salmon.

Primary responsibilities include providing leadership in research, performing laboratory work as needed, analyzing genetic and genomic datasets, and writing peer-reviewed manuscripts and reports.

The State Fisheries Genomics Lab is located at the Hatfield Marine Science Center in Newport, Oregon; this position is located on-site.

Please see the link below for full details including application instructions: <https://jobs.oregonstate.edu/-postings/131914> Kathleen O'Malley Associate Professor, State Fisheries Geneticist Coastal Oregon Marine Experiment Station Oregon State University 2030 SE Marine Science Drive Newport, Oregon 97365

ph: (541) 961-3311 email: kathleen.omalley@oregonstate.edu
website: marinegenomics.oregonstate.edu

"O Malley, Kathleen G"
<Kathleen.OMalley@oregonstate.edu>

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RobertKochInst Germany Phylogenomics PublicHealth

Final call, deadline 14th February:

The Phylogenomics Group at the Center for Artificial Intelligence in Public Health of the Robert Koch Institute is offering 3-year Postdoctoral positions.

For more details see

<https://www.linkedin.com/jobs/view/3420200608/>
 “Kühnert, Denise” <KuehnertD@rki.de>

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golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>)

RutgersU Evolutionary Genomics Drosophila

A unique research/teaching postdoctoral position in evolutionary genomics is available in the Ellison Laboratory (www.ellisonlab.website) in the Department of Genetics at Rutgers University in collaboration with the Genomics Education Partnership (GEP; <https://thegep.org>), Dr. Cindy Arrigo (New Jersey City University), and Dr. Sarah Elgin (Washington University in St. Louis).

The research portion of the position is funded by an NSF Research at Primarily Undergraduate Institutions (RUI) award and involves studying the evolutionary causes and consequences of genome size expansion using the dot chromosome of *Drosophila* (which shows > 15-fold variation in size among *Drosophila* species) and gene models that have been manually curated by a diverse group of undergraduate students from universities across the country. There will be additional opportunities to join other on-going research projects in the Ellison lab including work investigating the co-evolution of transposable elements and their host genome as well as the evolution of 3D genome architecture across *Drosophila*.

The teaching portion involves becoming an active member of the GEP, a community of motivated instructors, mentors, and researchers. This includes participation in a new member training workshop to learn the details of the GEP gene annotation pipeline, attendance at the annual GEP alumni workshop, and regional node meetings to meet other members and share research/teaching/mentoring strategies. The postdoc will utilize the knowledge they gain from these experiences to teach and train GEP undergraduate research students and advanced summer scholars.

As a member of the Ellison lab, the postdoctoral researcher will also have the opportunity to apply for the Rutgers multi-year INSPIRE fellowship (<https://rwjms.rutgers.edu/research/inspire/home>). These dedicated research and teaching fellowships (70% research

+ 30% teaching) are funded by an NIH Institutional Research and Career Development Award (IRACDA), whose goal is to prepare diverse PhD-level scholars for careers as scientist-educators.

Candidates should have a PhD in a biology-related field and an interest in teaching. Experience with genomic analysis in Unix/Linux environments and proficiency in Python, R, and/or Perl is desirable. The position is primarily computational although there may be opportunities for wet lab work. Previous experience working with *Drosophila* is beneficial but not necessary. The start date is flexible and salary will be determined based on the NIH pay scale. We are particularly interested in recruiting candidates dedicated to improving access and success for students of all backgrounds.

Rutgers-New Brunswick is a leading national research university and the preeminent public institution of higher education in the state of New Jersey. The campus offers a vibrant and diverse research community and is close to New York City and Philadelphia. Interested applicants should send a CV and a brief statement of research interests to chris.ellison@rutgers.edu

Christopher Ellison <cee53@hginj.rutgers.edu>

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RutgersU Quantitative Evolutionary Microbiology

Postdoctoral Fellow in Quantitative Evolutionary Microbiology

Application review begins March 1, 2023

The Quantitative Evolutionary Microbiology Laboratory (<https://qevomicrolab.org/>) led by Prof. Michael Manhart is recruiting a postdoctoral fellow. Our lab seeks to understand how fundamental evolutionary processes shape the ecology and cellular physiology of microbial communities. We are especially enthusiastic about contributing to fundamental microbiology that can benefit human health. We are an interdisciplinary group our backgrounds range from physics and applied math to systems biology and food science, and we use a wide range of methods, including experimental, computational, and theoretical approaches.

The position will be based at Rutgers University, Robert Wood Johnson Medical School (Piscataway, NJ, USA)

in the Center for Advanced Biotechnology and Medicine (<https://cabm.rutgers.edu/>). CABM is an interdisciplinary research center connecting life scientists from a wide range of fields, including microbiology, cell biology, biochemistry, and neuroscience. The fellow will also be an active member of the Rutgers University Microbiome Program (<https://microbiome.rutgers.edu/>), which links microbiologists across the university through regular seminars, retreats, and collaborations.

Description of the position: The fellow will develop and conduct research projects, present at local and international meetings, write papers, apply for fellowships and other funding, and mentor students and other lab members. Current major research directions in the lab include the evolution of microbial growth dynamics and the effect of ecological interactions on adaptation in microbial communities, but the position will allow for significant flexibility in developing new directions in accordance with the fellows interests and the broad goals of the lab. The fellows research may involve any combination of experimental (wet-lab biology), computational, and theoretical components.

The start date is flexible, but we prefer May 1, 2023 or as soon as possible thereafter. The fellow can expect at least two years of support, with additional years contingent on funding availability and mutual agreement. The salary will be commensurate with the applicants experience and qualifications, with the minimum set by NIH-NRSA stipend levels (<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-132.html>).

Qualifications: By the start date of the position, applicants must have a Ph.D. in a biological or quantitative discipline, including (but not limited to) biology, physics, chemistry, computer science, applied mathematics, or engineering.

Applicants ideally have previous experience in wet-lab biology research (e.g., microbiology, molecular biology, genetics), coding (e.g., Python, R, C/C++), analysis of large data sets, mathematical modeling, and/or simulations. Applicants without formal training in biology should demonstrate their strong interest in learning the relevant concepts and methods for this position.

Application instructions: Please submit your application through the university jobs portal:

<https://jobs.rutgers.edu/postings/191869> Please include the following documents:

1. A cover letter containing: - A narrative summary of your education and work history, especially experiences you feel specifically prepared you or motivated you for this position - An explanation of why you are specifically interested in this position and what you hope

to gain from it - Any other details that you consider important for evaluating your application - Where you learned about the position (e.g., e-mail from colleague, Twitter, job website, etc.) 2. Your CV, including all education and previous work experience 3. Names and e-mail address for three references that know you and your work well

We will start reviewing applications on March 1, 2023 and will continue until the position is filled. Our group values an inclusive culture, and we strongly encourage applications from a diverse range of candidates. If you are excited about our lab, please consider submitting an application even if you don't think you are a perfect fit.

If you have any questions, please contact Prof. Michael Manhart at mmanhart@rutgers.edu.

mmanhart@rutgers.edu

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StanfordU Biogeography

A 2-year postdoctoral position in developing analytical methods and tools for evolutionary biogeography and macroecology is available in the lab of Barnabas Daru (<https://darulab.org/>) in the Department of Biology at Stanford University. This position is part of a collaborative, NSF funded Division of Biological Infrastructure project titled "phyloregion, computational infrastructure for biogeographic regionalization and macroecology in the R computing environment." The position is 100% research.

The responsibilities are to: (1) Develop new methods for analyzing biome evolution; (2) Develop new tools to visualize patterns of biogeography, macroecology and evolution; and (3) Develop new tools for conservation that reflect the key dimensions of phylogenetic diversity including richness, divergence, and regularity (<https://doi.org/10.5281/zenodo.4792835>).

The Daru Lab is supportive of opportunities for professional development (through Office of Postdoctoral Affairs; <https://postdocs.stanford.edu/>). The postdoc will also have the opportunity to participate in a users workshop on biogeographic methods held at Stanford Hopkins Marine Station and Turtle Cove Field Station, Louisiana. We strive to provide a flexible, comfortable, inclusive environment for research and professional growth.

Essential qualifications: Applicants should have a PhD in ecology, biology, evolution, biogeography, statistics or a related field, and have demonstrated expertise in spatial analysis and programming in the R computing environment. Prior experience with GIS/geospatial analysis, R package development, Git, and/or reproducible research would be an asset. Prospective postdocs from traditionally under-represented groups are especially encouraged to apply.

Application: Applicants should electronically submit a single PDF containing the following: 1. a 2-page cover letter detailing your research interests and skills that match the position 2. a recent CV (with contact information for 3-5 references listed at the end)

Please submit applications before March 14, 2023 via <https://forms.gle/wKjNJHGcbfrJMXgQ7> Direct any questions to Dr. Barnabas Daru at bdaru@stanford.edu. The start date is May 2023, with flexibility.

Terms of employment: Salary, health insurance, and other benefits are included. This position is based at Stanford University, and it is an Equal Opportunity/Affirmative Action/Veterans/Disability Employer committed to diversity.

Barnabas Daru, Ph.D.

Assistant Professor of Biology

Stanford University

Email:bdaru@stanford.edu

Lab website:darulab.org

Barnabas Daru <bdaru@stanford.edu>

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UArizona EvolutionaryBiology

A postdoctoral position, supported by the G.G. Simpson Postdoctoral Fellowship, is available in the Badyaev lab at the Department of Ecology and Evolutionary Biology at the University of Arizona. This position was established to honor Prof. George Gaylord Simpson's work at our Department and provides an excellent opportunity for a productive and creative scientist to work on fundamental problems in evolutionary biology within the broad conceptual framework or empirical expertise of the lab. We are particularly interested in integrative organismal biologists wanting to master genomic or de-

velopmental approaches. In addition to training and extensive laboratory facilities, there is an opportunity to participate in long-term field studies of birds and mammals, work with a large multi-generational captive population, and collaborate on ambitious new projects investigating the evolutionary and developmental origins of adaptations utilizing approaches from genomics, physics of morphogenesis, network biology, and developmental dynamics.

Apply here: <https://arizona.csod.com/ux/ats/-careersite/4/home/requisition/13238?c=arizona>, submitting: 1) A statement of your research experience and approaches you would like to learn during your postdoc, 2) CV with contacts of three references, and 3) reprints of 2-3 of your most representative papers combined in a single file.

The start date is flexible, and review of applications is ongoing. Address inquiries to Alex Badyaev: abadyaev@arizona.edu. The position comes with a salary of \$54,840/yr with full benefits and research allowance and is renewable depending on funding.

abadyaev@arizona.edu

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UCalifornia Irvine MicrobialEvolutionaryEcol

Postdoctoral Scholar: Microbial Evolutionary Ecology/Rodriguez-Verdugo lab

A Postdoctoral Scholar position is available in the Rodriguez-Verdugo lab in Department of Ecology and Evolutionary Biology at the University of California, Irvine

We are seeking a highly motivated and independent postdoctoral scholar to work on an NSF-funded project investigating the role of cross-feeding interactions in the formation of new species in microbial communities. Using a two-species consortium composed of *Acinetobacter johnsonii* and *Pseudomonas putida*, the successful candidate will (1) assess the conditions promoting phenotypic and genotypic divergence by evolving species under lab conditions; (2) characterize fitness tradeoffs and test frequency-dependence selection; and (3) assess coevolution and divergence by tracking the fate of adaptive mutations in populations. To achieve this, the candidate

will employ a combination of experimental evolution, physiological assays, whole genomes and population sequencing, and reciprocal invasion experiments.

The postdoc will work directly with Dr. Alejandra Rodriguez-Verdugo (<https://faculty.sites.uci.edu/verdugolab/>) in the Department of Ecology and Evolutionary Biology at UC Irvine. The successful candidate will work in a dynamic, inclusive, and collaborative research environment to advance the field of microbial ecology and evolution. There will be opportunities to mentor graduate and undergraduate students. The initial appointment will be for 2 years.

Application due date: Postdoctoral candidates are encouraged to apply by February 16, 2023, but the position will remain open until filled. Start date: Flexible, ideally between April 2023 - June 2023.

The primary responsibilities of this position include:

1. Conducting laboratory experiments (~40%), including evolution experiments, physiological assays (e.g. growth performance assays, biofilm assays...), and competition fitness assays.
2. Analyzing data (~25%), including physiological and sequencing data, using R and Matlab, among others.
3. Writing and presenting research results (~25%) Draft and submit manuscripts for publication in peer-reviewed scientific journals: present results at professional meetings, conferences, and seminars.
4. Student mentoring (~10%) Mentor undergraduate and graduate students in related research.

Qualifications: The successful candidate is expected to have a PhD. in the following or related fields: microbial ecology, evolutionary biology, molecular microbiology, and ideally, will have experience in microbial experimental evolution, synthetic communities, and whole genome sequencing.

For more information about this position, contact Dr. Alejandra Rodriguez-Verdugo at alejandr1@uci.edu.

Qualified candidates should submit 1) a Cover letter indicating research interests, previous research experience, and fit with the advertised position, 2) curriculum vitae, and 3) Contact information for three references to the following on-line recruitment URL:

<https://recruit.ap.uci.edu/JPF08060> *Salary range: *The salary range for this position is \$55,632-\$66,600. The posted UC salary scales set the minimum pay determined by experience level. See Postdoctoral Scholar Scale for the salary range. "Off-scale salaries", i.e. a salary that is higher than the published system-wide salary at the designated experience, are offered when

necessary to meet competitive conditions.

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.

Alejandra Rodriguez Verdugo, PhD (she/her)

Assistant Professor

University of California, Irvine

Ecology and Evolutionary Biology

3110 Biological Sciences 3

Irvine, CA 92697

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<https://faculty.sites.uci.edu/verdugolab/> Alejandra Rodriguez Verdugo <alejandr1@uci.edu>

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UCDavis VectorPopulationBiology

Postdoctoral Research Fellow Position Vector Population Biology University of California, Davis

Description: The Vector Genetics Lab (VGL) at the University of California, Davis has a post-doctoral position available for a highly motivated candidate with a background in population biology, including strengths in ecology and/or genetics. The VGL is dedicated to research and training in the areas of ecology, population & molecular genetics, genomics and bioinformatics of insect vectors of human and animal disease. We have developed a program aimed at expanding knowledge that may be applied to improving control of disease vectors and that also addresses problems of interest in the field of evolutionary biology. See details at: <https://vectorgeneticslab.ucdavis.edu/> Ongoing projects include work on the following systems: - Populations of Anopheles malaria mosquitoes on islands off the coast of Africa - Populations of Plasmodium falciparum in Africa - Malaria elimination based on Anopheles vectors

engineered with Plasmodium- blocking transgenes - Autonomous CRISPR Cas9-based gene drive in Anopheles mosquitoes

Ongoing research topics include: - Interspecific hybridization and introgression as a mechanism for adaptation - The evolution of resistance to Plasmodium transmission blocking effector genes - Evaluating the behavior of Cas9-based gene drive systems in natural mosquito populations via field trials

The successful candidate will design a study of the molecular ecology of human malaria parasites and/or Anopheles mosquito vector species to decipher recent population history and evolution.

Position Information: Salary Range: \$60,000 - \$71,952 Full Time Location: Davis, CA Benefits Eligible including Medical, Dental, Vision, 401(k), etc.

Minimum Qualifications: - PhD in Ecology, Population Genetics/Genomics, Bioinformatics, or related discipline (theoretical and/or applied) - Demonstrated record of research productivity and publications - Ability to participate in expeditions to field sites in Africa

Preferred Qualifications: - Strong mathematical/statistical skills - Experience/or interest in working in Linux environment - Experience/or interest in genomic data analysis - Experience with coalescence/IBD methods - Experience/or interest in programming (e.g. C/C++, Python/Perl, R)

Physical Demands: Ability to move/lift boxes and material weighing approximately 25 lbs Must be able to walk 1-3 miles in rough terrain

Work Environment: - Work in open cubicle area where noise from others is present - Occasional international travel for several weeks to field sites in Africa - Work at field sites in tropical Africa where hazardous materials and potential infectious disease agents (malaria parasite from field collected mosquitoes) are present

The University of California prohibits smoking and tobacco use at all University owned or leased properties, or facilities operated by UC staff or faculty. Smoking and tobacco use are strictly prohibited in indoor and outdoor spaces, parking lots, residential space, and University vehicles. <https://ucdavispolicy.ellucid.com/documents/view/271> How to apply: Applicants should submit the following materials: - A cover letter - A curriculum vitae - List of relevant publications - Contact information for 3 referees Send the above combined into a single PDF to Gregory Lanzaro (gclanzaro@ucdavis.edu). Review of applications will start immediately. This position will be open until filled. The appointment is for a duration of two years.

The University of California has implemented a SARS-CoV-2 (COVID-19) Vaccination Program SARS-CoV-2 Vaccination Policy (ucop.edu) covering all employees. To be compliant with the policy, employees must submit proof of vaccination or a University-approved exception or deferral. The University of California 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.

Christine H Coleman <cmhandy@ucdavis.edu>

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UCollege Dublin FishDiseaseGenomics

A PostDoc position is available at University College Dublin

See: <https://my.corehr.com/pls/coreportal.ucdp/-apply?id=015627> UCD Post-doctoral Research Fellow Level 1 or 2, Biology and Environmental Science, Temporary 3 year post Applications are invited for a Temporary 3 year post of a UCD Post-doctoral Research Fellow Level 1 or Level 2 within UCD School of Biology and Environmental Science.

Atlantic salmon is affected by complex gill disease (CGD) that causes substantial losses to the aquaculture industry. The overall aim of the proposed work is to increase understanding of gill disease in salmon and provide targeted therapies for treatment. At present up to seven specific infections are categorised under the heading of gill disease and so it is necessary to consider gill health not only in response to the colonisation of one single pathogen type, but to attempt to elucidate the underlying pathologies in the context of multiple parallel gill disorders. The Post-Doctoral Research Fellow will undertake de-novo whole genome sequencing of pathogens associated with CGD as well as genetic analyses of the associated microbiome. In addition, an environmental DNA assay will be developed to assist in early detection of gill disease.

The Post-Doctoral Research Fellow will also work with

other aspects and partners within the Science Foundation Ireland funded GIDAS project that is a collaboration between The Atlantic Technical University and University College Dublin. The successful candidate will be expected to be based in Dublin, but will also spend time at The Atlantic Technical University in Galway.

The Post-Doctoral Research Fellow will be responsible for:

- Performing whole genome sequencing of pathogens and constructing draft genomes.
- Resequencing different strains of pathogens to assess variants using short read sequencing approaches.
- Establishing the pathogen associated microbiomes through High Throughput Sequencing
- Developing an environmental DNA assay for specific pathogen strains.
- Being actively involved in other aspects of the GIDAS research programme.
- Assisting in reporting and leading scientific publications.

In addition to the Principal Duties and Responsibilities listed below, the successful candidate will also carry out the following duties specific to this project:

- Assisting in the daily maintenance of a molecular genetics laboratory, curating samples, developing molecular genetic methods.

Contact: jens.carlsson@ucd.ie

Jens Carlsson <jens.carlsson@ucd.ie>

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UCopenhagen PopulationGeneticsAfricanMammals

A 2-year Post doc position is now open at the Department of Biology, University of Copenhagen. The position is in the Wildlife Genetics group led by Rasmus Heller, and will work on analyzing several large genomic data sets from African mammals. The position is part of the African Wildlife Genomics project in which we will sequence 10,000+ individuals spanning 20+ species of large African mammals and use population genetics to better understand the evolutionary history of Africa's

megafauna. Topics under investigation include population structure, phylogeography, gene flow, speciation, local adaptations, demographic history and conservation.

The preferred candidate has a strong background in analyzing whole-genome data, including a thorough understanding of NGS data and bioinformatic processing of raw sequencing data. The candidate must also be able to demonstrate an interest in - or preferably experience with - population genetic method development. In addition, the candidate must have demonstrated expertise in performing population genetic analyses on such data using state-of-the-art tools. The candidate is expected to be proficient in at least one scripting language and have a solid statistical background.

The position will provide an opportunity to work on unique data sets and problems in an engaging host environment. Rasmus Heller's group is part of a larger Statistical and Population Genetics cluster consisting of four research groups and PIs working closely together on the African Wildlife Genomics project. This ensures a strong, collaborative scientific environment with diverse expertise ranging from theoretical population genetics and methods development to molecular ecology and conservation genetics. We have a large network of Danish and international collaborators, including close ties to African research environments. Working conditions and quality of life in Denmark are among the best in the world.

The deadline for application is February 20th 2023, and the starting date is June 1st 2023. For further information and a link to the formal application page, see the official advertisement here:

<https://jobportal.ku.dk/videnskabelige-stillinger/?show=158372> Further questions can be addressed to Rasmus Heller at rheller@bio.ku.dk.

Group website:

<https://rathmuth.wixsite.com/wildlifegenetics> Rasmus Heller <rheller@bio.ku.dk>

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UCopenhagen SymbioticFungusImaging

Postdoctoral Fellowship in the advanced imaging of a symbiotic fungus, University of Copenhagen

The Integrative Evolutionary Biology (IEB) group at the Department of Biology at the University of Copenhagen in Denmark is offering a postdoctoral fellowship in the 'Advanced imaging of a symbiotic fungus' starting 1 September 2023 or as soon as possible thereafter. The University of Copenhagen provides a top-notch research environment and the city of Copenhagen provides a vibrant cultural scene.

Scientific environment

Symbioses often involve food exchange among interacting partners, but the nutritional dimensions underlying these transactions are often difficult to parse. The IEB group has developed techniques for using symbioses involving social insects as models for such inquiry. A main focus of our research is the remarkable lineage of fungus-farming 'attine' ants that have evolved diverse farming strategies for cultivating fungal symbionts which in turn have evolved key signatures of crop domestication (e.g. specialized nutritional rewards that occur nowhere else in the fungal kingdom). Our research is hypothesis driven and uses diverse methodological approaches to test these hypotheses ranging from field studies of free-ranging ant colonies in Panamanian rainforests, to laboratory studies of colony behavior and physiology, to in vitro tests of fungal cultivar performance, to diverse molecular and bioinformatics approaches. More information can be found on the IEB homepage (www.jonathanshik.com).

Project Description

The postdoctoral fellowship will be part of a newly established research project "Missing-link cultivars: using fungus-farming ants to solve mysteries of crop domestication" funded by the Carlsberg Foundation. More general information about the project can be found here: https://www.carlsbergfondet.dk/-/Forskningsaktiviteter/Bevillingsstatistik/-Bevillingsoversigt/CF22_0664_Jonathan-Shik . The project will use advanced imaging approaches to test hypotheses about nutritional optimization in the symbiosis between ant farmers and their fungal cultivars that have been domesticated over millions of

years. These fungi have traits that reinforce their value as co-evolved food crops, and they depend on their ant farmers to provide them with nutritional substrates (e.g. fresh vegetation) foraged from the environment. The postdoc will use advanced imaging approaches to visualize and map metabolite production and function at microscales within the hyphal network of the fungal cultivar with the potential to also study other microbial symbionts. Key techniques might include broadband coherent anti-Stokes Raman (BCARS), quantum cascade laser infrared (QCL-IR), and a range of state-of-the-art confocal as well as holographic-related microscopies.

Daily work will be based in the thriving research environment of the Section of Ecology and Evolution (<https://www1.bio.ku.dk/english/research/ecology-evolution/>). Additional collaborations will take place with the group of Staffan Persson at the Department of Plant & Environmental Sciences (<https://www.perssonlab.com/team>). The Persson group has broad expertise in many microscopy-based techniques and close ties with several people in the group are anticipated.

Job description

The position is available for a 2-year period (with the possibility of a third year extension) and your key tasks as a Postdoctoral Fellow at SCIENCE are:

* To manage and carry out your research project * To oversee student research related to your project * Write scientific articles * Disseminate your research

Formal Qualifications

* PhD in Cell biology, Biophysics, or Microbiology with good results (including publications and conference presentations) * An interest in advanced imaging, informatics, and image analyses * Experience with sequencing and molecular analyses * Creativity and ability to be both team-oriented and independent * A proven record of excellent English speaking, reading and writing skills. * Embrace of an international research environment and interdisciplinary research

Terms of employment

The position is covered by the Memorandum on Job Structure for Academic Staff. Terms of appointment and payment accord to the agreement between the Ministry of Finance and The Danish Confederation of Professional Associations on Academics in the State.

Application Procedure

The application, in English, must be submitted electronically by clicking APPLY NOW below.

How to apply

Applications must include:

* Cover letter * Statement of research interests and reasons for applying to this

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UCyprus AvianEvolutionaryGenomics

Postdoctoral research position in evolutionary genomics at the University of Cyprus

We are looking for a postdoctoral researcher to work on two Cyprus Research and Innovation Foundation (RIF) projects in Alex Kirschel's lab at the Department of Biological Sciences at the University of Cyprus. The projects "Leveraging ancestry to investigate the genomics of song and colour in birds < <https://www.tinkerbirds.com/single-post/-leveraging-ancestry-to-investigate-the-genomics-of-song-and-colour-in-birds> >" and "Continent-wide genomics of hybridisation and speciation < <https://www.tinkerbirds.com/single-post/continent-wide-genomics-of-hybridisation-and-speciation> >" involve collaboration with Associate Professor Bridgett vonHoldt, an expert in evolutionary genomics and epigenetics at Princeton University and Dr. Andrea Fulgione an expert in evolutionary and computational genomics at Max Planck Institute for Plant Breeding Research.

Both projects focus on the tinkerbird study system from continental Africa, which we have been studying for almost 20 years. For more information on the projects and research performed so far, please visit www.tinkerbirds.com. The role involves working on bioinformatics pipelines and downstream genomics analyses of whole genome sequences and ddRAD sequencing, working closely with Dr. vonHoldt and Dr. Fulgione. Genomics analyses include admixture mapping, GWAS, and RNAseq to examine gene expression patterns associated with phenotypic characters important in speciation. Population genomics analyses will include demographic inference, based on site frequency spectrum and multiple sequentially Markovian coalescent (MSMC) approaches, as part of an investigation into discordance between

nuclear genome and mitogenome phylogenies, while D statistics, metabarcoding and landscape genomics approaches will also be used.

Requirements A PhD in a related subject Molecular lab experience in genomic library preparation Proficiency in R Expertise in bioinformatics and command line A good understanding of transcriptomics Proficiency in English

Desirable skills Experience with demographic inference First author publications in peer-reviewed scientific journals

Location The position is based at the University of Cyprus, in Nicosia.

The position is for an initial 12 months, with possibility of extension. The gross annual salary range for full time employment ranges from euro 26,000 - euro 32,500 per annum commensurate with experience.

How to apply Applications for this position are due by 28th February 2023. Informal enquiries and applications, including a cover letter, CV, details of two referees, and a list of publications, should be sent by email to:

Associate Professor Alexander Kirschel Behavioural Ecology and Evolution Lab Department of Biological Sciences University of Cyprus kirschel@ucy.ac.cy

Alexander Kirschel <kirschel.alexander@ucy.ac.cy>

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UHelsinki MicrobiotaMicrobiomeResearch

The Insect Symbiosis Ecology and Evolution (ISEE) Research Group at the Organismal and Evolutionary Research Program, the University of Helsinki, Finland invites applications for a

POSTDOCTORAL RESEARCHER

in Microbiome research

The project is a comprehensive study of the evolution of resilient microbiome in wild species. We will test how resilient or eco-responsive host-microbiome interactions are to changing environments. Both biotic and abiotic factors can influence the bond between hosts and their associated microbes, and create an imbalance that may be linked to decrease in the host fitness and population dynamics in the field. The postdoc will have access

to long-term data and yearly field samples to tackle related to microbiota / microbiome community change through space and time. The tasks of the postdoc will include field work, molecular work, and community analyses, and writing of manuscripts; and the details of the project will be adjusted to fit the research interests of both the PI and the postdoc.

For this position experience in analyses of metabarcoding or metagenomic data is necessary. Experience with phylosymbiosis studies is not required but will be valued. Candidate with degrees in Evolutionary Biology, Molecular Biology, Microbiology, Bioinformatics or similar with experience in the above-mentioned research area are strongly encouraged to apply.

The position is available in the ISEE research group of Dr. Anne DUPLOUY, starting as soon as possible, no later than June 2023. Please see here for further information about

the hosting research group: www.anneduplouy.net and the PI: <https://researchportal.helsinki.fi/en/persons/-anne-duplouy> The salary is defined in accordance with the University salary system for teaching and research personnel (ca. 3200-3600 euros/month, depending on the appointee's qualifications and experience). The position is for a fixed-term of 2 years. A trial period of six months will be applied. The position will be filled as soon as possible, or as agreed with the selected candidate. The University of Helsinki offers comprehensive services to its employees, including occupational health care, supported access to high quality sports facilities, and opportunities for professional development. There are also several funding opportunities that the candidate may consider to acquire their own funding with full support from the PI.

The application should include the following attachments as a single pdf- file (in English): 1) Statement on your background and motivations to join the research group (eg. How do you fit?, what would you bring?, what do you seek?) (max. 1 page) 2) Curriculum Vitae 3) List of publications (preprints included, and quick description of your contributions to the works) 4) Names and contact details of two references

To apply, please submit the application through the University of Helsinki electronic recruitment system by clicking on the Apply button for the position. Internal applicants (i.e., current employees of the University of Helsinki) please submit your applications through the SAP HR portal.

The closing date is March 15th, 2023 but review of applications will begin immediately.

For more information: Dr. Anne Duplouy,

anne.duplouy@helsinki.fi

The University of Helsinki and the ISEE research group are strongly committed to diversity and equity, and welcome applications from persons of any background, who will contribute to the further diversification of ideas.

Apply here: <https://jobs.helsinki.fi/job/Helsinki-Post-Doctoral-Research-in-Microbiome-Research/-763683602/> Dr. Anne DUPLOUY Academy of Finland Research Fellow Insect Symbiosis Ecology and Evolution (ISEE), PI Organismal & Evolutionary Biology Research Programme (Organismi- ja evoluutiobiologian tutkimusohjelma) Faculty of Biological & Environmental Sciences University of Helsinki, Finland

www.anneduplouy.net @duplouy_anne

“Duplouy, Anne M R” <anne.duplouy@helsinki.fi>

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UInnsbruck AquaticEvolution

Dear EvolDir Community!

JOB OFFER: UInnsbruck.AquaticEvolutionaryEcology

A PostDoc position is available at the University of Innsbruck / Research Department for Limnology, Mondsee, Austria. Earliest possible start, duration 3 years.

In this position, you will carry out independent research in the field of aquatic evolutionary ecology by developing a project at the interface of ecology and evolution. The initial idea for the project comes from you, and you will develop it in collaboration with Prof. Seppälä. Collaboration with other research groups at the Research Department for Limnology and at other departments at the University of Innsbruck is encouraged. Possible research fields include, but are not limited to, species interactions, responses to environmental change, evolutionary genetics, and ecosystem functioning. In an ideal case, your project combines different fields.

Qualifications:

PhD in Biology Research experience in Aquatic Ecology and/or Evolutionary Ecology Desired: Postdoc experience, publications in high-ranking journals, experience in supervision of students, acquisition of third-party funds and international work experience Flexibility and ability to work in a group are essential

For this position we would need a CV, a motivation

letter and a brief (max. 2 pages) description of the research idea (e.g., study question, taken approach, possible collaborators).

Location: The Research Department for Limnology is located on the edge of the Alps in the small town of Mondsee (Upper Austria). The nearest city is Salzburg, which offers history, culture and entertainment at a convenient distance from Mondsee.

Job profile:

The full, legally binding call for application (in German) can be found at www.uibk.ac.at/karriere. Qualified persons are invited to apply through the Career Portal of the University of Innsbruck (position: BIO-13290).

We are looking forward to receiving your online application by 24th February 2023.

Salary:

The minimum gross salary (stipulated by collective agreement) for this position amounts to euro 4.352,00 per month (14 times). Furthermore, the university has numerous attractive offers (<https://www.uibk.ac.at/-universitaet/zusatzleistungen/>).

For more information considering research, please contact Prof. Otto Seppälä: otto.seppaelae@uibk.ac.at

“Burggraf, Sonja” <Sonja.Burggraf@uibk.ac.at>

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ing@mcmaster.ca](mailto:gold-
ing@mcmaster.ca))

ULiverpool ParasiticNematodes

Please see below for a link to apply for a postdoctoral researcher position linking some intriguing, recently discovered genomic regions to pathogenicity phenotypes in parasitic nematodes. The project is led by Mark Viney, with co-investigators Vicky Hunt, Andrea Betancourt and Dan Rigden.

Informal enquiries can be addressed to Mark Viney at mev@liverpool.ac.uk Deadline March 2nd.

We are seeking a POST-DOCTORAL RESEARCH ASSISTANT to work on a BBSRC-funded project studying the structure and function of pathogenicity islands in a parasitic nematode. Find out more and apply here: <http://bit.ly/054646> “Betancourt, Andrea” <aabt@liverpool.ac.uk>

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ing@mcmaster.ca)

ULiverpool ThermalFertilityLoss

Deadline: 7th February 2023

Latest start date: 1st April 2023

We are seeking a highly motivated postdoctoral scientist to investigate how high temperatures affect male and female fertility across the animal kingdom, by analysing a large data set of published papers collected in the last year.

The climate is warming rapidly, and there is an urgent need to be able to accurately predict how these changes will alter the distribution of species, from disease vectors and crop pests expanding into new areas, to endangered species seeing their ranges shrink. The thermal tolerance of species is often used to predict how populations will respond to warming, based on the temperatures at which organisms die or lose mobility. However, fertility loss often occurs at temperatures far less extreme than those required to kill an organism, and fertility loss may have equally large effects on population health and resilience and species distributions.

We are involved in a large research collaboration seeking to understand how temperature affects animal fertility, which has amassed a database of over 1,500 published papers containing relevant data. Alongside Dr Dougherty and Dr Price, you will lead the analysis of this dataset. You will work as part of a large research collaboration including experts in thermal fertility (Dr Amanda Bretman, Prof. Claudia Fricke, Prof. Rhonda Snook) and meta-analysis (Prof. Shinichi Nakagawa, Dr Daniel Noble).

You should have a PhD degree in Ecology, Evolution or a related discipline, and experience of running statistical analyses of large data sets, preferably using meta-analysis methods. The applicant should possess excellent statistical analysis, communication skills and be able to work in a collaborative environment. The post is available for 9 months, and remote working arrangements may be considered for UK applicants.

To apply, please use this link: <https://t.co/KTR1IJJo0E>

Informal enquiries may be made to Dr Liam Dougherty (liam.dougherty@liverpool.ac.uk).

“Dougherty, Liam” <Liam.Dougherty@liverpool.ac.uk>

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ing@mcmaster.ca)

Umeå University Horizontal Gene Transfer

Umeå University is currently running the “Excellence by Choice” Postdoctoral Programme in Life Science research to train outstanding young researchers and stimulate cutting-edge research. As a collaboration between the two national Centres of Excellence - Umeå Centre for Microbial Research (UCMR) and Umeå Plant Science Centre (UPSC) - the programme aims to encourage new synergies in Life Science with a focus on molecular and translational research and to strengthen world-class research activities in Umeå. Patron for the programme is Nobel laureate Emmanuelle Charpentier, who discovered the CRISPR-Cas9 gene editing technology during her time as a scientist and group leader in Umeå.

In this call, several fellowships are open for outstanding postdoctoral candidates interested to do research in the highly interactive and multidisciplinary research environments of UCMR and UPSC. In the scope of the “Excellence by Choice” Postdoctoral Programme, we aim to recruit up to six postdoctoral scientists in this round.

We invite people to consider one of the projects listed here (<https://www.umu.se/en/ucmr/ec-postdoc-programme/excellence-by-choice-postdoctoral-programme-in-life-science/>) and apply. The deadline is March 19, 2023.

In particular we would like to draw people’s attention to a postdoc opportunity with Peter Lind and Eric Libby. The project looks at how horizontal gene transfer affects genetic regulation in microbial communities. We are looking for someone interested in building theoretical/mathematical models to explore this fascinating topic. Please contact us if you are interested or have any questions: Peter Lind (peter.lind@umu.se) and Eric Libby (eric.libby@umu.se).

Eric Libby <elibbyscience@gmail.com>

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ing@mcmaster.ca)

UMinnesota Transcriptomics Polyploidization

Post doc to study transcriptomics of polyploidization

Susan Balenger is seeking a post-doctoral scientist to join an NSF-funded project for 1 year, and with possible extension, up to 3 years. The post doc will be based in the EEB department at UMN. Research focus is on understanding how changes in gene dosage associated with polyploidization in the gray treefrog complex impact neuroendocrine regulation. This is a highly collaborative project, and the post doc will have extensive opportunities to work with co-PIs Chris Leary (<https://olemiss.edu/learylabb/>) and Lainy Day at the University of Mississippi.

In collaboration with Balenger, the post doc will lead the assembly, annotation, and analysis of RNAseq derived datasets. The post doc will be expected to further integrate gene expression data with field collected hormonal phenotype data to connect regulatory and phenotypic changes following polyploidization events. Development of independent questions and projects utilizing samples and available datasets will be strongly encouraged.

The successful candidate will have the opportunity to be directly involved in field data collection from populations of frogs across the eastern United States, and to participate in broader impacts initiatives aimed at training high school, undergraduate, and graduate students in Mississippi. The post doc will be expected to present at scientific conferences and lead the preparation of manuscripts for publication in high-quality peer-reviewed journals.

Required Qualifications: PhD in bioinformatics, evolution, neurobiology, genomics, endocrinology, or related fields
Demonstrated experience with the assembly and analysis of transcriptomic data
Ability to work independently
Demonstrated experience with peer-reviewed publishing

Preferred Qualifications: Experience working with both long and short read RNAseq datasets
Experience with extraction of RNA from tissue samples
Strong writing skills

Applicants should email the following to Susan Balenger (sbalenge@umn.edu) with header: Polyploid Postdoc. Review of applications will begin on January 31st and continue until the position is filled. 1. Cover Letter, 2.

CV with names and contact information of three references, and 3. 1-page statement of research interests.

Susan Balenger (<https://susanbalenger.weebly.com/>)
Researcher University of Minnesota - Twin Cities Ecology, Evolution, and Behavior Saint Paul, MN 55108

Susan Balenger <sbalenge@umn.edu>

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UMinnesota TwinCities Polyploid Treefrog Transcriptomics

NSF funded postdoc to study transcriptomics of treefrog polyploidization

Susan Balenger (<https://susanbalenger.weebly.com/>) is seeking a post-doctoral scientist to join an NSF-funded project for 1 year, and with possible extension, up to 3 years. The post doc will be based in the Ecology, Evolution, and Behavior department at the University of Minnesota - Twin Cities. The primary research focus is on understanding how changes in gene dosage following polyploidization in the gray treefrog complex (*Hyla chrysoscelis/versicolor*) have impacted neuroendocrine regulation. This is a collaborative project, and the post doc will have opportunities to work with co-PI Chris Leary at the University of Mississippi.

In collaboration with Balenger, the post doc will lead the assembly, annotation, and analysis of RNAseq derived datasets. The post doc will be expected to further integrate gene expression data with field collected hormonal phenotype data to connect regulatory and phenotypic changes following polyploidization events. Development of independent questions and projects utilizing samples and available datasets will be strongly encouraged. In particular, candidates interested in addressing evolutionary questions are encouraged to apply.

The successful candidate will have the (optional) opportunity to be directly involved in field data collection from populations of frogs across the eastern United States, and to participate in broader impacts initiatives aimed at training high school, undergraduate, and graduate students in Mississippi. The post doc will be expected to present at scientific conferences and lead the preparation of manuscripts for publication in high-quality peer-reviewed journals.

Required Qualifications: PhD in evolutionary biology,

genetics, bioinformatics, endocrinology, or related fields
A background in transcriptomics, population genetics, and/or evolutionary genomics
Demonstrated experience with peer-reviewed publishing

Preferred Qualifications: Demonstrated experience with the assembly and analysis of transcriptomic data
Experience working with both long and short read RNAseq datasets
Experience with extraction of RNA from tissue samples
Strong writing skills
Strong interest in developing independent projects utilizing the system/datasets

Questions/indications of interest should be directed to Susan Balenger (sbalenge@umn.edu).

Applicants should email the following to Susan Balenger with header: Polyploid Postdoc.

1. CV, 2. names and contact information of three references, and 3. 1 page statement of research interests/ & motivation for seeking the position.

Review of applications will continue until the position is filled.

Susan Balenger <sbalenge@umn.edu>

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UMinnesota TwinCities PopGenomics Structural Variation

POSTDOCTORAL POSITION

If interested in postdoctoral work in the Population Genomics and Structural Variation (PopGenSV) laboratory, please contact PingHsun (Benson) Hsieh, Ph.D.: hsiehph [at] umn.edu (<https://cbs.umn.edu/contacts/-pinghsun-hsieh>)

A postdoctoral position in population genomics and evolutionary medicine is available immediately in the Department of Genetics, Cell Biology, and Development (GCD) at the University of Minnesota, Twin Cities, MN. We are looking for a highly motivated and creative individual to leverage large datasets of long- and short-read genomes to investigate the full spectrum of human genetic diversity in relation to their evolutionary and functional consequences. Our lab specializes in understanding the biological and evolutionary role of structural variants (SVs) that remain largely unexplored in traditional human genetic studies.

The specific research project will be tailored to the inter-

ests of the individual, but we are particularly interested in (i) empirical and theoretical studies of how natural selection and demography shape the genetic variation patterns in extant and archaic humans, (ii) studying structural mutations that have functional implications in adaptations and diseases, (iii) identifying novel eQTL and phenotype associations using multi-omics and large BioBank data, and (iv) the inference of fitness effects for different mutational classes (e.g. single-nucleotide variants vs. structural variants). The successful applicant will have the opportunity to work with experts from large consortia, including Human Genome Structural Variation Consortium and All-Of-Us, which can benefit the individual and help build up their independent research program.

GCD is a vibrant, multi-disciplinary department, spanning the Medical School and College of Biological Sciences, with outstanding faculty expertise in genomics, bioengineering, cellular biophysics, and developmental biology. The successful candidate will have the opportunity to interact with many outstanding research groups in computational, evolutionary, and functional genomics across the Twin Cities campus, including Frank Albert, Yaniv Brandvain, Xiao Dong, Ched Myers, Maria Nieves-Coli $\frac{1}{2}$ n, Anna Selmercki, and Arslan Zaidi. The beautiful Twin Cities of Minneapolis and Saint Paul are a central hub for many biotech and bio-pharmaceutical companies and have close connections with the Mayo Clinic in Rochester, MN.

Required and Preferred Qualifications: Applicants must have a Ph.D., or be within six months of their doctorate degree, in the field of Population Genetics, Computational Biology, Statistics, Biostatistics, Computer Science, or other disciplines with strong quantitative backgrounds and strong programming skills. Experience in population and statistical genetics analyses and working with large sequencing data sets are highly desired. The candidate must be highly motivated and independent with strong writing and communication skills.

Please send a cover letter and CV with the contact information of three references to PingHsun (Benson) Hsieh, Ph.D., (hsiehph [at] umn.edu). Applicants can also apply for this position via UMN Careers (<https://hr.umn.edu/Jobs/Find-Job>) Job ID: 353976

PingHsun Hsieh <hsiehph@umn.edu>

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UNeuchatel ComparativeEpiGenomicsCarex

2-year 100% Postdoc position in comparative (epi)genomics

Unravel the (epi-) genomic architecture of chromosomal fusion and fission in holocentric species

Holocentric chromosomes that lack centromeres have repeatedly evolved in both animals and plants. Their unique chromosomal architecture may promote large-scale rearrangements through chromosomal fusion and fission and eventually promote speciation (Lucek et al. 2022 Trends Ecol Evol). However, often only some species groups undergo massive chromosomal diversification while others do not. Repetitive elements have often been suggested to initiate chromosomal rearrangements. However, neither the repeat landscape associated with rearrangements nor their epigenetic modifications are fully understood. This project aims to resolve the (epi-) genomic architecture of chromosomal fusion and fission in sedges of the genus *Carex*. The project is in close collaboration with Prof. Marcial Escudero (University of Seville, Spain) and Dr. Andri $\frac{1}{2}$ Marques (Max Planck Institute for Plant Breeding Research, Cologne, Germany). For this project you will employ comparative genomic methods using existing chromosome-scale genome assemblies and generate additional genomes. You will annotate genomes and generate and analyse the epigenomic landscape. The goal is also to establish a macroevolutionary perspective of chromosomal rearrangements for speciation. The prospective candidates will join the group of Kay Lucek that is funded through a Swiss National Science Foundation (SNSF) Eccellenza fellowship and be part of the Biodiversity Genomics laboratory (www.biodiversity-genomics.ch) at the University of Neuch $\frac{1}{2}$ tel in Switzerland.

Your profile: Enthusiastic, self-driven, responsible, collaborative and highly-motivated; excellent communication and interpersonal skills in verbal and written English; a strong work ethic. The ideal candidate brings strong conceptual thinking together with profound genomic and/or bioinformatic skills. Applicants should have a PhD degree in evolutionary biology, (epi)genomics, bioinformatics, or close related fields.

We offer you: A fully funded cutting-edge, two-year positions based at the Institute of Biology, University of

Neuchâtel, Switzerland. The Institute offers a vibrant and interdisciplinary research environment, combining a broad spectrum of research activities in life sciences, including evolutionary genetics, conservation, ecology and microbial biology. Salary and social benefits are provided according to University of Neuchâtel rules. Neuchâtel is an enchanting historic Swiss city in the French speaking part, well connected and offering a broad range of cultural and recreational activities.

Starting date: The anticipated starting date is the 1st of May or June 2023, with some flexibility.

Application: Motivated applicants should submit (1) a one-page letter describing yourself, your career goals, and your preferred project outlining your match, (2) a CV describing your education, publications, and relevant work experience, as well as (3) contact information of two references. The application deadline is 15th of March 2023. Please, send all the information in a single (!) PDF to Prof. Dr. Kay Lucek (kay.lucek@unine.ch). If you have any further questions, please contact me using the same email address.

LUCEK Kay <kay.lucek@unine.ch>

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UppsalaU ExperimentalEvolution

Postdoc scholarship in medical microbiology with a focus on experimental studies of evolution of codon usage bias and tRNA content

At the Department of Medical Biochemistry and Microbiology, Uppsala University, Sweden.

Time-limited postdoc scholarship (stipend) 100% during 2 years beginning as soon as possible.

Research group: Dr. Joakim Näsvall's research group is part of the Department of Medical Biochemistry and Microbiology and we work on bacterial genetics and evolution with a focus on evolution of new genes and evolution of the translation apparatus and the genetic code. More information can be found at: <https://www.imbim.uu.se/research-groups/infection-and-immunity/nasvall-joakim/> Research project: The project is aimed at understanding the selective forces leading to codon usage bias and its co-evolution with the composition of the tRNA pool. The usage of synonymous codons varies between differ-

ent organism and between different sets of genes in the same organism. What drives the evolution of codon usage bias and tRNA content is largely unknown, although several hypotheses exist. We have generated bacteria with genome-wide non-optimal codon usage that grow poorly and have pleiotropic phenotypes (temperature sensitivity, salt dependence, etc.). By evolving these bacteria to higher fitness in laboratory conditions we intend to find clues to what selective forces drive the evolution of codon usage bias and tRNA content.

Qualifications: We are looking for an outstanding postdoc that has a PhD in microbiology, genetics, evolutionary biology or similar where your PhD work was focused on experimental work with bacterial model systems. Experience of work with bacterial genetics, experimental evolution, genome sequencing, and reporter gene systems is a merit. We want a person with high creativity, willingness to implement cutting edge-new methods, the ability to independently plan experiments as well as excellent analytical and practical skills. You should have high skills in written and spoken English and the ability to work in a multi-disciplinary team.

Instructions for application: Please send your application by email with the subject line "postdoc application" to Joakim Näsvall (joakim.nasvall@imbim.uu.se) and include in your application, compiled in a single pdf file, the following: - A short letter that describes your research interests and a motivation for why you would be suitable for this position (maximum 2 pages) - Curriculum vitae including publication list - Copy of proof of passed PhD exam - Names and email addresses to three references

Joakim Näsvall Uppsala University, Dept. of Medical Biochemistry and Microbiology phone: +46 (0)18 4714366, cell: +46 (0)70 6972236

Web: www.uu.se, Facebook: [@Uppsalauni](https://www.facebook.com/uppsala.universitet), Twitter: [@Uppsalauni](https://twitter.com/Uppsalauni)

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

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USorbonne EvolutionBeetleChemosensoryGenes

Post-doc description Evolution of chemosensory genes in aquatic beetles

In the context of a project funded by the French national agency for research (ANR), we are offering a 20 months post-doctoral position (ideally starting 1st May 2023), to study the evolution of the chemosensory system in the context of adaptation to aquatic life in a major clade of predatory coleopterans (beetles). Transcriptomes of chemosensory organs (antennae; palps; control non-sensory tissue) have been generated in our lab (partly assembled and some preliminary analyses already performed) from adult specimens of about 15 species representing the main families of the beetle suborder Adephaga: Carabidae and Cicindelidae (terrestrial), Dytiscidae (the most species-rich aquatic family) and their successive aquatic/sub-aquatic sister-groups. For one dytiscid species, chemosensory organ transcriptomes have been produced from the strictly aquatic larval stage and from the adult stage (amphibious) for comparison. The research to be carried out by the post-doc will focus on chemosensory genes known in aerial insects to be involved in the detection of either water-soluble molecules (e.g., ionotropic and gustatory receptors: IRs and GRs) or of hydrophobic molecules (odorant receptors: ORs; odorant binding proteins: OBPs). The aim is to reconstruct within a phylogenetic framework, the evolution of these gene families (gene expansions and losses; selection signatures) and of their expression sites (notably antennae vs. palps; see Montagné et al. 2021. *Front. Ecol. Evol.* 9: 773915). The project will provide an unprecedented picture of the evolutionary changes in chemodetection that accompanied land-to-freshwater transition(s) in a lineage of insects, and is expected to yield papers in high impact scientific journals.

Applicants must hold a PhD and confirmed skills in bioinformatics, particularly transcriptomics and genomics including phylogenetic analyses and RNAseq analyses, and a keen interest in evolutionary biology and/or ecology. The recruited post-doc is expected to perform mainly in silico analyses (transcriptome assemblies, annotations, gene phylogenies, species tree / gene tree reconciliation, dN/dS analyses, differential gene expression analyses, evolutionary interpretations). The salary will be determined according to qualification and

prior experience.

The research activity will be conducted within the EvoFonct group of the Institute of Systematics, Evolution and Biodiversity (<https://isyeb.mnhn.fr/fr>), an internationally renowned lab in the study of organism diversity and evolution, and in close collaboration with the Sensory Ecology department of iEES Paris (<https://iees-paris.fr/>). The post-doc will be supervised by Michaël Manuel (<https://cv.hal.science/michael-manuel>) and Muriel Jager. Our lab is located on the Pierre & Marie Curie campus of Sorbonne University in the heart of Paris near the “Quartier Latin”. Sorbonne University comprises three faculties: science and engineering, humanities and medicine. Covering all fields of knowledge in science and engineering, the Faculty of Science and Engineering is dedicated to supporting research at the heart of the disciplines as well as promoting multidisciplinary approaches to meet the major challenges of the 21st century.

Candidates should send a letter of motivation and curriculum vitae to Pr. Michaël Manuel (michael.manuel@sorbonne-universite.fr)

See also the announcement on the ISYEB website <https://isyeb.mnhn.fr/en/news/isyeb-recruits-post-doc-study-evolution-chemosensory-genes-relation-land-water-transition> Michael MANUEL <michael.manuel@sorbonne-universite.fr>

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USouthBohemia EvolutionaryEcology

Postdoc: USouthBohemia.EvolutionaryEcology

Text:

Faculty of Science, University of South Bohemia in Āeské BudĀjovice, Czech Republic is seeking qualified applicants for the position of

Post-doctoral Researcher in Evolutionary Ecology

-Animal Migration

The newly established research group Global Life-history, Ornithology & Behavioural Ecology (GLOBE) - <https://GLOBEresearchgroup.com> new webpages will be launched soon - focuses on ecology, behaviour, life-history strategies and population dynamics of wild ani-

mals, particularly birds, including impacts and consequences of recent environmental changes. The GLOBE research group is led by Dr Vojtěch Kubelka from Department of Zoology and Centre for Polar Ecology at the Faculty of Sciences, University of South Bohemia in the Czech republic and has been recently awarded a prestigious Junior Star GAAR grant: Animal migrations in a changing world - Movements for reproduction to higher latitudes: still advantageous strategy or maladaptive behaviour? for years 2023-2027.

We seek to appoint an early career scientist as post-doctoral researcher to contribute to this new project.

What would be your main responsibilities

Organize and conduct ornithological field work at selected study sites across Western Palearctic and South America in association with international collaborators
Combine experimental and observational fieldwork with a comparative approach based on extracting relevant information from published literature
Coordinate data collection and analyses, working with large datasets in relational databases
Prepare and write manuscripts for publication in peer-reviewed journals
Lead or participate in funding applications for research in collaboration with team members
Supervise students and research assistants

Participate in conservation activities
Present and promote the results at conferences and seminars

Disseminate the project outputs to stakeholders and public,

§Carry out other scientific and/or academic activities that are important for the success of the project

What we offer

A two-year position with the possibility of extension based on good performance
Excellent instruments, equipment and multiple research platforms within the Faculty of Sciences, University of South Bohemia in Aeské Budějovice, Czech Republic
Access to the Czech Arctic research station at Svalbard and fieldwork at study sites along latitudinal gradients from Morocco to Arctic and from tropical Brazil to Patagonia

Extensive international networking and mentoring opportunities via the ALVONAL Shorebird Science project (<https://elvonashorebirds.com/-home/>)
Full logistical support for own follow-up research funding applications
English speaking, stimulating & friendly international research environment
HR Award certificate, jcu.cz/about-the-university/development/hr-award-hrs4r
Professional administration support and assistance with all personal, economic, legal, project, IT, intellectual property

needs, flexible working time
Competitive salary + possible bonuses, 5 weeks of paid vacation per year
Meals allowance, special mobile services, university kindergarten

§Work-life balance in a historical middle-sized university city, budejce.cz/en/

Competitive candidates are expected to have

PhD in evolutionary biology, behavioural ecology, zoology, or relevant field of life sciences

A foundation of knowledge in two or more fields: evolutionary ecology, climate change biology, demography and population dynamics, predator-prey interactions and animal migration
Experience in conducting or supervising international research projects
3+ years hands-on experience in field research, with preference for experience with fieldwork in tropical or Arctic locations
Ornithological fieldwork experience including bird handling and ringing (bird ringing licence is welcomed but not necessary)
Good skills in statistical modelling, advanced level in using R
Strong record of success conducting research and scholarly activities, including publications in peer-reviewed journals
Experience working with analysis and presentation of large data sets
Demonstrated project management experience and leadership skills
Budgetary and general administrative skills
Excellent interpersonal skills and ability to collaborate within a team-based environment, ability to work effectively both in a team and independently

§Valid driving licence

Representative publications of our research

Kubelka V., Áálek M., Tomkovich P., Végvári Z., Freckleton R. P. & Székely T. 2018: Global pattern of nest predation is disrupted by climate change in shorebirds. *Science* 362: 680-683.

Zámeňník V., Kubelka V. & Áálek M. 2018: Visible marking of wader nests to avoid damage by farmers does not increase nest predation. *Bird Conservation International* 28: 293-301.

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USouthBohemia LASTCALL ButterflyMeiosis

Laboratory of Chromosomics (University of South Bohemia, Czechia) is looking for excellent & highly motivated candidates for a Postdoctoral position to join a project newly funded by the Czech Science Foundation.

Project: Mechanistic basis and evolution of meiotic idiosyncrasies in moths and butterflies (Lepidoptera) as a part of

Abstract: Evolution of meiotic sex still represents one of the most intriguing evolutionary mysteries. Meiosis is highly conserved in eukaryotes. Yet, its modifications are common and can provide important insights into the evolution of sex. Moths and butterflies (Lepidoptera) with their holocentric chromosomes are great candidates for study of modified meiosis. Their chromosomes lack localized centromeres and thus should not be compatible with conventional meiotic segregation as they cannot control separation of sister chromatids. Alterations of meiosis, such as absence of recombination and inverted meiosis, can resolve the issue and were previously reported in Lepidoptera. However, our understanding of lepidopteran meiosis stems mainly from ultrastructural studies limited to only a handful of species. In the present project, we will employ immunofluorescence, Oligopaint fluorescence in situ hybridization, and linked reads and single-cell sequencing to holocentric chromosomes and variation in kinetochore coverage in Lepidoptera along with their meiosis and its modifications including female achiasmatic meiosis, male recombination landscape, and inverted meiosis.

We are a research campus with a strong tradition in biosciences focused on complex ecological, evolutionary & developmental aspects of LIFE. The Laboratory of Chromosomics combines cytogenetic and genomic approaches to study drivers of karyotype and sex chromosome evolution. It is a part of the Department of Molecular Biology and Genetics which provide a vibrant scientific environment due to its close collaboration with research institutes of Biology Center of Czech Academy of Sciences. The Faculty of Science represents an equal opportunity employer as certified by the European Commission's HR Excellence in Research Award.

This position will provide - full time position for 3 years - support for career development and mentoring - inter-

national team and collaborators with opportunities to travel - opportunity to mentor BSc & MSc students - flexible working time, 5 weeks of vacation, full health insurance - a meal allowance, a discounted mobile phone tariff with a contract operator, and university kindergarten - administrative support with relocation & settling in the Czech Republic - work-life balance in a middle-sized university city offering low cost of living and high quality of life

Requirements - a PhD degree in relevant field of Life Sciences or Bioinformatics - a career level-appropriate publication track record - strong interest in the research question - flexibility and the ability to work both independently and in a team are essential - fluency in English - skills and experience we are looking for include: - experience in molecular cytogenetic and standard molecular biology techniques and/or next generation sequencing and data analysis is highly appreciated - knowledge of widefield and confocal fluorescent microscopy and image data analysis is a plus but not required - preferred starting date is spring 2023 but it is negotiable

How to apply

To apply please submit your application via e-mail to jobs@prf.jcu.cz by January 6, 2023. The application should be sent as a single pdf-document and include: - CV including a complete list of your publications - a letter detailing your motivation to apply with a concise summary of your previous research achievements - contact information of two referees

Informal inquiries are welcome. For further information, please contact the principal investigator Petr Nguyen (petr.nguyen@prf.jcu.cz).

For more information, please visit the following websites: Laboratory of Chromosomics: <https://bit.ly/3HtV7f4> Petr Nguyen, principal investigator: <https://orcid.org/0000-0003-1395-4287> <https://bit.ly/3uP5ouK> Welcome guide for international staff: <http://bit.ly/3uM3P0L> Āeské BudĀ: <https://www.budejce.cz/en/> Petr Nguyen <nguyep00@prf.jcu.cz>

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UToronto EvolutionaryBiology

DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY Faculty of Arts and Science University of Toronto

JOB POSTING - The EEB Postdoctoral Fellowship

The Department of Ecology and Evolutionary Biology at the St. George campus of the University of Toronto invites applications for a Departmental Postdoctoral Fellowship. <https://eeb.utoronto.ca/employment/>
<https://eeb.utoronto.ca/wp-content/uploads/2023/02/CUPE3902-U5-2023-EEB-Postdoc-Job-Posting-1.pdf> Area of Research: Ecology and/or Evolution

Description of duties: We encourage applications from highly motivated postdoctoral fellows with broad interests in ecology and evolutionary biology. The Fellow may collaborate with a single or multiple advisors on research in ecology and evolution. To facilitate interactions within the department, the Fellow will co-organize a seminar series in the first year and organize a workshop on a topic related to the Fellow's interest for graduate students, postdocs and faculty in the second year. Although broad interactions within the department are expected, there is an emphasis on candidates with independence and innovative ideas, compared to more traditional post-docs who are expected to become members of a single lab and its research program. Given this independence, there will be access to a small research supplement to support the successful candidate's research. Prior to applying, we do encourage candidates to contact faculty members with shared interests about potential research activities.

The Fellow will be a fully participating member in the Department of Ecology and Evolutionary Biology (EEB) at the University of Toronto's St. George campus. The University of Toronto is a family friendly employer that has won awards as one of Canada's Top Family-Friendly employers for seven consecutive years. Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement, which provides a Child Care benefit to eligible Postdoctoral Fellows. This is in addition to numerous other benefits that help support department members and their families.

Salary: \$52,000 - \$58,000 per year

Required qualifications: Applicants must have a PhD in ecology and/or evolution or a related area of study, and field-specific qualifications as set by the faculty advisor(s).

Application instructions: Applicants must submit a cover letter indicating the date that they will be available to begin the position, a curriculum vitae, copies of 2 publications, and a short (1-3 pages) description of past research accomplishments and future research plans. Applicants should include names and e-mail addresses for two potential referees. EEB values equity, diversity,

and inclusivity (EDI) and candidates should provide a short (maximum one page) statement about how they could contribute to enhancing EDI. This could include activities addressing academic inequities in relation to race, gender, sexual orientation, disability, economic justice and the like. Examples might include contributing to departmental discussions on EDI and mentoring of students from underrepresented groups.

All application materials must be submitted as a PDF(s) in a single email to: Adriana Milani, Assistant to the Chair, at chairsec.eeb@utoronto.ca by the closing date.

Closing date: March 24, 2023

This position will remain open until filled, however we will begin to review complete applications after March 24, 2023.

Supervisor: Chair, Department of Ecology and Evolution, University of Toronto

Expected start date: As early as June 1, 2023 and no later than October 1, 2023

Term: 12 months; renewable for another 12 months subject to suitable research progress.

FTE: 100%

The University of Toronto is a leading academic institution in Canada with over 60 faculty members specializing in ecology and evolution. Strong links exist between the Department of Ecology and Evolutionary Biology and the Royal Ontario Museum, the Centre for Global Change, and the School of the Environment. The University owns a nearby field station dedicated to ecological and evolutionary research (the Koffler Scientific Reserve, www.ksr.utoronto.ca). The department also has a partnership with the Ontario Ministry of Natural Resources that helps provide access to infrastructure, including lab facilities in Algonquin Provincial Park (www.harkness.ca), funding, and long-term data sets. Genomic analyses are supported by a number of high-performance computing resources, multi-lab bioinformaticians, as well as staff at the Centre for the Analysis of Genome Evolution and Function.

The normal hours of work are 40 hours per week for a full-time

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Uppsala GenomicsThermalAdaptation

EXTENDED DEADLINE UNTIL: 24/2-2023
2-year post doc position in evolutionary genetics/genomics at the Department of Ecology and Genetics, Uppsala University.

The Repeatability of Evolution under Climate Warming

Background: Whether evolution is repeatable, and whether the same genes contribute to recurrent phenotypic adaptations is a long-standing question in evolutionary biology with fundamental implications for predicting genetic responses to changing environments. This project explores the role of historical contingencies for genetic adaptation and demography of insect pest species facing contemporary climate warming. We will take advantage of a long-term (>10 years) evolve-and-resequence experiment explicitly designed to quantify the role of selective determinism versus historical contingency in thermal adaptation of a cosmopolitan insect pest, the seed beetle *Callosobruchus maculatus*. The successful candidate will have access to genome sequences (DNA pool-seq data) and gene expression across temperature (RNA-seq data) from the replicated experimental populations and their ancestors, deriving from three separate geographical regions of the world-wide distribution of *C. maculatus*. This will allow quantification of the repeatability of temperature adaptation in key genetic pathways, molecular functions, and life history traits that determine the agricultural footprint left by insect pests. There will be possibilities to further develop the project as the evolution experiment is ongoing.

Related Publications: <https://royalsocietypublishing.org/doi/full/10.1098/rspb.2020.3094> <https://onlinelibrary.wiley.com/doi/full/10.1002/ece3.6775> <https://academic.oup.com/mbe/article/39/11/msac242/6806091?login=true> Job description: 2-year post doc position at the Department of Ecology and Genetics, Uppsala University. We are looking for someone with a background in bioinformatics or genetics, with some of the following qualifications:

- Programming skills in R, C, Python, Perl or other relevant language
- Background in population- and/or quantitative genetics
- Background in ecology and evolution
- Previous experience of analysing DNA pool-seq and/or RNA-seq data.
- Previous experience of research

applying experimental evolution - Collaborative spirit

Working Environment: You will be based at the Department of Ecology and Genetics (<https://www.ieg.uu.se>), Uppsala University, Sweden. The PI of the project is David Berger and the research will involve collaboration with Rike Stelkens at the Department of Zoology, Stockholm, Sweden. The successful candidate will be part of a larger group of researchers working on seed beetle genetics, consisting of two additional PIs (Goran Arnqvist and Elina Immonen), post docs and PhD students. There is also the possibility to get involved with the analysis of pool-seq and RNA-seq data from another evolve-and-resequence experiment focusing on genomic consequences of sexual selection and sexual conflict in seed beetles. The host department is door-to-door with the facilities of the Swedish national resource for genome sequencing (<https://www.scilifelab.se/>) and has access to bioinformatic tools and computational clusters at UPPMAX (<https://www.uppmax.uu.se/>).

The host department is part of The Evolutionary Biology Centre, which hosts one of the world's largest aggregations of evolutionary biologists and Uppsala University was recently ranked 7th in the world in evolutionary biology (CWUR 2017). The Department of Ecology and Genetics is an international environment with staff from all over the world. Our research spans from evolutionary ecology and genetics to studies of ecosystems. For more information, see: <https://www.ieg.uu.se>. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant college town with beautiful surroundings conveniently situated 40 minutes by train from Stockholm.

Description of Scholarship: The Carl Trygger foundation provides financial support directly to the successful applicant via a tax-free scholarship for two years (<https://www.carltryggersstiftelse.se/>). Extra financial support will cover additional sequencing efforts and conference travel linked to the project.

Application: Please submit your application as a single pdf to david.berger@ebc.uu.se with email heading: "Application Carl Trygger".

The application should include: - Cover letter justifying how your background fits with the outlined

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UZurich ExptEvolutionaryBiology

Postdoc in experimental evolutionary biology

A postdoctoral fellowship in evolutionary biology is available in the laboratory of Andreas Wagner at the University of Zurich. The fellow will study the evolution and evolvability of biomolecules either through experimental evolution or through the large-scale analysis of adaptive landscapes, using methods such as CRISPR-Cas genome editing. Lab members are a group with very diverse backgrounds and research projects, unified by their interests in evolution and life's fundamental organizational principles. Recent experimental work in the lab ranges from the directed evolution of proteins to the experimental evolution of microbes (e.g., Zheng et al., Science 2020; Toll-Riera et al, Science Advances 2022). Ongoing projects characterize the adaptive landscapes of biomolecules such as enzymes and transcriptional regulators. The successful candidate will have flexibility in designing their own project within the lab's general research area (see also <http://www.ieu.uzh.ch/wagner/>).

We are looking for an individual who has received his or her PhD within the last five years, who is highly self-motivated and can work independently on a project that he or she will help develop. The successful candidate will have a strong background in microbiological techniques and molecular cloning. Applicants with experience in approaches such as deep-scanning mutagenesis, molecular barcoding, and CRISPR-Cas-based library design will be especially welcome. Experience with flow cytometry, as well as with computational analysis of high-throughput DNA sequence data, and machine learning applied to biological data will be a plus, as will be a research history in evolutionary biology. The position offers a competitive salary of up to three years on annually renewable contracts. The working language in the laboratory is English. German skills, although helpful, are not essential. Zurich is a highly attractive city in beautiful surroundings, with a multinational population, and many educational and recreational opportunities.

To be considered, please send a single (!) PDF file merged from the following parts to jobs.wagner@ieu.uzh.ch: CV including publication list, academic transcripts, three academic references. In addition, we require a brief sketch of an experimental evolution project that you would like to pursue, and

that is part of a brief statement of research interests not exceeding three pages. Please include the word "EXPPDOC23" in the subject line of your application. Applications will be considered until March 31, 2023 or until the position has been filled. The position is available from mid-2023.

T

Annette Schmid Administrative Assistant of Prof. A. Wagner / HR University of Zurich Institute of Evolutionary Biology and Environmental Studies Wagner lab, Y27-J52 Winterthurerstrasse 190 CH-8057 Zürich Switzerland Mail to: annette.schmid@ieu.uzh.ch Phone +41 (0)44 635 61 42 Fax +41 (0)44 635 61 44 at the office on Monday and Thursday

IEU wagnerjobs <jobs.wagner@ieu.uzh.ch>

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WageningenU BehaviouralManipulation

We are recruiting a postdoc (2 years) to study viral manipulation of caterpillar behaviour. Parasites, including viruses, are able to manipulate the behaviour of their hosts to increase their transmission probability. The goal of this study is to unravel the molecular mechanisms behind behavioural manipulation by viruses in insects, for which caterpillars infected with baculoviruses will be used as a model. Infected caterpillars climb to elevated positions prior to death, a phenomenon known as tree-top disease. In this project you will apply a transcriptomic approach to reveal differences in gene expression patterns between virus-infected caterpillars under conditions triggering (light) and non-triggering (dark) tree-top disease. These data will provide information about virus and insect signal transduction pathways and effector genes that lead to altered host behaviour. In addition, small RNAs will be sequenced to look into the role of micro RNAs (miRNAs). A number of differentially regulated genes or miRNAs will be selected for follow-up studies (including both molecular and behavioural analyses) to confirm and specify their role in parasitic manipulation. The project will also aim to investigate tree-top disease in multiple caterpillar-baculovirus systems, to identify possible homologues and infer the evolutionary history of viral manipulation.

This postdoc position is embedded in the group of Dr.

Vera Ros within the Laboratory of Virology, Wageningen University & Research (The Netherlands). Our research < <https://www.wur.nl/nl/personen/vera-dr.ir.-vid-vera-ros.htm> > focuses on insect virus - host interactions. We study a range of RNA and DNA viruses in insects, focusing on virus-induced manipulation of caterpillar behaviour, covert (latent or persistent) virus infections in insects (related to insect mass rearing), virome identification of insects and biological control of insects using viruses.

To apply, follow the instructions in the link below (applications via email are not considered). More information is also found via the link.

<https://www.wur.nl/en/vacancy/postdoctoral-researcher-on-viral-manipulation-of-insect-behaviour.htm> Kind regards, Vera

Dr. ir. Vera I.D. Ros Associate Professor Laboratory of Virology | Plant Sciences Group | Wageningen University | Droevendaalsesteeg 1 | 6708 PB Wageningen, The Netherlands | +31-317-484461 | vera.ros@wur.nl | www.vir.wur.nl “Ros, Vera” <vera.ros@wur.nl>

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YorkU Toronto HoneyBeeGenomics

Postdoctoral position in genomics at York University, Toronto, Canada

The honey bee lab (www.yorku.ca/zayedlab) at York University’s Dept. of Biology (Toronto, Canada) has a

position available for a postdoctoral fellow with demonstrable expertise in genomics and bioinformatics.

Our group is leading a national Genome Canada-funded initiative called BeeCSI (<https://beecsi.ca/>) to develop stressor-specific biomarkers for honey bees. We are looking for a postdoctoral fellow with experience in transcriptomics and interest in honey bee biology to lead the analysis of a large RNAseq dataset consisting of 43 laboratory and 12 field experiments where honey bees were naturally and experientially exposed to a large number of relevant stressors, alone and in combination. The RNAseq datasets have been fully assembled and the successful candidate will be able to initiate the bioinformatics analyses immediately after starting the position. The goal of our research is to characterize the molecular machinery underlying the honey bee’s response to multiple stressors, and to discover diagnostic transcriptional signatures that can be used to predict exposure to stressors in the field.

Qualified candidates are encouraged to submit a cover letter outlining their expertise, a CV, reprints of relevant papers, and contact information for 3 referees to honeybee@yorku.ca. We will evaluate the applications as they are received.

In addition to the honey bee lab, York University is home to the Center for Bee Ecology, Evolution and Conservation (BEEc, <https://bees.yorku.ca>). Successful candidates will have a chance to interact with the diverse faculty, fellows and students at BEEc, and participate in BEEc activities and training initiatives.

Start Date: April 2023 Salary: Starting from \$55,000 and Commensurate with experience.

Ida Conflitti <iconflitti@gmail.com>

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Cesky Krumlov Genomics May14-27

Just 10 days left to apply for the 2023 Workshop on Genomics! Deadline: 1st March at midnight CEST (GMT+1).

The 2023 Workshop on Genomics will be held 14-27th of May, 2023 in ĀeskĀ $\frac{1}{2}$ Krumlov, Czech Republic. This is the 12th time the Workshop of Genomics will be held in the Czech Republic.

For more information and to check out the 2023 programme, please clicking the following link: < <https://evomics.org/2023-workshop-on-genomics-cesky-krumlov/> >

Please apply using the application form:

< <https://evomics.org/apply-workshop-on-genomics-2023/> >

We look forward to meeting you in the Czech Republic in May!

The Workshop on Genomics Team:

Josephine Paris, Rayan Chikhi, Joan Ferrer Obiol, Guy Leonard, Mercè Montoliu Nerín, Scott Handley

Josie Paris <parisjosephine@googlemail.com>

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Florida CricketEvolution Jul3-7

THE CRICKET COURSE 2023

We are excited to offer the first ever CRICKET COURSE from July 3-7, 2023, at the Archbold Biological Station in Florida, USA!

Rationale for a new course: Although katydids, crickets, and allies represent an excellent model system for ecology, behavior, physiology, bioacoustics, and evolutionary biology, there is currently no platform in North America to provide structured training on these insects. As part of the National Science Foundation grant titled “NSFDEB-NERC: Multidisciplinary approach to bioacoustics: Integrating phylogenomics, biophysics, and functional genomics to unravel the evolution of hearing and singing in katydids, crickets, and allies” (DEB-1937815), we have assembled a team of currently active specialists to create and offer a unique workshop called “THE CRICKET COURSE.” This 5-day workshop is targeted towards students, amateur naturalists, museum scientists, ecologists, and evolutionary biologists in order to provide hands-on training in identification, ecology, behavior, and bioacoustics of these amazing insects. The course will include lectures on taxonomy, phylogeny, biology, bioacoustics, and ecology of Ensifera, instructor-led collecting expeditions taking advantage of the diverse habitats found in Central Florida, exercises on taxonomic identification, specimen preservation, field observation, and sound recording and analysis.

Venue: THE CRICKET COURSE will take place at the Archbold Biological Station (ABS) near Lake Placid, Florida, one of the most renowned biological stations in the world. ABS (5,193 acres) and the Archbold Reserve (3,648 acres) together comprise an 8,840-acre globally-significant preserve, located in the Florida scrub, one of the most distinctive natural habitats in the United States. Of course, it is home to numerous orthopterans, which makes ABS a perfect place to learn about crickets and katydids.

Participant Acceptance Criteria: THE CRICKET COURSE is open to all interested individuals (professionals, motivated amateurs, such as citizen/community scientists, undergraduate and graduate students, post-docs, and professors). Priority is given to applicants currently researching crickets, katydids, or other orthopterans and to those biologists for whom the course will have a significant impact on their research and/or teaching. An entomological background is not required. We aim to include students with interests and experi-

ences in biology, including systematics, evolution, ecology, bioacoustics, and conservation. We also aim to enhance diverse perspectives through this event and highly encourage individuals from diverse backgrounds and underrepresented groups to apply. THE CRICKET COURSE is presented in English and is limited to 15 participants.

Cost: Course fees are estimated at \$800 (USD). The fees cover meals, lodging, station fees, and local transportation for field trips. Participants are responsible for their own transportation costs between home and Ft. Myers Airport (RSW) from where we will take them to ABS, or between home and ABS by car.

Student Scholarships/Tuition Waivers: For accepted students traveling from the U.S. and Canada who demonstrate financial need, a limited number of partial tuition waivers are available for up to \$500 (USD).

Learning outcome: THE CRICKET COURSE has the following learning outcomes. Upon completing the course successfully, students will be able to:

- Correctly describe phylogenetic relationships among major orthopteran lineages and morphological traits defining each group
- Correctly identify ensiferan genera and selected species of North America using diagnostic characters and identification keys
- Properly collect, preserve, and curate orthopteran insects using various methods
- Record songs using standard equipment and analyze them using bioacoustics software
- Comfortably use online tools for Orthoptera identification, natural history, and scientific communication
- Place the study of Ensifera into broader research fields such as animal behavior, neuroethology, or speciation
- Apply theories and practices in bioacoustics research to ensiferan insects of choice

For more information, please visit: <https://schistocerca.org/SongLab/index.php?page=the-cricket-course> To apply: Please use this Google Form (<https://forms.gle/6Johxh3fd4v7B6Eg6>). The deadline for application is March 31, 2023.

Hojun Song, Ph.D. Professor Department of Entomology Ecology & Evolutionary Biology IDP Texas A&M University College Station, TX 77843-2475 Office: 979-845-2481 Hojun.Song@ag.tamu.edu | schistocerca.org/SongLab BPRI: behavioralplasticity.org [signature.2048539220]

Hojun Song <Hojun.Song@ag.tamu.edu>

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KrugerNatIPark ConservationCameraTraps Jun8-19

This is a 12-day active training course in Kruger National Park, South Africa. Participants will learn the principles of camera trapping for research and conservation science, including how to design, collect, and process camera trap data to answer ecological questions and obtain standardised reports. During the course participants will deploy camera traps in the National Park and can spend their evenings and free time connecting with other camera trappers and researchers surrounded by the sounds of the African bush. The course is an official short learning programme offered by the Nelson Mandela University.

Course Details Dates 8 - 19 June 2023 (arrival 7 June and departure 20 June) Location Skukuza Science Leadership Initiative Campus, Skukuza, Kruger National Park, South Africa

Cost \$1,750 - including course fees, accommodation, all meals. Participants are responsible for their own travel arrangements.

Participants The course is limited to 20 participants and is open to graduate students and conservation professionals.

Deadlines Registration opens 1st March 2023.

Book your place in the meantime by completing this form. Applicants are encouraged to apply early to avoid missing out! Space in the class will be awarded on a first-come, first-served basis. Please contact Dr Rob Davies if you have any enquiries [s226043789 \[at\] mandela.ac.za](mailto:s226043789@mandela.ac.za)

Find more details here: <https://wildecolabdotcom.wordpress.com/courses/> Lucie Thel <lucie.mc.thel@gmail.com>

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Loretto PA ConservationGenetics Jun21-July1

DEADLINE APPROACHING: Workshop: Recent Advances in Conservation Genetics (ConGen2023) June 21-July 1, 2023, Loretto PA

There is still time to register for the next edition of the Recent Advances in Conservation Genetics Course (ConGen-2023) sponsored by American Genetic Association that will be held on campus St. Francis University in Loretto, PA (just outside PennState), June 21- July 1, 2023. (<https://conservationgenetics.org/congen2023/>).

The application deadline is March 15, 2023

Application is free. You do not need to pay the registration fee before receiving the acceptance letter. If your application is accepted by the selection committee, you may be eligible to apply to a number of sponsored scholarships covering your tuition, living expenses or both. Registration form can be accessed here (<https://forms.gle/Nu8YAEcwozku2ahT6>)

Scholarships: If your application is accepted by the selection committee, you will be eligible to apply to a number of sponsored scholarships covering your tuition, living expenses or both.

The course will host 25-30 participants dedicated to the conservation of animals and plants and about 20-25 distinguished faculty from around the world. The course is directed by its founder, Dr. Stephen J. O'Brien, and taught by renowned scientists conversant in the methods, interpretation, and applications of genomic-based analyses for conservation of endangered species. The 20-25 esteemed experts listed below will share their personal research expertise and experiences in this important and rapidly developing field.

The ConGen-2023 faculty represent an amazing group of people who come from around the world and will be teaching, sharing their current research and conservation stories, and interacting with students during the course. Participants will learn how to handle bioinformatics pipelines and algorithms for analyzing genomic and genetic data through lectures and hands-on computer tutorials. The full list of the tentative faculty is available here: <https://conservationgenetics.org/congen2023/-course-faculty/> Some of the hands-on workshop topics to be covered include:

- Study design for conservation genomic projects
- Overview of genome sequencing and reduced representation methods
- Genome assembly and annotation
- Read mapping
- Variant discovery
- Analysis of genomic diversity and inbreeding
- Identification of deleterious variants
- Admixture analysis
- Estimation of historical effective population size
- Application of Artificial Intelligence (AI) in the conservation genetic analysis
- Application of genomic data to aid conservation of ex situ and in situ populations,

Each evening will feature a keynote-style open lecture by guest faculty on their seminal research advances and interpretations in conservation biology and genomics, including a feature from Rachel Newer, an author of a recently published book on the topic of biological conservation. A full day wildlife-based field trip will be planned by local hosts from the SFU.

Please fill out the registration form (<https://forms.gle/Nu8YAEcwozku2ahT6>) to be considered as one of the participants for the course. We encourage graduate students, postdoctoral scholars, early-career researchers and established research scientists to apply. Participants should have previous coursework and/or experience in evolutionary biology, genetics, genomics, and/or population genetics and be familiar working in the command-line environment. During the selection process, ConGen organizers are committed to diversity and inclusion, as diverse perspectives help to generate better ideas to solve the complex problems in conservation of endangered species around the world.

The ConGen 2023 committee will review the applications and announce acceptances by April 1. Admittance to the course is competitive so please be sure to submit your application in a timely manner.

Application for the ConGen2023 acceptance is a competitive process: the committee will evaluate your application and will mail you an acceptance letter if you are qualified. Please address your questions to the ConGen organizers at: congen2023@conservationgenetics.org

<https://conservationgenetics.org> Taras Oleksyk
<oleksyk@oakland.edu>

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MasarykU Czechia Evolutionary Fish Parasitology

It's my pleasure to announce the summer school program at Masaryk University in the city of Brno (Czechia/Czech Republic). It will be for 9 weeks (May-July 2023) as a research lab internship in the field of fish parasitology.

Details about the topic, requirements and fees are available at the following link: <https://summeratmasaryk.cz/-research-lab-internship> (see in the section "academic overview and projects"). The internship is intended for Master's/Ph.D. students with a keen interest in fish parasitology, ideal candidates will be with a little background in the taxonomy and evolution of fish monogeneans.

The deadline for application is April, 15 2023

Contact person (please feel free to write me)

Mgr. Chahrazed Rahmouni, PhD. Masaryk University Faculty of Science Department of Botany and Zoology/Parasitology Group Kamenice 753/5 Building A31, Niš₂ 333 625 00 Brno Czech Republic

Email: rahmouni.chahrazed@gmail.com

Chahrazed Rahmouni <rahmouni.chahrazed@gmail.com>

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Nicaragua Cetacean Research Mar Apr

Dear EvolDir community,

Training on whale, dolphin and sea turtle research in Nicaragua - Central America, closing date: 04/15/2023 for season 1 and 06/30/2023 for season 2

Dear MARMAM community,

Association ELI-S is a small non-profit organization based in France that was created in 2013. Our organization aims at promoting, protecting and conserving cetaceans in Central America. We are running the Cetacean Conservation Project of Nicaragua since 2016.

This pioneer project aims to generate knowledge on cetacean presence, population size, distribution and habitat use patterns. The expected output is to generate: 1) scientific data on whales, dolphins and sea turtles in Nicaragua to assess distribution and movement patterns, behaviours and, 2) environmental awareness to the local communities in order to create a socio-economic relevance in conserving and protecting their natural environment and 3) responsible eco-tourism by participating to beach clean-up.

Association ELI-S is recruiting research assistants for field work, photo-identification and data entry between February and April (season 1) and August-September (season 2) 2023 in San Juan del Sur. A commitment of minimum 2 weeks is expected.

Team

- Joëlle De Weerd, PhD Candidate Vrije Universiteit Brussel (VUB), Project director of Cetacean conservation of Nicaragua

- Leslie Blanchet, MSc, Research Assistant in Association ELI-S

WHAT WE OFFER:

- A unique experience in Central America to study cetaceans

- Online training covering following topics: Cetaceans Ecology and Biology, Research methods and Fieldwork

- High-quality two weeks training program including at least 4 field trips

- Experience research and conservation in the field from a researcher and local community perspective

- Valuable experience to pursue a marine research career

- Possibilities of entering research community and developing scientific and professional web

- Real field experience giving additional value to your CV

- Possibilities to learn a new language (French or Spanish)

This training is a unique opportunity to participate in a pioneer research project on cetacean conservation in Central America under the supervision of experienced marine biologists, which gives the opportunity for the participants to develop both professionally but also personally thanks to the unique experience to live within local communities.

Location: San Juan del Sur, South-West of Nicaragua

Project length: 1st of March to 15th of April (deadline: April 15th) and 1st of August to 30th of September

(deadline: June 30th) with a minimum of 2 weeks commitment

Type of agreement: Full time

Age: minimum 21 years old

WHAT TO EXPECT: - Assist in boat-based surveys and data collection on cetaceans

- Photo-identification of whale and dolphin species including matching and grading (computer based)

- Data entry of collected field data

- Participate to public outreach and events

Knowledge you need to participate:

- Enthusiastic, conscientious and proactive (!)

- Interest in marine wildlife and conservation

- Be able to solve problem in unanticipated situations

- Have an attention to detail and follow policies and procedures

- Being comfortable on a small boat and spend long hours on a boat in the sun

- Being able to work in a small team

- Be able to swim

- Spoken language: English (mandatory), French (not mandatory) or Spanish(optional)

Successful candidates will:

- Gain valuable and unique experience in cetacean survey techniques including behavioural studies, biopsy sampling procedures and acoustic data collection

- Work in a very dynamic environment

- Get insight in running a research project in developing countries

DATES AND FEES

15 February - 28 February

1st March - 15 March

15 March - 31 March

1st April - 15 April

1st August - 15 August

15 August - 31 August

1st September - 15 September

15 September - 30 September

(min. 2 weeks commitment)

500\$ for two weeks

What is included :

- A membership to Association ELI-S for a year

- An online training on field methods and protocols of 10 hours

- A full marine biologist training (photo-identification, acoustic, data collection, behaviour ...)

- Fieldwork including boat surveys

- Team support for travel logistics and local activities

What is not included:

- Accommodation (an extra of 300\$ for 2 weeks is asked for an accommodation)

- Meals

- Travel to the study site (international flight and national transportation) but we'll help you to organise your trip if needed.

- Personal expenses: restaurants, bars, telephone, laundry, etc.

- Travel health insurance

- VISA fee (13\$)

You can't make it to Nicaragua but wish to have a marine mammal training online? You can participate to our online sessions, find out more 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>

Online GeometricMorphometrics Apr17-21

Dear all,

there are still a few seats available for the 6th edition of the Geometric Morphometrics course.

Dates: online, April 17th-21st

Course website: (<https://www.physalia-courses.org/-courses-workshops/course22/>)

This course covers the main common practices of modern geometric morphometrics, including: acquiring data, analysing it, visualizing and interpreting the results.

The lectures will cover both basic theoretical aspects and their practical implementation in research practice

and software. During the hands-on sessions, the attendees will have the chance of both using example datasets and applying the knowledge acquired to their own data. The course will be focused mainly on 2D data and on easy-to-use software with graphical user interface to maximize the ability to understand concepts and apply them. However, substantial information on 3D data and on R implementations will be provided, as appropriate and depending on participants' interests.

For more information about our courses and Workshops, please have a look at: (<https://www.physalia-courses.org/courses-workshops/>)

Best regards, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org mobile: +49 17645230846 Follow us on (<https://mas.to/@PhysaliaCourses>)

"info@physalia-courses.org" <info@physalia-courses.org>

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Online GWAS Jun5-8

Dear all, registrations are now open for the 6th edition of the Physalia course "Introduction to genome-wide association studies (GWAS)" Dates: Online, June 5th-8th

Course website: (<https://www.physalia-courses.org/courses-workshops/course49/>) The course is aimed at students, researchers and professionals interested in learning the different steps involved in a GWAS study using them to build a structured pipeline for semi-automated and reproducible GWAS analyses. It will include information useful for both beginners and more advanced users. We will start by introducing general concepts of GWAS and bioinformatics pipeline building, progressively describing all steps and putting there seamlessly together in a general workflow. 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
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Online Macroevolutionary Dynamics Apr11-21

Dear colleagues,

There are a few slots available for the course "Understanding Macroevolutionary Dynamics using RPANDA and jPANDA", April 11th-21st, 2023.

The RPANDA package contains tools for macroevolutionary analyses on phylogenetic trees, in particular for the analysis of diversification and trait evolution from comparative data.

Schedule: Online live sessions on April 11th, 12th, 14th, 17th, 19th, and 21st; from 15:00 to 18:00 (Madrid time zone).

Instructors: Dr. H₂O₂ Morlon (IBENS, France), Sophia Lambert (IBENS / MNHN, France), Dr. Fabien Condamine (Institut des Sciences de l'Evolution de Montpellier, France), Dr. Ignacio Quintero (IBENS, France), Dr. Julien Clavel (CNRS, France), Dr. Jonathan Drury (Durham University, UK) and Dr. Benoit Perez-Lamarque (IBENS, France)

Course Overview:

Phylogenetic analyses are central to understanding the ecological and evolutionary processes shaping present-day biodiversity patterns.

In this course, participants will learn phylogenetic analyses with the RPANDA R package. They will also have a quick introduction to Julia and to the jPANDA Julia package.

The RPANDA package contains tools for macroevolutionary analyses on phylogenetic trees, in particular for the analysis of diversification and trait evolution from comparative data.

The instructors will introduce the theory behind these analyses, run practicals with illustrative examples, and guide the interpretation of the output of these analyses.

This workshop is primarily intended for (but is not exclusive to) graduate students and postdocs. Participants are encouraged to bring their own phylogenetic

datasets (with potentially matching trait, biogeographic and paleoenvironmental datasets).

More information and registrations: <https://www.transmittingscience.com/courses/evolution/-understanding-macroevolutionary-dynamics-using-rpanda-and-jpanda/> or writing to courses@transmittingscience.com

Best wishes

Sole

Soledad De Esteban-Trivigno, PhD Director Transmitting Science www.transmittingscience.com Twitter @SoleDeEsteban Orcid: <https://orcid.org/0000-0002-2049-0890> Under the provisions of current regulations on the protection of personal data, Regulation (EU) 2016/679 of 27 April 2016 (GDPR), we inform you that personal data and email address, collected from the data subject will be used by TRANSMITTING SCIENCE SL to manage communications through email and properly manage the professional relationship with you. The data are obtained based on a contractual relationship or the legitimate interest of the Responsible, likewise the data will be kept as long as there is a mutual interest for it. The data will not be communicated to third parties, except for legal obligations. We inform you that you can request detailed information on the processing as well as exercise your rights of access, rectification, portability and deletion of your data and those of limitation and opposition to its treatment by contacting Calle Gardenia, 2 Urb. Can Claramunt de Piera CP: 08784 (Barcelona) or sending an email to info@transmittingscience.com or <http://transmittingscience.com/additional-terms>. If you consider that the processing does not comply with current legislation, you can complain with the supervisory authority at www.aepd.es. Confidentiality. - The content of this communication, as well as that of all the attached documentation, is confidential and is addressed to the addressee. If you are not the recipient, we request that you indicate this to us and do not communicate its contents to third parties, proceeding to its destruction.

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Soledad De Esteban-Trivigno
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golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>

Online Multivariate Data Analysis In R Apr24-28

Dear all, registration is now open for the 2nd edition of the course MULTIVARIATE DATA ANALYSIS WITH R AND VEGAN. Dates: online, 24-28 April

Course website: <https://www.physalia-courses.org/-courses-workshops/vegan/> This course will offer participants a practical introduction to some of the most useful functions available within vegan. We will focus on the use of ordination methods and on the use of restricted permutations to test a range of experimental designs. We will focus in particular on when and how to use multivariate methods including unconstrained and constrained ordination (CCA, RDA, Constrained PCoA), as well as between-group tests such as PERMANOVA. We will cover concepts such as design- and model-based permutations and the exchangeability of samples in tests. We will also discuss the use of vegan to go beyond simply fitting a constrained ordination model, to diagnostics, plotting, etc.

By completing this course, you will:

1. Have a good introductory understanding of the main approaches used in the analysis of multivariate data sets
2. Be able to choose an appropriate method to use to analyse a data set
3. Understand how to use restricted permutation tests with constrained ordination methods to test the effects of predictor variables or experimental treatments
4. Be able to use the R statistical software to analyse multivariate data

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 mobile: +49 17645230846 Follow us on (<https://mas.to/@PhysaliaCourses>)

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**Online MultivariateDataAnalysis
WithRvegan
Apr24-28**

Dear all,

registration is now open for the 2nd edition of the course “MULTIVARIATE DATA ANALYSIS WITH R AND VEGAN”.

Dates: Online, April 24th-28th

Course website: (<https://www.physalia-courses.org/-courses-workshops/vegan/>)

This workshop will offer participants a practical introduction to some of the most useful functions available within vegan. We will focus on the use of ordination methods and on the use of restricted permutations to test a range of experimental designs. We will focus in particular on when and how to use multivariate methods including unconstrained and constrained ordination (CCA, RDA, Constrained PCoA), as well as between-group tests such as PERMANOVA. We will cover concepts such as design- and model-based permutations and the exchangeability of samples in tests. We will also discuss the use of vegan to go beyond simply fitting a constrained ordination model, to diagnostics, plotting, etc.

At the end of the course, attendees will:

1. Have a good introductory understanding of the main approaches used in the analysis of multivariate data sets
2. Be able to choose an appropriate method to use to analyse a data set
3. Understand how to use restricted permutation tests with constrained ordination methods to test the effects of predictor variables or experimental treatments
4. Be able to use the R statistical software to analyse multivariate data

For more information about our courses and Workshops, please have a look at: (<https://www.physalia-courses.org/courses-workshops/>)

Best regards, Carlo

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“info@physalia-courses.org” <info@physalia-courses.org>

**Online NetworkAnalysisInR
Mar27-31**

Dear all,

registration is now open for the 4th edition of the Network Analysis in R course.

Dates: (online) March 27th-31st

Course website: (<https://www.physalia-courses.org/-courses-workshops/network-analysis-in-r/>)

This course will provide a complete guide to carrying out network analysis, from data collection to publishable results. The first two days cover networks as a data structure, talking about how to recognise them, make them from a dataset, convert them into analysable formats, and visualise them. The next three days expand on this foundation by talking about network modelling itself, going through the different options for analytical approaches and linking them with hypothesis testing. There will be several opportunities to introduce and use your own data, and therefore to develop plans for carrying out your own analyses. The course will be very interactive and will come with code, with a combination of quick quizzes, supervised sessions, independent hands-on sessions, and brief group discussions.

Those thinking of taking this course should have a minimum of intermediate familiarity with statistical analysis (linear modelling, etc), as well as aptitude with the R coding language and the tidyverse. Beginners with R and those unfamiliar or uncomfortable with data manipulation are discouraged from attending, as this may impede your ability to make the most of the course.

For more information about our courses and Workshops, please have a look at: (<https://www.physalia-courses.org/courses-workshops/>)

Best regards, Carlo

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Online Pangenomics Apr12-14

Dear all,

registration is now open for the course “ANALYSIS OF PROKARYOTIC PANGENOMES”.

Dates: online, April 12-14

Course website: (<https://www.physalia-courses.org/courses-workshops/prokaritotic-pangenomes/>)

In this course, you will be introduced to the study of pangenomes and their implications in biological research. You will also be given the chance to put theory into practice. By the end of the first day, you will have analysed a set of bacterial genomes to illustrate their pangenome. On day 2, you will assess the extent to which sets of genes evolve together in pangenomes and make inferences about the implications of this in a range of biological fields. Finally, in day 3, you will have the chance to design your own bespoke analysis, putting the theoretical and practical knowledge gained in the first two days into practice with the aid of the course leads.

Instructors: Prof. James McInerney and Dr Alan Beavan (University of Nottingham)

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: (<mailto:info@physalia-courses.org>)

Best regards, Carlo

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Online Phylogenetic Comparative Methods In R May29-Jun2

Dear all,

registration is now open for the course “Phylogenetic Comparative Methods in R” (4th edition).

Dates: online, May 29th - June 2nd

Course website: (<https://www.physalia-courses.org/courses-workshops/course44/>)

This course will introduce students, researchers and professionals to the theoretical and practical aspects of generating ultrametric trees, reconstructing trait evolution and investigating rates of lineage diversification. It will consist of both lectures to cover theory, as well as practical tutorials.

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
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Online RNAseq Analysis May25-Aug3

Dear all,

There were quite a lot of people who were interested in the second edition of the RNA-seq data analysis course but could not be accommodated due to the number of places being limited. A third edition will thus run online from the 25th of May till the 3rd of August 2023. We will be focused not only on the practicalities of how to analyse this kind of data but also on the conceptual

and statistical underpinnings of the methods - so they don't feel like a black box. The course is designed to be accessible also to participants that have little or no previous experience with statistics and/or R programming. Everybody is welcome!

The course is made up of weekly Zoom sessions that aim to be as interactive and as hands-on as possible. The participants will also be completing small weekly assignments, with individual written feedback each time.

I would be grateful if you could share with colleagues that may be interested!

Syllabus and registration: <https://www.mondegoscience.com/courses/analysis-of-rna-seq-data-online-25-may-3-august-2023> To stay up-to-date, follow Mondego Science on social media (pick your favourite platform!):

<https://www.facebook.com/mondegoscience> <https://www.linkedin.com/company/mondego-science>
<https://www.instagram.com/mondegoscience/> <https://twitter.com/MondegoScience> <https://mstdn.science/@mondegoscience> Hope to analyse some data with you soon,

Rosina.

Rosina Savisaar <rosinasavisaar@gmail.com>

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Portal Arizona BeeEvolution Aug16-26

BEE COURSE 2023

In partnership with the American Museum of Natural History, Cornell University, and the Southwestern Research Station, we are proud to announce the 23rd installment of The Bee Course. The Bee Course is a ten-day workshop held at the Southwestern Research Station in Portal, Arizona that will run from August 16th through the 26th, 2023. The course is designed to train students in bee identification and systematics, bee biology and ecology, and faunistics and faunal survey work. The course focuses on wild bees (not honeybees) and we accept applications from people with an academic, land-management, policy, or conservation background. For more information on the course, including instructions on how to apply, a list of this year's instructors, and course testimonials from previ-

ous offerings, please visit the new and improved course website at www.thebeecourse.org . [laurence packer <geodiscelis@mail.com>](mailto:laurence.packer@geodiscelis@mail.com)

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QueenslandU Tech EvolEconBehaviour Jul5-7

“Winter School on the Evolutionary Foundations of Economic Behaviour”: 5, 6, and 7 July 2023 at the Queensland University of Technology, in Brisbane. This three-day Winter School will provide participants with an overview of different approaches investigating the origins of human behaviour: evolutionary game theory, the evolutionary foundations of preferences, and the synthesis program which consists in recovering rational explanations for behavioural biases.

<https://sites.google.com/view/wsefeb/home> Event sites.google.com

Lionel Page <lionel.page@uq.edu.au>

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UFribourg Polyploidy Jul10-20

A Summer School entitled “Polyploid evolutionary genomics: challenges and opportunities” will take place at the University of Fribourg (Switzerland) from 10 to 20 July 2023.

Registration is now open for this summer school covering main hypotheses in polyploidy research and how to address them, from field sampling to analyses of genomic variation. Additional information can be found at: https://events.unifr.ch/summerschool_polyploidy/en/ Organized at the University of Fribourg from 10 to 20 July 2023 with leading scientists from multiple international institutions, the summer school starts with a symposium (10-11 July 2023), entitled “Genome duplication at the intersection of biodiversity and crop sciences”. Invited lectures and contributed talks will illustrate the current state of the field. The symposium

is open to all scientists.

The practical training of the summer school (12-20 July 2023) consists of the three additional modules entitled “from samples to data”, “polyploid genomes” and “polyploid populations” that mix theoretical sessions and hands-on work. Open to selected participants, it will operate main tasks necessary in polyploid research using datasets to be provided by lecturers. Participants have the opportunity to analyze their own data.

Confirmed lecturers

Christian Parisod (local organizer; University of Fribourg, Switzerland) <https://www.unifr.ch/bio/en/research/genetics/parisod-group.html>

Yves van de Peer (Ghent University, Belgium) <https://www.vandeppeerlab.org/> Kirsten Bomblies (ETH-Zurich, Switzerland) <https://impb.ethz.ch/research/research-evo.html> Boulos Chalhoub (Agroscope, Switzerland)

<https://www.agroscope.admin.ch/agroscope/en/home/about-us/organization/competence-divisions-strategic-research-divisions/plant-breeding/field-crop-breeding-genetic-resources.html> Malika Ainouche (University of Rennes, France) <https://ecobio.univ-rennes.fr/interlocuteurs/malika-ainouche>

Andrew R. Leitch (Queen Mary University of London, UK) <https://evolve.sbcs.qmul.ac.uk/leitch/>

François Felber (Musée et Jardins botaniques cantonaux in Lausanne, Switzerland) <https://www.unil.ch/dee/en/home/menuinst/research/associated-researcher-privat-francois-felber.html>

Kentaro Shimizu (University of Zurich, Switzerland) <https://www.ieu.uzh.ch/en/research/evolbiol/ecogenomics.html>

Martin Lascoux (Uppsala University, Sweden) <https://www.ieg.uu.se/plant/lascoux-group/>

Armel Salmon (University of Rennes, France) <https://ecobio.univ-rennes.fr/interlocuteurs/armel-salmon>

The selection of participants will be based on their scientific background and project via a motivation paragraph and a CV in their application. See: <https://events.unifr.ch/summerschool-polyploidy/en/registration/> Registration fees for the whole Summer School (CHF 350; half-pension). Deadline for registration: 16.04.2023

Further details about the venue, program and registration can be found at: <https://events.unifr.ch/summerschool-polyploidy/en/> Prof. Christian Parisod Department of Biology - University of Fribourg Chemin du Musée 10 - 1700 Fribourg - Switzerland Phone: +41 26 300 8852 e-mail: christian.parisod@unifr.ch <https://www.unifr.ch/bio/en/research/eco-evol-parisod-group.html> <https://www.unifr.ch/bio/en/research/eco-evol/parisod-group.html>

UMaine BiodiversityData

We're pleased to announce a two-part workshop aimed at rapidly bringing participants to a high level of proficiency in the management and analysis of multidimensional biodiversity data. Part I serves as an introduction to data management and visualization, and serves as a crash course in the data methods that will be necessary to participate in Part II, which focuses on analyzing biodiversity data using process-based models and machine learning. For those with extensive familiarity with biodiversity data, enrolling only in Part II might make sense.

This workshop is organized in conjunction with Data Carpentry and the Evolution 2023 conference in Albuquerque, NM, USA. Significant funding is available to support travel and lodging for the duration of the workshop. Participants may also apply for funding to extend their stay and join the Evolution 2023 conference (Evolution registration fee waivers may also be requested).

Read the full add here: https://www.ecoevomatics.org/2023/02/10/biodiversity_data_workshop.html To attend our workshop and apply for funding support, please complete the application form (<https://forms.gle/8MwNZLTUk8Y1Git79>; use for both Parts I and/or II). Spots are limited, and acceptance into the program will be competitive and based on your application. We encourage applicants from all backgrounds and especially welcome individuals from minoritized populations. To contribute to the goal of broadening participation in the study of biodiversity, we will use diversity, equity, inclusion, and justice principles in addition to other criteria in selecting applicants. Computational expertise and financial need will not be selection criteria.

Andrew J. Rominger (he/him) Assistant Professor of Ecological Bioinformatics

School of Biology & Ecology University of Maine
ecoevomatics.org

The University of Maine recognizes that it is located on Marsh Island in the homeland of the Penobscot Nation, where issues of water and territorial rights, and encroachment upon sacred sites, are ongoing. Penobscot homeland is connected to the other Wabanaki Tribal Nations the Passamaquoddy, Maliseet, and Micmac through kinship, alliances and diplomacy. The univer-

sity also recognizes that the Penobscot Nation and the other Wabanaki Tribal Nations are distinct, sovereign, legal and political entities with their own powers of self-governance and self-determination. (UMaine Land Acknowledgement)

Andy Rominger <andrew.rominger@maine.edu>

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UOklahomaBiolStation PhyloComparativeMethods Jul11-16

Workshop in phylogenetic comparative methods for early career evolutionary biomechanists

OVERVIEW OF WORKSHOP

Do you study biomechanics, locomotion, or functional performance? Are you a primarily experimental biologist who would like to expand your work to multiple species? Have you heard about phylogenetic comparative methods but are unsure how they might apply to your research field? If the answer to any of these questions is “yes,” you may be interested in an upcoming summer workshop on phylogenetic comparative biology.

The Moen lab in the Department of Integrative Biology at Oklahoma State University will hold a summer workshop on phylogenetic comparative methods in evolutionary biomechanics. This workshop is part of an NSF CAREER grant focusing on the evolution of locomotor mechanics. Phylogenetic methods for analyzing trait evolution will be covered, particularly those methods most directly related to the evolution of biomechanical systems. A key goal of the workshop is to expose early career researchers with more experimental, single-species experience to methods and perspectives helpful in studying the evolution of their study system by analyzing data from multiple species.

No previous experience with these methods is required. Most expenses for attending the workshop will be covered. As a consequence, participation is limited to a maximum of 15 participants. We expect applications to be competitive.

ELIGIBILITY

Participants must be mid-level to advanced Ph.D. students and post-docs at any stage. Strong applicants will have experience in one or more of the following research areas: biomechanics, locomotion, muscle physiology, and

functional morphology and performance. Prior work in R will be especially helpful, though less-experienced participants will be provided materials to learn more prior to the workshop. Because learning will be facilitated by having your own data to analyze, we are particularly looking for applicants who have an interspecific dataset they can analyze or those who plan to soon collect such a dataset. More generally, we seek highly motivated applicants with a desire to expand their research into studies of phylogenetic comparative biology.

WORKSHOP AND APPLICATION DETAILS

Workshop format: Most days will include lectures on the theory of methods, followed by hands-on exercises with R tutorials. We will also discuss key research papers, which will be provided to participants in advance. The workshop will finish with participants analyzing their own datasets, using the methods they have learned. Participants without their own dataset will be provided with one.

Workshop dates: Participants will be expected to arrive in Oklahoma City, Oklahoma (USA) on Saturday, 10 June 2023. The workshop will take place at the University of Oklahoma Biological Station on Lake Texoma from 11-16 June. Participants will then depart from Oklahoma City on Saturday, 17 June.

Details of financial support: All participants will be eligible for reimbursement of up to \$500 in travel expenses to Oklahoma City. Additional travel support to Oklahoma City may be available given need. Travel to and from the field station will be provided by us. Lodging and meals the night of arrival and during the workshop will be fully reimbursed.

Application deadline: Review of applications will begin on 15 March 2023, though we will still consider applications until we have filled all available seats in the workshop.

Applications must include:

(1) A cover letter answering the following questions:

(a) Why do you want to participate and what do you hope to learn?

(b) In which part of your current or future research do you envision yourself using phylogenetic comparative methods?

(c) Do you have or plan to collect an interspecific dataset you could analyze as part of the workshop?

(d) What is your previous experience with data analysis in R? With phylogenetic comparative methods in particular?

(e) Do you anticipate needing additional travel support

beyond the \$500 for travel to Oklahoma City? If so, what alternative sources of financial support are you seeking (e.g., other travel grants)?

(f) What is the contact information for your recommendation letter writer (email and phone, if possible)?

(2) A full CV

(3) One recommendation letter from a research advisor or supervisor. The letter should address your motivation for applying and how the methods would fit in the context of your current research and plans.

Please submit the cover letter and CV *as a single PDF* in a single email* to Rafael Bovo (rparell@okstate.edu), Monique Simon (monique.simon@okstate.edu), and Daniel Moen (daniel.moen@okstate.edu). *Please use the subject line “PCM workshop application: <Your name>”.* Recommendation-letter writers should send their letters to the same three email addresses with a similar subject line. These letters are due on the same date as applications.

— / —

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>

Venice EvoSysBioFuture Aug21-25

Dear all,

Registration is now open for the:

*** Venice Summer School 2023 - The Future of Evolutionary Systems Biology

This is a EMBO Lecture Course that will take place on

*** Aug 21 - Aug 25, 2023, at Centro Culturale Don Orione Artigianelli, Venice, IT

Organisers: Johannes Jaeger, University of Vienna, AT
James DiFrisco, The Francis Crick Institute, UK

Teaching Panel:

Graham Budd, University of Uppsala, SE

James DiFrisco, The Francis Crick Institute, UK

Veronica Grieneisen, University of Cardiff, UK

Benedikt Hallgrímsson, University of Calgary, CA

Johannes Jaeger, University of Vienna, AT

Alan Love, University of Minnesota, US

Daniela Santos Nunes, Oxford Brookes University, UK

Mihaela Pavlicev, University of Vienna, AT

Nicole Repina, Friedrich Miescher Institute, CH

James Sharpe, EMBL Barcelona, ES Renske Vroomans, Sainsbury Laboratory, Cambridge, UK

Günter Wagner, Yale University, USA

Course description:

Any adequate theory of evolutionary change must cover both the sources and the consequences of phenotypic variation. On the one hand, we must understand the various processes genetic, metabolic, physiological, developmental, and behavioral that generate variation. On the other hand, we must understand the sorting processes that lead to the differential survival of different variants. The latter aspect is covered by traditional evolutionary genetics, with its well-developed set of concepts and models. In contrast, there seems to be no overarching theory or unifying framework able to explain the enormous diversity of processes generating variation. These processes are not only dauntingly complex, but also occur at many different levels of organization from the molecular to the cellular, tissue, organ, organismic, and even supra-organismic levels (ecological or social). We could conclude from this that no theory of the sources of variation is possible, or we could call for a novel, empirically grounded, organismic systems biology that integrates philosophical, mathematical, and experimental approaches to tackle the issue. We will look at this project from a broad theoretical vantage point to assess the future of evolutionary and developmental systems biology.

Specifically, we will focus on the following five topics:

1. How is genetic causation framed and embedded in the context of the organism?
2. How do we connect the study of cell & developmental biology to evolutionary genetics?
3. How can we model the genotype-phenotype relationship and its role in evolution?
4. What would a modern organism-centered evolutionary biology look like?
5. What role do technology and theory play for progress in evolutionary systems biology?

We have gathered an interdisciplinary teaching panel of empirical investigators together with mathematical modelers and philosophers of biology to discuss the topics listed above. For the first time in the history of our summer school, we will focus entirely on the future of the field, in an attempt to anticipate challenges and to prepare our participants for questions that are likely to have an important impact on their empirical or theoretical research some years into the future.

This requires a format that is question-driven, exploratory, and participatory. We combine lectures with small-group discussions where teachers and students search for the commonalities and differences between their respective views. The aim of the summer school is to attract early-stage empirical and theoretical researchers from a large range of disciplines who are interested in evolutionary problems, to equip them with the conceptual tools and critical thinking skills to tackle future challenges and to relate them to their own specific research questions and explanations.

*** REGISTRATION is open on EMBO's course website:

<https://meetings.embo.org/event/23-evolution-venice>

Applicants are required to submit an academic CV, and a motivation letter. You are also encouraged to submit an abstract if you would like to present your own work as an elevator pitch on the first day of the course.

*** Application/abstract submission deadline: Mar 31, 2023. Applicants will be notified whether they have been accepted (or not) by Apr 30, 2023. The payment deadline for successful applicants is May 31, 2023.

Follow @VeniceEvoDevo on Twitter for updates.

On behalf of the organizers, Yogi Jaeger

Dr. Johannes Jaeger Freelance Researcher, Philosopher & Educator Project Leader, JTF Project "Pushing the Boundaries", Dept of Philosophy, Uni Vienna

Associate Faculty, Complexity Science Hub (CSH), Vienna

Johannes Jaeger <yoginho@gmail.com>

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WillametteU
FieldResInDesertEvolEcol
May22-Jun2

The Departments of Biology at Willamette University and California State University Northridge are pleased to announce a unique field course opportunity for undergraduates in the biological sciences and allied fields: Field Research in Desert Evolutionary Ecology. Professors Christopher (Chris) Smith (WU) and Jeremy Yoder (CSUN) will lead a two week class from Monday, May 22 to Friday, June 2, focused on the population ecology

of the Joshua tree, an archetypical species of the Mojave Desert that is threatened with extinction due to climate change. Working from the Zzyzx Desert Studies Center in Baker, California (<https://www.fullerton.edu/dsc/about/index.php>), students will participate in primary research on the population ecology of Joshua trees, will learn surveying and data analysis techniques, and will complete focused research projects culminating in a research symposium. The formal course description can be found at the end of this message.

During the course of the program students will reside at the Desert Studies Center, and will spend daylight hours hiking in the adjacent Mojave National Preserve and other protected areas in the Mojave Desert. Participants should be prepared to walk up to a mile at a time, and up to five miles in a day, in desert heat (95 degrees F) while carrying a day pack. Meals and barracks-style lodging are provided as part of tuition. The course will provide transportation from Burbank Airport, to the Desert Studies Center, and from the Desert Studies Center to field sites. Students are responsible for arranging their own transportation to Burbank Airport.

Students will earn 4 credit hours at the 300 level from Willamette University, applicable to the major requirements in Biology at Willamette. Students at other institutions are strongly encouraged to discuss rules for transfer credits and applicability to program requirements at their home schools. Tuition, which covers transportation from Burbank and room and board at the field station, will be \$3000. Financial aid may be available if enough students enroll, and students are encouraged to contact their financial aid office to discuss financial support.

Interested students should complete the following form: <https://forms.gle/giPWpgrDaCUFy5uq7> Course Description:

Biology 399: Topics in Biology: Field Research in Evolutionary Ecology

During an intensive, 2-week long, field-based course, students will learn concepts and field research techniques in population ecology. Using Joshua trees as a case study, students will learn to collect demographic data, will learn to analyze data using the statistical program R, and will contribute to ongoing research on the ecology and natural history of these plants. Students will complete a small-scale research project and will describe their results in the format of a research talk.

Recommended prerequisites: Previous coursework in biology, ecology, or environmental science.

Notes: Students will reside at a field station in the Mojave Desert and will be working outdoors on most

days. Participants should be prepared to carry a light backpack and walk over rough, uneven terrain for up to a mile at a time, and up to five miles per day.

Jeremy B. Yoder he/him/his jbyoder.org @JBYoder
< <http://www.twitter.com/jbyoder> >

Associate Professor of Biology, California State University Northridge *Collaborator *on the Joshua Tree

Genome Project < <https://www.joshuatreegenome.org/> > *Associate Editor*, Molecular Ecology *Blog Editor*, The Molecular Ecologist < <https://www.molecularecologist.com/> >

jbyoder@gmail.com

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Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from ‘blackballed’ addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notification of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that ‘on vacation’, etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail’s your code can be temporarily changed to 000000.

To send messages to the EvolDir direct them to the email evoldir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as 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 send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most 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.