
E v o l D i r

July 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.

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Conferences

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Aguascalientes Mexico GGBN Biodiversity Oct17-20

To those interested in biodiversity biobanking:

early registration and abstract submission for the Global Genome Biodiversity Network, GGBN 2023 Conference in Aguascalientes, Mexico, is now open through June 30th, don't miss your chance at the discount rates! General registration will be open from July 1-August 31.

This year's GGBN conference is intended to communicate ideas, new tools, expertise on biodiversity and environmental biobanking, and to encourage the community to make genomic collections public and broadly available for research while respecting the spirit of the Nagoya Protocol.

Conference agenda, info on hotels / travel, and abstract submission are now available on the conference website: <https://ggbn2023.weebly.com/> Register for this in-person conference here: <https://ggbn2023.weebly.com/-registration-abstract-submission.html> We look forward to seeing you in Mexico this October 17-20! the GGBN conference planning team

Jonas Astrin Biobank Leibniz Institute for the Analysis of Biodiversity Change (LIB) Museum Koenig

Adenauerallee 127 (mail; visitors: #160), 53113 Bonn, Germany Tel: +49 (0)228 9122-357 E-Mail: j.astrin@leibniz-lib.de

<https://bonn.leibniz-lib.de/en/biobank> | <https://fogs-portal.de> | <https://ggbc.eu> | <http://bolgermany.de> | <https://biodiversitygenomics.eu> | www.ggbn.org

Leibniz-Institut zur Analyse des Biodiversitätswandels
Stiftung des öffentlichen Rechts | Direktion: B. Misof, A. Gröger
Sitz: Bonn

Jonas Astrin <J.Astrin.ZFMK@uni-bonn.de>

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ArizonaStateU SMBE MechanismsCellularEvol Nov8-11 extDeadline

Hi all,

Due to popular demand, we have extended the deadline for submission of abstracts to September 1, 2023. If you have already submitted an abstract, please feel free to send a revised/updated abstract to Josh Hoskinson (josh.hoskinson@asu.edu) no later than September 1, 2023.

Please see below for more information regarding the symposium itself as well as the registration link. Registration link here:

https://na.eventscloud.com/ereg/-newreg.php?eventid=6305&eb=&ebs=*/encrypted_id/*

If you have any questions, please reach out.

Thanks, Josh

“The key to every biological problem must finally be sought in the cell,

for every living organism is, or at some time has been, a cell.” - E.B. Wilson Hello, You are cordially invited to register for the SMBE Satellite Meeting on Mechanisms of Cellular Evolution. This four-day event is being organized by the Biology Integration Institute for Mechanisms of Cellular Evolution at Arizona State University and is in collaboration with the NSF BII for Mechanisms of Cellular Evolution’s Annual Symposium. The event is scheduled to take place from November 8-11, 2023, in Tempe, AZ and is the second in a series of annual events focused on the emerging interdisciplinary field of evolutionary cell biology (ECB). This field combines evolutionary biology and cell biology with other related disciplines, including biochemistry, biophysics, population genetics, molecular biology, and mathematics. The motivation behind this meeting is the simple point that the cell, organelles, and their contents define the natural settings within which genes, genomes, proteins, and other molecular features evolve. It follows that a stronger focus on the molecular features inside of cells and the constraints under which they function will lead to an improved understanding of evolutionary processes. Remarkably, despite well-established fields of molecular evolution, genome evolution, and evolutionary developmental biology, we still have no recognizable field of ECB. Our efforts with this symposium seek to change that. This symposium aims to bring together leading researchers and experts from diverse scientific fields to discuss current advances and future directions in ECB, and to provide opportunities for interdisciplinary discussions, knowledge sharing, and collaboration. This year, our meeting will incorporate several broad themes within ECB. Keep reading to learn more about this event or register today!

About the Event

The following list includes the identified themes and their respective speakers:

Theme 1: The origin and diversification of macromolecular structures

Session A

Protein structural biology: evolution of simplicity vs. complexity Speakers: Georg Hochberg (Max Planck Institute for Terrestrial Microbiology, Germany) Christian Landry (Laval University, Canada) short talks selected from abstracts

Session B

Macromolecular structures in cell biology Speakers: Lillian Fritz-Laylin (University of Massachusetts Amherst, USA) Sonja-Verena Albers (University of Freiburg, Germany) Kazuo Inaba (University of Tsukuba, Japan) short talks selected from abstracts

Theme 2: Energetic costs and constraints of making a cell

Session A

Cell size constraints and growth laws Speakers: Sri Iyer Biswas (Purdue University, USA) Suckjoon Jun (University of California San Diego, USA) short talks selected from abstracts

Session B

Metabolic networks underlying energy acquisition Speakers: Anja Spang (Royal Netherlands Institute for Sea Research, The Netherlands) Shelley Copley (University of Colorado Boulder, USA) short talks selected from abstracts

Theme 3: Precision of information transmission

Session A

Gene regulatory network rewiring Speakers: Alan Moses (University of Toronto, Canada) Sandy Johnson (University of California San Francisco, USA) short talks selected from abstracts

Session B

Gene expression heterogeneity, noise, and errors Speakers: Brian Metzger (Purdue University, USA) Audrey Gasch (University of Wisconsin Madison, USA) short talks selected from abstracts

Abstracts We will be soliciting for abstracts during the event registration process for both poster presentations and selected talks. The deadline for submission will be September 1, 2023 @11:59pm Arizona time. Responses to abstracts will be sent out no later than September 30, 2023.

Key Dates April 17, 2023 Event Registration OPENS Call for abstract submissions OPENS September 1, 2023 Call for abstract submissions CLOSES October 30, 2023 Registration CLOSES Contact Info For abstract or symposium related questions, contact the Program Manager, Josh Hoskinson, at josh.hoskinson@asu.edu.

Register Now

Joshua S. Hoskinson, M.S., M.A.

Program Manager, Biological Integration Institute

Biodesign Center for Mechanisms of Evolution

Biodesign Institute, Arizona State University

Mail Code: 7701

— / —

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>

Berlin Wildlife Conservation Sep9-11

We are pleased to announce that registration and abstract submission for the conference “Wildlife Research and Conservation 2023” (Berlin, 9-11 September 2023) is open!

<https://www.izw-berlin.de/en/wildlife-research-and-conservation-sept-2023.html> The session on “Population responses to disturbances” invites contributions that assess the responses or resilience of wildlife populations to disturbances, at the ecological scale. We welcome a variety of methods and approaches (e.g. capture-mark-recapture, matrix population models, individual-based models, patch occupancy models), based on empirical or simulated datasets. We welcome studies that focus on conservation or address more fundamental research questions. We are happy to announce that the plenary lecture will be given by Marlène Gamelon. If you have any questions, please do not hesitate to contact us!

Please submit your abstracts to this session by 9th July 2023.

We look forward to your contributions! If you have any questions, please do not hesitate to contact us.

Viktoriia Radchuk (radchuk@izw-berlin.de) Sarah Benhaiem (benhaiem@izw-berlin.de) Marlène Gamelon (marlene.gamelon@univ-lyon1.fr)

“Benhaiem, Sarah” <benhaiem@izw-berlin.de>

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CornellU GLAM GreatLakesAnnMeeting Aug19

Dear Colleagues,

We are excited to announce that the 2023 Great Lakes Annual Meeting of Evolutionary Genomics (GLAM-Evogen) will take place at Cornell University on Saturday, August 19, 2023. You can find more information about the meeting on our website: <https://messengerlab.org/glam-evogen/> Registration is free but required: <https://forms.gle/HyFey5VjkAVnniiC6>. The deadline for abstract submission is July 21. Please encourage your students and postdocs to present, as we traditionally aim to celebrate trainee contributions at this meeting. We would be delighted if you can circulate this announcement broadly in your units, departments, and on social media.

Sincerely,

Philipp

Philipp W. Messer Associate Professor Director of Graduate Studies Department of Computational Biology Cornell University 102J Weill Hall, Ithaca, NY 14853 messer@cornell.edu | 408-636-8701 <http://messengerlab.org> Philipp Messer <philipp.messer@gmail.com>

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Irvine California EvolutionaryMedicine Aug14-17

Abstracts for the 8th annual International Society for Evolution, Medicine, and Public Health meeting are now posted online at <https://airtable.com/shrmIiJ18F3GIU1r> Details on the plenary speakers and the rest of the program are at <https://isemph.org/ISEMPH-2023-Program> Discounted meeting registration is available until June 15 <https://isemph.org/ISEMPH-2023-Registration> Fees are refundable if your plans change.

Some of the discounts on lodging at hotels and UC Irvine dormitory rooms will expire June 9.

It will be a wonderful meeting! Join us!

Questions to Manager@evmed.org

Randolph Nesse <nesse@umich.edu>

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KewGardens UK PlantDiversity Oct11-13

Dear friends and colleagues of Kew,

We are delighted to announce that registration and abstract submissions are open for the international State of the World's Plants and Fungi Symposium taking place as a hybrid event at the Royal Botanic Gardens, Kew and online from 11 to 13 October 2023. We would be extremely grateful if you could please share details with relevant colleagues and networks.

Tackling the nature emergency: Evidence, gaps and priorities

Plants and fungi are the building blocks of our planet, with the potential to solve some of the greatest challenges facing humanity. However, the vital resources and services they provide depend on diverse, healthy ecosystems. The future of these ecosystems, and life as we know it, hinges on the decisions we make today.

The State of the World's Plants and Fungi Symposium accompanies the publication of a cutting-edge report that takes a deep dive into our current knowledge on plant and fungal diversity and distribution - what we know, what we don't know and where we need to focus our efforts.

This year's three-day symposium brings together experts to discuss findings presented in the report and to identify and motivate priority actions for protecting and restoring global plant and fungal diversity. The discussions will be used to create a declaration containing a shared agreement and action plan for where scientific institutions aim to focus their collecting and research efforts to achieve the targets of the Kunming-Montreal Global Biodiversity Framework.

Programme

The symposium is based around themed sessions in which invited experts will address topical questions through presentations and Q&A panel discussions:

Where are the diversity hotspots and critical knowledge

gaps?

What do we know about extinction risk?

How do we accelerate our understanding of plant and fungal diversity?

How can we achieve global and national targets for biodiversity protection and restoration?

In-person attendees will also be able to participate in four workshops to contribute their ideas and expertise towards the development of the symposium declaration.

[View the programme](#)

[View the programme](#)

[Register now for an early bird ticket](#)

Discounted early bird tickets are available until 31 July. Full ticket pricing and information about travel bursaries can be found on the symposium web page.

[Submit a poster abstract](#)

Delegates attending the symposium in-person are invited to submit an abstract to present a poster and a one-minute oral presentation. Prizes will be awarded for the best early career researcher poster presentations.

[Deadline for abstracts: 31 July 2023](#)

[Register now](#)

[Register now](#)

We very much hope you can join us.

Best wishes,

Professor Alexandre Antonelli (he/him)

Director of Science

Royal Botanic Gardens, Kew

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Krakow Poland Evolution Sep18-20

Dear One and All, We are pleased to announce the 9th Polish Evolutionary Conference (PEC2023), which will take place from 18 to 20 September 2023 in Krakow, Poland. We cordially invite everyone interested in evolutionary biology and ecology, both young and experienced scientists, researchers and students, active and passive participants. The PEC has been bringing together researchers working in different areas of evolutionary biology and the interface between evolutionary biology and ecology for 10 years.

The invited speakers for this year's conference are - Richard Eimer Lenski, Michigan State University, Michigan, USA - Carlos A. Botero, University of Texas at Austin, USA - Julia Pawłowska, University of Warsaw, Poland - Wilco C.E.P. Verberk, Radboud University, The Netherlands

We are pleased to announce that registration for the conference is now open. To ensure your participation, please visit the conference website at <https://pec2023.confer.uj.edu.pl/start>. The deadline for abstract submission is 16 June. Early bird registration is available until 17 July, so we encourage you to take advantage of this opportunity.

One day before the conference, on Sunday, September 17th, we suggest that we spend time together on a walk along the trails of the Kraków Valleys Landscape Park. For news about the conference, please follow PEC on Twitter <https://twitter.com/PolishEvoConf> or Facebook <https://www.facebook.com/inos.uj>. If you have any questions or require any assistance, please do not hesitate to contact our organising committee at pec2023@uj.edu.pl.

We hope to see you at the 9th Polish Evolutionary Conference!

On behalf of the PEC2023 Organising Committee, Edyta Sadowska Instytut Nauk o Ćrodowisku - Institute of Environmental Sciences Uniwersytet Jagielloński - Jagiellonian University ul. Gronostajowa 7, 30-387 Kraków, Poland

Edyta Sadowska <edyta.sadowska@uj.edu.pl>

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Linz Austria MathStatMolBiol Aug31-Sep1

*** Call for Abstracts and Participation - Deadline extension *** The MASAMB (Mathematical and Statistical Aspects of Molecular Biology) workshop will be held on August 31- September 1, 2023 at the Johannes Kepler University Linz (JKU)/Austria with an online component. We have extended the deadline for abstract submission to *June 20th*.

More details may be found at <https://conferences.jku.at/masamb23/> Please forward this email to your fellow colleagues.

*** MASAMB *** Bioinformatics and statistical genetics, twin themes of the long-running series of annual MASAMB meetings, have gained huge impetus from large-scale genome sequencing projects and development of high-throughput biological assay systems, including gene-expression microarrays, next generation sequencing, proteomic and metabolomic technologies. These immense data resources, and the underlying complexities of molecular and cell biology, provide exciting research opportunities for numerate scientists.

With participants from mathematics, statistics, computer science, bioinformatics, biology and related fields, MASAMB meetings provide an intimate setting for exchange of ideas in methodological and applied research. Research students and scientists newly entering the field of genomic research are particularly welcome.

*** Topics *** Next Generation Sequencing Population Genetics RNA Bioinformatics Phylogeny and Comparative Genomics Personalized medicine Biological networks

*** Important dates *** Abstract submission: 20th June 2023 Registration closes for in-person: 15th August 2023 Registration closes for online: 27th August 2023 Conference: August 31-September 1

Looking forward to seeing you in Linz! MASAMB Organisers

Carolin Kosiol <ck202@st-andrews.ac.uk>

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Online ESEB STN Speciation Jun6

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 06 June 2023, 5 pm CET.

The upcoming session addresses the topic of “Paleontological views of micro and macroevolution”. We welcome speakers Susana Magallón (UNAM, Mexico) and Michael Landis (WUSTL, 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/64501352956> 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 Univer-

sity of Sheffield www.cooneylab.co.uk Chris Cooney <c.cooney@sheffield.ac.uk>

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Online India EvolutionaryBiology Aug2

SSE International Symposium for India and neighboring regions

2 August 2023 via Zoom Apply to be a speaker by 30 June

<https://www.evolutionarybiology.org/news/display/2023-6/8/call-for-speakers-international-symposium/> The Society for the Study of Evolution (SSE) is an international organization that promotes the understanding of evolutionary biology and its subdisciplines. Some of its activities include the publication of the journals *Evolution* < <https://academic.oup.com/evolut> > and *Evolution Letters* < <https://academic.oup.com/evlett> >, and the organization of the annual Evolution conference < <https://www.evolutionmeetings.org/> >.

In order to celebrate the diversity of its international membership and strengthen ties with the global community of evolutionary biologists, SSE is organizing the International Symposia Series. It consists of one-day virtual events free of charge that are conducted in different languages and time zones.

The first event < https://www.youtube.com/watch?v=dTyX8IIIdgFM&list=-PLiWPVybUyohHovbbtbXFq0idBIQzFDSW&ab_channel=SSEOutreach > of the SSE International Symposia Series was held in October 2022 and aimed at the Spanish-speaking Latin American community. The second event will take place on August 2, 2023. It will aim at India and neighboring regions and will be conducted in English. This event is being organized in collaboration with the Indian Society of Evolutionary Biologists (ISEB < <https://home.evolutionindia.org/> >).

The symposium will be followed by a workshop on how to publish articles in *Evolution* the day after. This workshop will be taught by the Associate Editors Kavita Jain (Jawaharlal Nehru Centre for Advanced Scientific Research), Sutirth Dey (Indian Institute of Science Education and Research Pune), and NG Prasad (Indian

Institute of Science Education and Research Mohali).

SSE invites India-based scholars, and those from neighboring regions, to apply to be a speaker of this event. You do not have to be a member of either SSE or ISEB, but this is encouraged. If you are not a member of SSE, you can access a free or discounted membership through the Global Membership Assistance Program < <https://www.evolutionssociety.org/membership.html#gma> >.

We aim to showcase the work on evolutionary biology of six early-career researchers (15-min talks) and two senior researchers (30-min talks) working in India and neighboring regions. All speakers will receive a USD 200 honorarium.

If you want to participate as a speaker, please email us the following information as a single PDF to GSAC@evolutionssociety.org before June 30, 2023.

-

Motivation letter (1 page max.), please include: - Name - Pronouns - Affiliation - Career stage - Tentative topic of the talk - Motivation to participate in the symposium - CV

Deadline: 30 June 2023

The speakers will be selected covering several axes of diversity to guarantee a fair representation of the regional community in terms of gender, geographic location, subdisciplines, and study systems. We will inform the results of this call in the first week of July. If you have any questions, please contact us at GSAC@evolutionssociety.org.

This event is organized by the SSE Graduate Student Advisory Committee (GSAC) in collaboration with the Indian Society of Evolutionary Biologists, with support from the SSE Council and the SSE International Committee.

*Kati Moore*she/her *Communications Manager*
Society for the Study of Evolution
communications@evolutionssociety.org
www.evolutionssociety.org SSE Communications
<communications@evolutionssociety.org>

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Online McGillU AdaptationInStructuredPopulations Jun29

A free one-day virtual symposium

Adaptation in structured populations Thursday, June 29

Free registration: <https://mcgill.zoom.us/meeting/-registre> < https://mcgill.zoom.us/meeting/register/-tZcquivjrjguG9EP_IMKA9bD4Mwq5DB7eb9J > Link to program <https://gravellab.github.io/events/> Session 1: Theory and methods

10:00 AM Jennifer Blanc Testing for differences in polygenic scores in the presence of confounding
10:30 AM Amy Goldberg Inferring post-admixture adaptation from ancestry-painted chromosomes
11:00 AM Aaron Ragsdale Dynamics of genetic variation under stabilizing selection and archaic introgression

Session 2: Applications

12:00 PM Nandita Garud Adaptation in the human gut microbiome: a structured population
12:30-13:00 PM Lluís Quintana-Murci Archaic introgression and immunity to infection
13:00-13:30 PM Discussion Next steps for the field

“Simon Gravel, Dr” <simon.gravel@mcgill.ca>

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Oslo InsectVectoredParasite,Jun14

Hi all,

The final seminar of the CIGENE spring series takes place next Wednesday 14th June, 12:00-12:50 (Oslo time). See details below.

Speaker: Professor Saskia Hogenhout, Group Leader, John Innes Centre, UK

Title: Molecular mechanisms that shape the multi-trophic interactions of an insect-vectoring parasite

Abstract: A substantial number of, often obligate, par-

asites depend on the interactions of multiple hosts for survival and spread. Fascinatingly, these parasites appear to have evolved mechanisms to induce developmental and behavioural modifications in their hosts that increase the chances of interactions among host trophic levels. By functionally characterizing effectors of the vector-borne phytoplasmas, we have identified the molecular mechanisms that underpin these remarkable parasite-enforced host modifications and elucidated novel cellular pathways.

For more information on Professor Hogenhout's research, visit her pages of the John Innes Centre website: <https://www.jic.ac.uk/people/saskia-hogenhout/> Zoom link: <https://nmbu.zoom.us/j/67064421833> Hope to see you there.

Kind regards,

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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Roscoff HostParasiteCoevolution

Oct16-20

Dear Colleagues, Just 2 weeks left to register for October's Jacques Monod Conference on host-parasite coevolution, in lovely Roscoff, Brittany, France!

A MATTER OF SCALE: WITHIN-HOST AND BETWEEN-HOST PROCESSES DRIVING COEVOLUTION WITH PARASITES

16-20 October 2023 Infectious diseases present an inherently multi-scale problem for evolutionary biologists: it is crucial that we understand both within-host processes and between-host processes, including any fitness trade-offs posed by the transition between scales, to understand the coevolution of strategies of attack and defense. For example, the evolutionary fitness of vector-borne parasites is shaped by immune selection and competition within the host, but also by transmission from host to vector, selective processes within the vector, and transmission from the vector to a new host. Likewise, the evolutionary fitness of hosts is shaped by the relative

costs and benefits of immune defense in light of the risk and cost of parasitism for each host, and for the other hosts with which each host must compete for food and mates. Furthermore, these interactions are impacted by spatial and temporal heterogeneity in the landscapes in which hosts and parasites complete their life cycles.

Our primary aim with this conference is to foster the interdisciplinary exchanges that are essential to investigating cross-scale dynamics and thus to understanding the coevolution of hosts and parasites. Historical barriers to communication - e.g., between theorists and empiricists, or among evolutionary biologists, epidemiologists, microbiologists, and immunologists - need to be surmounted. Our conference will nurture conversations across these divides. We invite researchers to join us, for exciting presentations and discussions on themes such as genetic and genomic signatures of host-parasite coevolution, the evolutionary dynamics of attack and defense, and the environmental contexts shaping coevolution.

Please share this message with colleagues and REGISTER NOW! via this link: <https://cjm4-2023.sciencesconf.org/> We hope to see you there! Thanks, and do let us know of any questions.

All the best, Oliver Kaltz & Andrea Graham

Andrea L. Graham Professor of Ecology & Evolutionary Biology Affiliated Faculty, Center for Health and Well-Being Affiliated Faculty, High Meadows Environmental Institute Princeton University Princeton, NJ 08544 USA

External Faculty, Santa Fe Institute Santa Fe, NM 87501

Tel: (+1) 609-258-6703 <tel:+16092586703> E-mail: algraham@princeton.edu @Grahammunology <http://algraham.princeton.edu/> algraham@princeton.edu

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UAlabama AmericanMalacologicalSoc Aug1-5

Dear EvolDir community,

The 89th American Malacological Society meeting will take place from 1-5 August 2023 in Tuscaloosa, Alabama at the University of Alabama and the Alabama Museum of Natural History. The deadline to register and submit abstracts for AMS 2023 has been extended by one week to June 30th.

Visit the AMS 2023 meeting page for more information and to register or submit abstracts: <https://ams.wildapricot.org/AMS-2023> Whether or not you choose to attend this year's meeting, please consider

participating in a voluntary anonymous survey to gather information about the barriers that may be preventing malacologists from fully participating in the AMS, including joining the Society, renewing membership, and attending annual meetings. We also want to understand how these barriers intersect with factors like career stage, identity axes, and other Justice, Equity, Diversity, & Inclusion (JEDI) areas of interest. <http://tinyurl.com/5744r9rp> Sincerely,

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

Kevin Kocot <kmkocot@ua.edu>

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GradStudentPositions

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AarhusU Denmark OstrichGenomicsThermalAdaptation

PhD position on The Evolutionary Potential of Thermoregulation in Ostriches in Aarhus, Denmark

We are seeking candidates with a strong interest in evolutionary biology and eager to learn a suite of tools including bioinformatics.

- Monitor and perform physiological experiments on the world's largest bird - Identify genetic basis of thermoregulation by gene expression and genotyping data - Use the data to understand how large species evolve to cope with temperature fluctuations

More info and apply here: <https://phd.nat.au.dk/for-applicants/open-calls/august-2023/the-evolutionary-potential-of-thermoregulation-in-ostriches> Deadline: 1st of August Questions: Mads F. Schou, (mfs@bio.au.dk), Aarhus University, Denmark

Mads Frstrup Schou <mfs@bio.au.dk>

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BenGurionU EvolutionHostParasite

Title: M.Sc., PhD, and Postdoctoral Research Associate Positions

Location: Ben-Gurion University of the Negev, Marco and Louise Mitrani Department of Desert Ecology (MDDE), Midreshet Ben-Gurion campus, Israel, Hadas Hawlena's research group.

Position description: Open positions are available, and the successful candidates will be able to choose between multiple projects in the laboratory; from bacterial species coexistence, through behavioral and applied aspects of disease ecology, to bacterial evolvability (the evolution of parasite capabilities to produce novel variation). Some of the research projects conducted are part of a collaborative project between leading laboratories in the field (University of Michigan, Prof. Luis Zaman; The University of Texas at Austin, Prof. Jeffrey Barrick; Michigan State University, The Hebrew University of Jerusalem, Prof. Shimon Harrus; Ben-Gurion University, Prof. Michal Segoli, and Dr. Ido Tsurim) and multiple years of funding are possible.

Minimum qualifications:

B.Sc., M.Sc., or PhD in ecology or microbiology, for M.Sc., PhD, and post-doc, respectively

Devotion to work, curiosity, and reliability.

High level of scientific writing and publications in English.

Preferred additional qualifications:

Strong background in evolutionary biology, community ecology, or disease ecology.

Experience in microbiological methods or molecular biology.

Quantitative thinking.

Proficiency with R for statistical analyses.

Application deadline: 1 of August 2023

About the laboratory: We use evolutionary and ecological theories to investigate the interactions between microbes, their vertebrate hosts, arthropod vectors, and the surrounding environment. Our philosophy is that realism and simplicity must be balanced. We get closer to nature by studying simultaneously wild, multiple host and multiple parasite species. However, our main model the rodent-flea-bacterial system of the Negev Sand Dunes (Israel) keeps the studies quite simple as all the relevant players are readily manipulated in the laboratory and field. The research lies at the interface of evolution, ecology, microbial ecology, disease ecology, immunology, and molecular genetics. For further details on our research, see <https://scholar.google.com/citations?hl=en&user=D3J-xSMAAAAJ>. About Midreshet Ben-Gurion campus: This campus of the Ben-Gurion University is situated at a beautiful site in the Negev Desert (south Israel), surrounded by desert wildlife and its student population is made of about 50% foreign graduate and postdoctoral students that come from all over the world together with local Israeli students. The campus has a friendly attitude and plenty of opportunities for social interactions with fellow students and locals alike. See <https://in.bgu.ac.il/en/bidr/SIDEER/-MDDE/Pages/default.aspx> for more information about the department.

Interested? Submit a paragraph detailing your interests and experience, a CV, and a list of three references (with contact information) to Prof. Hadas Hawlena (hadashaw@bgu.ac.il).

Hawlena Hadas <hadashaw@bgu.ac.il>

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Bolzano Italy ApplePathogen

A PhD position is offered at the Free University of Bozen-Bolzano (Italy) in the lab of Hannes Schuler. The position is in close collaboration with the phytopathology group of Sabine Ättl at the Research Centre Laimburg and aims to investigate the sooty blotch complex on

apples. The position is funded for three years and will start in November 2023.

The sooty blotch complex describes a multifaceted pattern of damage to apple, caused by melanized fungal hyphae and resulting in dark-colored, superficial blemishes on the apple peel. The involved fungi are colonizing the epicuticular wax layer, but do not penetrate the fruit itself. The blemishes are either visible already in the field or develop during long-term cold storage and finally, impair the commercialization of the fresh fruit. So far, more than 100 fungal species have been described to contribute to the sooty blotch complex of apple, and thus it represents the most diverse plant-pathogen complex. The composition of the microbial community is linked to environmental, climatic, and biogeographic factors, orchard management practices as well as the apple cultivars.

To date, no systematic determination of the core microbiome of apples with sooty blotch symptoms has been performed. Therefore, in this PhD project, a metabarcoding approach will be applied to investigate the microbial diversity of the apple carposphere. The identification of the key species of the sooty blotch complex is essential for a better understanding of symptom expression in changing environments and thus, might contribute to the development of targeted and environmentally friendly management strategies. We are looking for an enthusiastic candidate with a background in Agricultural or Biological Sciences, Agricultural Biotechnology, Ecology and Evolution. Competences with molecular genetic methods, next generation sequencing and bioinformatics as well as experience with ecological studies and field work are desired. The candidate should have excellent communication skills and should be fluent in English.

The following activities are planned: - Sampling of apple fruit in the field - Genetic characterization of fungi and bacteria on the apple carposphere - Experimental studies to investigate factors which influence the sooty blotch complex composition

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 internationalisation as well as an ideal study environment guaranteed by its excellent facilities are some of the reasons why unibz regularly reaches top positions in national and international rankings. The Schuler lab is member of the newly funded Competence Centre for Plant Health, a joint institution which consists of several research groups in the field of Biology, Agricultural Sciences and Engineering <https://www.unibz.it/>-

[en/home/research/competence-centre-plant-health](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> The Laimburg Research Centre is the leading research institution for South Tyrolean agriculture and food processing. Our research activities place great emphasis on practical relevance and pursue the goal of increasing the competitiveness and sustainability through a decisive knowledge advantage. We work on concrete solutions for the agricultural practice in our trial fields and in our excellently equipped laboratories, but we also deal with basic research on key topics. Our newly acquired knowledge is passed on directly and via extension services to our stakeholders in order to ensure the fastest possible implementation in practice. The Laimburg Research Centre has partners in South Tyrol and abroad, participates in national and international projects and is a member of various research networks.

General requirements for the position: Master's degree (or close to completion) in Agricultural or Biological Science, Biotechnology or related field. Moreover, a B2 level (or higher) certificate of English is required.

Deadline for applications is 18.07.2023 (noon).

All documents for the application procedure can be found here: <https://www.unibz.it/en/faculties/-agricultural-environmental-food-sciences/phd-mountain-environment-agriculture/> 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 Agricultural, Environmental and Food Sciences Free University of Bozen-Bolzano

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CNRS Montpellier GrapeOliveTreePaleoGenomics

Ph.D. Student Position: Paleogenomics of Grape and Olive tree in France

Our project “Modelling Interactions between Climate change and Agriculture in the ancient West”, supported

by the French National Agency for Research, opens a CNRS 3-year position (fully financed) for a PhD thesis on the paleogenomics of grapevine and olive trees. The research will be carried out by a nice collaboration between the French Research Units : ISEM, AGAP and EDB in Montpellier, and GATK in Toulouse.

You will find the description of the PhD subject and conditions here : <https://emploi.cnrs.fr/Offres/Doctorant/UMR5554-LAUBOU-003/Default.aspx> The program requires the candidates to formally apply through the CNRS system by 10th July 2023 (button “Apply” or “Postuler” according to the chosen language). You will need to open an account but it is easy. If you find it difficult or if you have preliminary questions, you can write before the 3rd of July directly to Laurent or me (addresses below).

We wish to start the PhD in October 2023. We will accept candidates online up to July 10th, and we will interview the candidates just after.

Thanks to All if you can kindly transfer our offer to your best students.

Sincerely, Laurent Bouby, Roberto Bacilieri

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Bonjour

Dans le cadre du projet MICA (Modelling Interactions between Climate change and Agriculture in the ancient West) financé par l'ANR, notre équipe “études du passé, patrimoines, cultures” de l'UMR ISEM, ouvre un nouveau contrat doctoral (CNRS), pour une thèse sur la paléogénomique de la vigne et de l'olivier. Le travail se fera dans le cadre d'une collaboration entre les UMR : ISEM, AGAP et EDB de Montpellier, et GATK de Toulouse.

Le descriptif du sujet de thèse est dans le lien suivant : <https://emploi.cnrs.fr/Offres/Doctorant/UMR5554-LAUBOU-003/Default.aspx> Pour postuler, les candidats doivent s'inscrire sur le site du CNRS et suivre la procédure. Si vous avez des questions préliminaires, vous pouvez nous écrire avant le 3 juillet (courriels dessous). Nous souhaiterons que la thèse commence à partir d'octobre 2023. Nous accepterons les candidatures jusqu'au 10 juillet, et auditerons les candidats tout de suite après.

Merci de la diffusion que vous voudrez bien faire vos étudiants.

Bien cordialement

Laurent Bouby, Roberto Bacilieri

– Laurent Bouby Ingénieur de Recherche CNRS Institut des Sciences de l'Evolution - ISEM (UMR 5554)

Université Montpellier Place Eugène Bataillon Bâtiment 22 - 3ème étage - CC 065 34095 Montpellier cedex 5 France laurent.bouby@umontpellier.fr ResearchGate

Roberto BACILIERI INRAE/CIRAD - UMR 1334 AGAP - Bâtiment 3, B103 TA A-108/03, Avenue Agropolis 34398 Montpellier Cedex 5, FRANCE Tél. : +33 4 67 61 49 31 E-mail: roberto.bacilieri@inrae.fr <https://umr-agap.cirad.fr/en> Roberto Bacilieri <roberto.bacilieri@inrae.fr>

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CPG Stockholm BumblebeeMuseomics

4-year PhD on bumblebee genomics with focus on museum samples (deadline: 30 June 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 governmental 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 following criteria will be used to fill the position: the candidates' documented knowledge in a relevant field of research, written and oral proficiency in English, the capacity for analytical thinking, the ability to collaborate, 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. Experience in population genetics, insect ecology, bioinformatics, and working in a DNA laboratory (ancient/historical/modern) are relevant qualifications.

Check the full 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=21253&rmlang=UK>

More information about the Centre for Palaeogenetics can be found here <https://palaeogenetics.com> For informal inquiries, contact David Díez-del-Molino (david.diez@zoologi.su.se)

All welcome to apply!

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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HalleLeipzig InsectSymbiontBiogeography

The Martin Luther University Halle-Wittenberg, in cooperation with the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, offers the following position in Leipzig, starting on 1 August 2023 or at the earliest opportunity and limited to 3 years, with the possibility of extension for another year:

Doctoral Researcher - The biogeography of insect and symbiont genetic diversity (m/f/d)

The salary will be up to 50% Entgeltgruppe 13 TV-L, if the personal requirements and tasks are fulfilled. The workplace will be in Leipzig.

The project

The German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig is a National Research Centre funded by the German Research Foundation (DFG). Its central mission is to promote theory-driven synthesis and data-driven theory in integrative biodiversity research. It is located in the city of Leipzig and it is a central institution of the Leipzig University, jointly hosted by the Martin Luther University Halle-Wittenberg (MLU), the Friedrich Schiller University Jena and the Helmholtz Centre for Environmental Research (UFZ). More information about iDiv: www.idiv.de. This project will be jointly supervised by Dr. Chloé Schmidt, Senior Scientist at iDiv and Dr.

Michael Gerth, Junior Group Leader at iDiv and Martin Luther University Halle-Wittenberg. The candidate will be embedded in a supportive and international group of researchers studying symbiont evolution, macroevolution, and macroecology. Doctoral researchers at iDiv further benefit from inter- and transdisciplinary training and support by the iDiv graduate school yDiv.

The project will explore the biogeography of insect and symbiont genetic diversity. Insects are dominant in most terrestrial ecosystems and comprise a majority of all named species on earth. Despite their importance, we have a poor understanding of global biodiversity patterns in insects - particularly for genetic diversity, the most fundamental level of biodiversity that underlies population persistence and adaptive potential. This PhD project will use macrogenetics approaches to investigate the biogeography of genetic diversity in insects and the globally distributed insect symbiont *Wolbachia*. The project scope would encompass determining how diversity patterns of hosts and symbionts are jointly influenced by ecology, geography, climate, and host biodiversity. The student would have the opportunity to compile and work with various publicly available sets of genetic markers (mitochondrial, nuclear, microsatellite, genomic) to assess their utility and congruence.

Tasks:

- * Compiling global insect and symbiont genetic data from various sources (e.g., DataDryad, NCBI Genbank & * Identifying factors contributing to genetic diversity of insects and symbionts on various levels * Interpretation and presentation of the work at national and international conferences, as well as in the form of publications in international journals

Requirements:

- * Scientific University degree (Diploma/ M.Sc.) in biology or a related field
- * Demonstrated knowledge of and interest in evolutionary biology, macroecology, or macroevolution
- * Strong interest in symbiont ecology and evolution, and data synthesis
- * Willingness to integrate and contribute to an international research centre
- * Fluency in English and good communication skills
- * Knowledge of German is advantageous, but not required

The Martin Luther University Halle-Wittenberg gives priority to applications from severely disabled candidates with equivalent qualifications. Women are particularly encouraged to apply. Applicants with a degree that was not obtained at a German higher education institution must submit a Statement of Comparability for Foreign Higher Education Qualifications from the Central Office for Foreign Education (Zentralstelle für ausländisches Bildungswesen) to prove equivalence.

For queries about the research project please contact Dr. Chloé Schmidt (chloe.schmidt@idiv.de) or Dr. Michael Gerth (michael.gerth@idiv.de).

Please submit your full application dossier only in English with registration number 5-5293/23-D until July 5, 2023. Applications should be submitted electronically via our iDiv application portal at <https://apply.idiv.de>. Applications should include motivation letter tailored to the research project, curriculum vitae, a digital copy of Master's degree/Diploma or equivalent, and contact details of scientific references. Application portfolios will not be returned, application costs will not be reimbursed.

This announcement is subject to possible budgetary restrictions.

iDiv is committed to establishing and maintaining a diverse and inclusive community that collectively supports and implements our mission to do great science. We will welcome, recruit, develop, and

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Helsinki Evolutionary Behavioral Ecology

The research group of Ulrika Candolin (<https://www.helsinki.fi/en/researchgroups/behavioural-ecology>) is seeking a highly motivated PhD student to join our research project: 'Coping with light pollution: integrating behavioural, physiological, and genetic research in the study of the European glow-worm'

The aim of the project is to determine the impact of light conditions - both natural and artificial - on the ability of organisms to cope with modern LED lights, and to evaluate the underlying mechanisms, using the glow-worm as the model species. Insights gained will be used to identify measures that can be taken to reduce negative effects of man-made lighting systems on the species and biodiversity in general.

In the European glow-worm (*Lampyris noctiluca*), females emit a bioluminescent signal to attract flying males; they are thus likely to be sensitive to light pollution. We will integrate behavioural, physiological and

genetic research to assess their responses to LEDs along three gradients: 1) a latitudinal gradient to evaluate the impact of natural light conditions, 2) an urbanisation gradient to evaluate the impact of earlier exposure to artificial light, and 3) a temporal gradient to evaluate the impact of the time populations have been exposed to artificial light. We will assess both behavioural and physiological responses to artificial light in experimental work, and determine the genetic underpinnings of the responses by screening for signs of selection across the genome. The research will provide information on the ability of the glow-worms to cope with modern LED lights, both phenotypically and genetically, and the degree to which this depends on past light conditions and exadaptations. The results will be used to predict the expected trajectory of populations depending on future scenarios of light pollution, and to evaluate changes needed to artificial lighting systems to reduce negative effects on biodiversity. At a more general level, the insights will be used to assess the degree to which information on past conditions can be used to predict species responses to rapid human-induced environmental change.

The salary will be based on the salary system of Finnish Universities with demand levels 1-4. In addition, the appointee will be paid a salary component based on the personal performance. The gross salary will be 2200-3000 €/month depending on the stage of the doctoral studies and work performance. Standard Finnish pension benefits, occupational health care and health insurance are provided. English is the primary language in doctoral education and research.

How to apply: The application should include the following attachments as a single pdf-file - Motivation letter describing your background and motivation to apply for the position (max. 2 page) - CV with a list of publications and a brief summary explaining your own contributions - Contact information of two referees, who can provide reference letters upon request

Please submit your application using the University of Helsinki Recruitment System via the Apply link. <https://career2.successfactors.eu/careers?company=-helsinginy> The deadline for submitting the application is 21st of July 2023.

For more information, contact: ulrika.candolin@helsinki.fi

"Candolin, A Ulrika" <ulrika.candolin@helsinki.fi>

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JyvaskylaU EvolutionaryGeneticsGenomics

A position for a Doctoral Researcher (graduate student) in Evolutionary Genetics, is available in the group of Ilkka Kronholm at the department of Biological and Environmental Sciences at the University of Jyväskylä, starting on 1st of September 2023 or as agreed, for a maximum of fixed term of four years.

The genetics, epigenetics, and evolution group lead by Ilkka Kronholm studies the properties of mutations and spontaneous epigenetic changes, parental effects, and genetic architecture of complex traits. Our research questions are focused on understanding how different intrinsic and extrinsic factors affect evolutionary adaptation. As model systems we use the filamentous fungus *Neurospora crassa* and fission yeast.

The researcher will join an ERC-funded project that studies the properties of epistatic interactions. Epistatic effects are non-additive effects of combining two or more mutations. Epistatic interactions are known to play an important part in certain aspects of evolution, such as speciation. However, the role of epistasis in adaptation has remained controversial. In this project, we will combine empirical measurements of mutational effects and their combinations in a microbial system. We have previously generated mutation accumulation lines, and we know the mutations that happened in these lines. Through genetic analysis, and genotyping by high-throughput sequencing we can estimate effects of individual mutations and their epistatic effects. With our collaborators we can parameterize evolutionary models with the empirical data and model the role of epistasis in adaptation.

Recent work from the group includes developing mutation accumulation lines for the filamentous fungus *Neurospora crassa*, and analysis of how chromatin modifications affect mutation rate, see: Villalba de la Peña et al. 2023. Chromatin structure influences rate and spectrum of spontaneous mutations in *Neurospora crassa*. *Genome Research* 33: 1-13 <https://doi.org/10.1101/gr.276992.122> The doctoral researcher is expected to contribute to the current project, plan and perform research, write manuscripts, and finally a PhD thesis. While the major outlines of the project are fixed, it is possible to tailor parts of the project according to the interests of the candidate. Participating in limited

amount of teaching can also be arranged.

You are the person we are looking for if you have a masters degree in evolutionary biology, population genetics, genetics or a related discipline with strong interest in evolutionary genetics. Previous experience with fungal genetics is not required. Experience in analysis of sequencing (NGS) data can be an advantage, as well as good computational skills and solid understanding of statistics, and in particular the R environment. Good written and oral communication skills in English are required.

The requirements for graduate studies at the University of Jyväskylä apply (mainly proficiency in English), for further details please see the link in the application. Please note that Finnish is not a language requirement for this position, the information in the University webpage is unfortunately not very clear about this.

What does the University of Jyväskylä offer as an employer?

At the University of Jyväskylä, you are a recognized member of our community with an ample opportunity to be drawn into international research. You get to participate in our international and multidisciplinary community, where everybody's welfare is essential. You will work in an inspiring and lively campus area and in an environment that supports a healthy and active lifestyle.

Finland has a high standard of living with healthcare, free schooling (also in English), affordable childcare, and good family benefits. The city of Jyväskylä is located in central Finland amidst Finnish lakes and has excellent opportunities for different nature, outdoor, and sports activities. It is a major educational center, whose large student population is responsible for a vibrant cultural scene. To find useful information about the University of Jyväskylä, the City of Jyväskylä, and living in Finland, see the University's International Staff Guide.

The initial annual salary will be approximately 28,000 EUR (gross income, including a holiday bonus). With progress of the thesis work, the salary will be revised in accordance with the Collective Agreement of Finnish Universities. The employment starts with a trial period of six months.

Please attach the following documents to the online application form:

1. Curriculum vitae, including contact information of two people willing to provide a reference
2. Cover letter explaining your motivation, research interests, and career plans
3. Relevant certificates / diplomas

Please submit your application at the latest by 20 July 2023 by using the link found on page:

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LiverpoolJMU UK EnrichmentSocialFish

We are looking for suitable PhD candidates to enter Liverpool John Moores University's VC scholarship scheme. If successful, the student will receive three years funding covering tuition fees, UKRI-standard student stipend and research support, with a starting date in February 2024.

The project aims to manipulate environmental complexity during development in the highly social daffodil cichlid fish (*Neolamprologus pulcher*), which forms complex hierarchies that can be manipulated in the laboratory. The prospective candidate will investigate how personality traits, physiology, and conflict management strategies differ between individuals exposed to physical environments of varying complexity early in life. More complex environments offering more shelter may give animals a sense of safety encouraging greater social interaction early in life which may influence social competence and stress coping mechanisms. We plan to integrate behavioural measures of conflict management with the examination of the key systems involved in regulation of stress responses, aggression, and social behaviour.

The successful candidate will be working in our custom fish facilities at Liverpool John Moores University (LJMU) and be integrated into our flourishing "Behavioural Ecology and Physiology research Group" in the School of Biological & Environmental Sciences.

Prospective students should have a keen interest in and desire to develop their knowledge of animal behaviour, zoology and neurobiology, with good bachelor's and master's degrees in relevant disciplines. A good working knowledge of statistical analysis using R, strong organisational skills, and the ability to work both independently and collaboratively with a team and prior experience working with fish would be advantageous.

Full training in all required techniques, advanced statistical analysis and appropriate research methodologies will be provided by the supervisory team (Dr. Susanne Zajitschek, Dr. Adam Reddon and Dr Will Swaney) and through our Doctoral Academy.

Additional information can be found here: <https://www.findaphd.com/phds/project/the-effect-of-developmental-enrichment-on-personality-stress-physiology-and-conflict-management-behaviour-in-a-highly-social-fish/?p158721> Applicants should email a CV including contact details of two referees, and a cover letter detailing their suitability for the project, their experience and motivation, to Dr. Susanne Zajitschek: s.r.zajitschek@ljmu.ac.uk

Shortlisted applicants will be contacted for interview in early July.

[Liverpool John Moores University] <<https://www.ljmu.ac.uk/>> Susanne Zajitschek (FHEA Fellow) Lecturer, Year Tutor (L5) Biological and Environmental Sciences James Parsons Building, Byrom Street, Liverpool, L3 3AF t: 01519041061 e: S.R.Zajitschek@ljmu.ac.uk w: <https://suszaj.github.io-ZajitschekLab/> Important Notice: Liverpool John Moores University was established as a Higher Education Corporation under section 121 of the Education Reform Act 1988. Further information about Liverpool John Moores University can be found at <https://www.ljmu.ac.uk/about-us> The information in this email and any attachments is for the sole use of the intended recipient(s). If you are not an intended recipient, or a person responsible for delivering it to an intended recipient, you should delete it from your system immediately without disclosing its contents elsewhere and advise the sender by returning the email or by telephoning a number contained in the body of the email. No responsibility is accepted for loss or damage arising from viruses or changes made to this message after it was sent and the recipient must ensure that the email (and attachments) are virus free. The views contained in this email are those of the author and not necessarily those of Liverpool John Moores University. We will use the personal data information provided by you to respond to your email. For information about how we process personal data and monitor communications please see our Privacy Notice. <https://www.ljmu.ac.uk/legal/privacy-and-cookies> "S.R.Zajitschek@ljmu.ac.uk" <S.R.Zajitschek@ljmu.ac.uk>

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LJMU Liverpool Wildlife Urban Adaptation

We're looking for an excellent, motivated student to apply for a fully-funded PhD scholarship in ecophysiology at Liverpool John Moores University, UK. If successful, the applicant will start in February 2024 and will receive three years funding covering tuition fees, UKRI-standard student stipend and research support.

The PhD project aims to gather crucial information for predicting the ability and requirements of wildlife to cope within anthropogenically-modified environments, using the European hedgehog (*Erinaceus europaeus*) as a model species.

During this PhD, the student will use a combination of indicators to quantify wildlife responses to urbanisation. This will involve monitoring and tracking of free-living hedgehogs along rural-urban gradients around Liverpool. The use of biologging methods will allow the collection of data on activity, timing of reproduction, nest site choice and home range use. Monitoring of appropriate indicators of state, including torpor characteristics and reproductive timing, and use of thermal imaging to record stress responses, in relation to environmental variables will help to identify the intrinsic and extrinsic factors essential for urban adaptation.

Through this combination of techniques, the student will assess the link between habitat features, physiological and behavioural adaptations, and individual state.

The results of the PhD will increase our knowledge about species' sensitivity to urban habitats and help future-proof our natural environments by informing urban planning and conservation policies aiming to mitigate the impact of human-induced urbanisation.

In addition to holding a master's or strong first degree in zoology or an equivalent biological/environmental sciences field, the ideal applicant will be able to demonstrate significant interest in eco-physiology and have experience with fieldwork. Strong organisational skills and the ability to work both independently and collaboratively with a team as well as a good working knowledge of statistical analysis using R would be advantageous. Full training in eco-physiological research methods, science communication techniques, advanced statistical analysis and appropriate research methods will be provided by the supervisory team and through

our Doctoral Academy.

To apply, email a CV and cover letter detailing your suitability for the project and contact details of two referees to Dr Julia Nowack (J.Nowack@ljmu.ac.uk).

Applicants need to be available for an interview (by video) in early July and able to start in February 2024.

Additional information can be found here: <https://shorturl.at/ehrKP> Julia Nowack Reader in Animal Physiology Biological and Environmental Sciences Room 2.34, James Parsons Building, Byrom Street, L3 3AF Liverpool, t: 01512312415 e: J.Nowack@ljmu.ac.uk

Important Notice: Liverpool John Moores University was established as a Higher Education Corporation under section 121 of the Education Reform Act 1988. Further information about Liverpool John Moores University can be found at <https://www.ljmu.ac.uk/about-us> The information in this email and any attachments is for the sole use of the intended recipient(s). If you are not an intended recipient, or a person responsible for delivering it to an intended recipient, you should delete it from your system immediately without disclosing its contents elsewhere and advise the sender by returning the email or by telephoning a number contained in the body of the email. No responsibility is accepted for loss or damage arising from viruses or changes made to this message after it was sent and the recipient must ensure that the email (and attachments) are virus free. The views contained in this email are those of the author and not necessarily those of Liverpool John Moores University. We will use the personal data information provided by you to respond to your email. For information about how we process personal data and monitor communications please see our Privacy Notice. <https://www.ljmu.ac.uk/legal/privacy-and-cookies> "Nowack, Julia" <J.Nowack@ljmu.ac.uk>

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MNHN Paris MorphoButterflyEvolution

Dear colleagues,

We are offering a 3 years PhD position at Paris Museum of Natural History (starting October 2023), to study the coevolution of flight and iridescence in Morpho butterflies.

This PhD is part of a HFSP project led by Vincent Debat aiming at identifying the evolutionary drivers of iridescence in Morpho butterflies. This is an international collaborative project, involving physicists and evolutionary biologists, who combine their expertise to jointly analyze iridescence, flight and colour vision in Morphos. The PhD candidate will mostly contribute to the flight part of the project.

Although iconic animals, the ecology and evolution of Morpho butterflies have been scarcely studied. In particular, the evolutionary drivers of their blue iridescence are mostly unknown.

One hypothesis is that, combined with a fast erratic flight, iridescent flashes generated during wing movements increase the difficulty of capture by bird predators. Under this hypothesis, we predict a co-evolution between flight and iridescence. The aim of this PhD project is to test this prediction, by quantifying the diversity of flapping flight performances across the genus, and assessing the covariation with colour patterns and ecological conditions. Our recent work on the evolution of Morpho flight has shown a striking diversity of flight behaviours among species, with a marked divergence between species flying in different forest strata, the canopy species displaying extreme gliding flight performances (Le Roy et al 2021). The PhD project will build on this expertise to assess flapping flight performances.

The project will combine aerodynamic analysis of flight and evolutionary ecology and will be co-supervised by Florian Muijres (Wageningen University) on the aerodynamics side, and Vincent Debat (Paris Museum), on the eco-evolutionary side. The project has a substantial experimental part (aerodynamics of flight) and will rely on field work in Amazonia.

The candidate should have an expertise either in biomechanics or evolutionary ecology, with a strong interest for interdisciplinarity and a taste for field work in tropical conditions.

The PhD candidate will benefit from the expertise of the members of the HFSP international consortium, and locally will integrate a large team, led by V. Debat and M. Elias, working on adaptive diversification. The project will be conducted in collaboration with the ERC team of V. Llaurens, composed of two PhD students and a postdoc.

For any inquiry, please email me (and please include a CV) at vincent.debat@mnhn.fr

Cited reference Le Roy, C., Amadori, D., Charberet, S., Windt, J., Muijres, F. T., Llaurens, V., & Debat, V. (2021). Adaptive evolution of flight in Morpho butterflies. *Science*, 374(6571), 1158-1162.

Dr Vincent Debat, MC MNHN Institut de Systématique, Evolution et Biodiversité (UMR 7205 CNRS/MNHN/Sorbonne Université/EPHE) Muséum National d'Histoire Naturelle - CP50 57 rue Cuvier - CP50 75005 Paris, France

www.evomorpho.com 01 40 79 30 54

Vincent DEBAT <vincent.debat@mnhn.fr>

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MPIBI Seewiesen EvolutionCognition

Opportunity!

Projects available for Master's students and self-funded guest researchers in Comparative Cognition Research Station at Tenerife, Spain, run collaboratively between the Max-Planck Institute for Biological Intelligence and the Loro Parque Foundation

The Max-Planck Comparative Cognition Research Group (CCRG)

<https://www.bi.mpg.de/von-bayern> invites applications from Postgraduate/Undergraduate students and Interns who want to assist in research projects and bird care, enrichment and management. The CCRG is part of a collaboration between the Max-Planck Institute for Biological Intelligence, Germany, and Loro Parque Fundación (LPF) in Tenerife, Spain. We are currently carrying out several projects on parrot intelligence. We work with mostly tame, captive parrots of LPF, which owns the largest collection of parrots and genetic reserve in the world (approximately 350 subspecies) for conser-

vation and research purposes. Interested candidates are encouraged to contact us to request information about ongoing projects. Selected applicants will gain experience in the field of cognitive research, as well as working with and training exotic parrots in a highly dynamic international research environment. A unique opportunity!

Preferable time of joining: It is highly preferable if students can join by September 2023

Logistics: The projects for Master's theses and guest researchers require a minimum of 4 months but ideally 6 months of continuous commitment at the research station in Tenerife, Spain.

Accommodation can be provided in a shared student apartment (Puerto de la Cruz, Tenerife, Spain), with affordable facilities. Students with their own funding or grants can apply for the posts.

Important skills/qualifications:

Selected candidates need to have:

- High motivation and commitment to the care of our birds - Preferably pursuing a Master's degree in Biology/ Psychology/Animal Science or related subjects. - Reliability, efficiency and ability to work independently
- Confidence to interact with animals - Good verbal English skills - Good teamwork attitude and social skills

Submit your request!

For more information on how to apply, please email Dr. Anastasia Krasheninnikova (akrasheninnikova@bi.mpg.de), or Msc Esha Haldar (EHAL-DAR@bi.mpg.de).

“Krasheninnikova, Anastasia”
<AKrasheninnikova@bi.mpg.de>

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Norway

MarineFishAdaptiveMechanisms

Funded PhD Position to study Adaptive Mechanisms in Marine Fish in Norway

About the position A 100 % position is available at the University of Agder in Kristiansand, Norway, as a PhD Research Fellow, affiliated to the Department of Natural Sciences, for a period of three years.

The position is integrated into the group of Assoc. Prof. Enrique Blanco Gonzalez. The candidate is expected to generate new knowledge about the adaptive ecology of coastal species in Norway. Possible research areas include * Adaptive mechanisms in marine organisms * Population genomics of coastal species * Metabarcoding approaches in coastal and fjord systems

Required qualifications * Hold a MSc degree (at the starting date) in a relevant field such as marine ecology, bioinformatics, evolution, biotechnology, fisheries or aquaculture * Relevant competence in the analysis of molecular data, notably experience working with DNA and/or RNA * Proven ability to work creatively and independently * Motivation for scientific work, structured work routines and collaborative skills * Written and spoken English proficiency

Desired qualifications * Skills and experience within genomics, transcriptomics or metabarcoding * Experience with laboratory protocols in molecular biology and analyses of large datasets will be emphasized. * Prior experience with experimental design, ecological modelling, programming and/or R-coding. * Relevant field work experience. * Be familiar with coastal ecology and aquaculture species in Norway.

How to apply General information The application is to be sent electronically by 31.07.23. More information can be found here: <https://www.jobbnorge.no/en/available-jobs/job/245991/phd-research-fellow-in-coastal-ecology> . The following documentation must be uploaded electronically: * Application letter: describe why you apply for the position and how your experiences and skills fit the description of the position * A short project description (1-3 pages) that present your ideas for the project, including the relevance of the research, theory perspectives, etc * CV * Summary (max. 2 pages) and Full MSc thesis. * Diplomas, transcripts and up to three (3) letters of reference. * Up to five (5) scholarly and other relevant publications which the applicant wishes to include for assessment. * Other important documentation like results from language tests (e.g. TOEFL)

Enrique Blanco Gonzalez <enrique.blanco@uia.no>

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OhioU HareClimateChangeAdaptation

The Zimova Lab at Ohio University, Dept of Biological Sciences is looking for 1 - 2 graduate students (MSc or PhD) to join our group in Fall 2023. Our research focuses on quantifying consequences of climate change for vertebrate populations and understanding the potential for evolutionary change to facilitate adaptation to climate change-related stressors. Our work integrates a broad range of tools and approaches including intensive field surveys, museum specimens, high-resolution climate and environmental data, and advanced statistical modeling. We are looking for graduate students who are interested in conservation biology, animal ecology and/or evolutionary biology with at least some relevant undergraduate coursework and/or field ecology research experience.

The student would work with Dr. Marketa Zimova on a field-based research project related to seasonal camouflage mismatch in snowshoe hares (for more information see 'Phenological mismatch in seasonal camouflage' <https://www.marketazimova.com/research>). The student will develop strong field ecology- and quantitative skills and conduct reproducible research. All students admitted to the program are guaranteed teaching assistantship (\$18-25k/year) that comes from a combination of teaching and other assistantships. I am happy to assist students with their NSF GRFP and other fellowship applications.

If you are interested in this grad school opportunity, please fill out this form by Wednesday July 12th, 2023 for full consideration for Fall 2023:

<https://forms.gle/JVn7q6WjLjukAYoTA> Review of applications will begin immediately and continue until the position is filled. Do not hesitate to reach out to Marketa at [marketzimova\[at\]gmail.com](mailto:marketzimova[at]gmail.com) with any questions.

Marketa Zimova Assistant Professor (starting Fall 2023)
Dept. of Biological Sciences Ohio University, Athens, OH 45701

Marketa Zimova, PhD Assistant Professor Appalachian State University Department of Biology 572 Rivers Street Boone, NC 28608 www.marketazimova.com Marketa Zimova <marketzimova@gmail.com>

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StFX NovaScotia ForestPestAdaptations

Funded PhD or MSc position to study adaptations for overwintering biology of a forest pest

The Toxopeus lab (<https://jantinatoxopeus.com/>) is recruiting a graduate student to study diapause - an important adaptation for surviving winter - in the eastern spruce budworm.

Program: <https://www.mystfx.ca/biology/graduate-program> - PhD or MSc positions available

Start date: September 2023 preferred, but other start dates are possible

Location: Antigonish, Nova Scotia, Canada, which is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People

Funding: Minimum stipend of \$25,000 per year for four years (PhD) or two years (MSc)

The Project: Diapause of the eastern spruce budworm (*Choristoneura fumiferana*) Understanding the overwintering biology of eastern spruce budworm is important for predicting its impact as a forest pest. Different budworm populations across Canada vary substantially in their ability to survive and respond to low temperatures, and we are interested in why. Like many insects, budworm overwinter in diapause, an important adaptation for surviving winter. The core of this project will be using transcriptomics and metabolomics to understand the impact of different temperatures on spruce budworm diapause, and identify genetic markers associated with key transitions in the diapause program. By comparing these genetic markers across multiple populations, we hope to understand more about variation in, and evolution of, the diapause program in spruce budworm.

Qualifications: - A strong academic background that includes the completion of all requirements for a thesis-based MSc (for PhD applicants) or thesis-based BSc Honours (for MSc applicants) prior to the proposed start date. Applicants with equivalent experience are also encouraged to apply. - Previous experience with one or more of the following research areas would be an asset, but is not required: bioinformatics, entomology, evolution, genetics, forestry, or molecular biology. - Lifelong learner with a curiosity about how life works. - Strong attention to detail, organization, and time-management

skills. - Ability to work well independently and a commitment to working equitably within diverse teams or groups of people.

To Apply: Assessment of applications will begin on 3 July 2023 and will continue until the position is filled. Informal inquiries are also welcome. To apply, email Jantina Toxopeus (mailto:jtoxopeu@stfx.ca) with the subject line “Spruce budworm PhD/MSc” with the following pdf attachments.

- A CV or resume outlining your academic, work, and volunteer experience
- A 1 page cover letter summarizing your qualifications, research interests, and how this graduate position will help you realize your future goals
- Your unofficial university transcripts

We welcome applications from people who identify with groups underrepresented in STEM fields.

jtoxopeu@stfx.ca

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UAuckland Two NCCrowCogCultEvol

New Caledonian crow cognition and culture

About the project

Positions available and funding:

The Crow Cognition Group (CrowCoG) is seeking qualified applicants for two 3-year doctoral project positions, funded through a collaboration agreement between the University of Auckland and the Max Planck Institute for Evolutionary Anthropology. The funding covers research costs, tuition fees, and a tax-free stipend of \$35K (NZD) per year. The positions will be based at the University of Auckland in New Zealand, with 3 to 4-month stints in New Caledonia per year.

Background:

From hammers and chisels to cars and computers, the technological behaviour of humans is unsurpassed by any other organism. Nevertheless, we are not alone in the technological realm. Since Jane Goodall’s pioneering discovery of chimpanzees’ tool manufacturing half a century ago, many other primate and non-primate species are now known to exhibit tool-related behaviour, and to perform comparably on a wide variety of cognitive tasks. One species in particular, the New Caledonian

crow, expresses tool manufacture skills that eclipse those seen in chimpanzees, including the production of hook tools?” an ability shared only with humans. New Caledonian crows’ pandanus leaf tool designs vary across populations in different geographical areas in a pattern that suggests they have cumulatively evolved. In aviary experiments, wild-caught New Caledonian crows have successfully solved cognitive tasks that probe abilities such as reasoning by exclusion, causal inference, meta-tool use, agency detection, and short-term planning. The New Caledonian crow is thus an ideal model species to test hypotheses about what makes humans unique, and, in the process, to study the more general links between tool manufacture, cognition, and cultural evolution.

About us:

Alexis Breen, James St Clair, and Russell Gray established CrowCoG in February 2023 to expand our understanding of New Caledonian crow tool-making, culture, and cognition. Quentin Atkinson leads the University of Auckland’s Language, Cognition and Culture Lab. Together, this team will combine observational studies of crow behaviour in the field with noninvasive experiments on temporarily-captive wild subjects in its large purpose-built aviaries. Experiments will test the crows’ abilities for high-fidelity social learning, memory, physical cognition, and planning.

Requirements:

Essential - A deep interest in the natural world - A BSc (1st Class or equivalent) or Masters degree in a relevant field (e.g., biological sciences, psychology) at the start of the position - Experience collecting and analysing behavioural data - Excellent written and spoken English language skills - Willingness to work in remote field conditions for prolonged time periods - Demonstrated ability to work as part of a team - Demonstrated ability to learn new skills - Good physical fitness - A valid driving licence

Desirable - Good spoken French - Familiarity in R (data handling and statistical analyses) - Field work experience - Experience in animal husbandry - A valid bird banding permit

How to apply:

Please send the following documents to crowcog@eva.mpg.de by 14 July 2023:

1. Cover letter describing how you meet the essential and/or desired requirements, including details of past research projects and relevant experience (not more than 2 pages).
2. Curriculum vitae, including the names and contact details of three professional referees.
- 3.

Digital copies of 1-2 writing samples (e.g. first-author publications, manuscripts, thesis, essays).

alexis_breen@eva.mpg.de

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UCanterbury NZ ComputationalMicrobiology

PhD Position in Computational Microbiology

A scholarship is available to fund a PhD in the computational microbiology research group at Te Whare Wānanga o Waitaha | University of Canterbury (UC) in Christchurch, New Zealand. The available scholarship will cover tuition fees, provide support for research expenses and provide a stipend of \$28,000 per annum for up to 3 years.

The focus of the computational microbiology group is to better understand the diversification and dispersal of microorganisms across environmental gradients and over geological time. To facilitate scientific insights, we are interested in finding ways to improve computational techniques used in the analysis of microbial communities and in organizing microbial data in meaningful ways. We are seeking those who are comfortable with coding and have a strong interest in microbiology.

Example topics include:

- * Biogeography of genes and function.
- * Phylogeny-assisted functional characterization of genes.
- * Improvement of metagenomic binning techniques
- * Resolving deep relationships in the prokaryotic tree of life
- * Tree-free classification schemes for bacteria and archaea

Successful applicants are expected to draw on their research interests to develop an individualized research plan and will have the opportunity to test computationally generated hypotheses with field sampling and laboratory experiments.

Requirements:

- * Completion of a research-focused Honours or Master's degree, at First or Second Class (Division I) Honours or Distinction level (or equivalent) in bioinformatics, molecular biology, microbiology or a relevant field.

Please review the Regulations for the Doctor of Philosophy (<https://www.canterbury.ac.nz/-regulations/academic-regulations/phd-36/>) and/or use the admission requirements checker (<https://-checkwhatyouneed.canterbury.ac.nz/home>).

* Proficiency in scripting (e.g., R, Python, bash) or programming (e.g. C++).

* Experience in processing high-throughput sequencing data

* A desire to present research findings at conferences and publish in scientific journals.

Application Process:

To apply for this position, please submit the following documents:

- * A cover letter (2 page max) stating how your research interests fit into the broader goals of the research group and/or topics provided above. Include a link to a Github repository (or equivalent) with examples of code that you wrote or contributed to and describe in the cover letter what the code was used for and your contribution to it.

- * A detailed curriculum vitae (CV) highlighting your academic achievements and research experience.

- * Contact information for two academic referees who can provide letters of recommendation.

Please email your application as a single PDF file to craig.herbold@canterbury.ac.nz with the subject line "PhD Position in Computational Microbiology." Should you have any further inquiries regarding this position, please contact Dr. Craig Herbold at craig.herbold@canterbury.ac.nz. Screening of applicants will begin immediately and will continue until a suitable candidate has been identified.

This email may be confidential and subject to legal privilege, it may not reflect the views of the University of Canterbury, and it is not guaranteed to be virus free. If you are not an intended recipient, please notify the sender immediately and erase all copies of the message and any attachments.

Craig Herbold <craig.herbold@canterbury.ac.nz>

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UEastAnglia UK AIEvolution

PhD Position in Computational Biology

We invite applications for a three-year PhD position based at the University of East Anglia in Norwich, the United Kingdom. Due to the funding source, this project is for UK students only, meaning those who are eligible to work in the UK. The deadline for application is 19th June 2023 and the successful candidate will be supervised by Dr. Taoyang Wu (<https://research-portal.uea.ac.uk/en/persons/taoyang-wu>) at the School of Computing Science and Prof. Cock van Oosterhout (<https://research-portal.uea.ac.uk/en/persons/cock-van-oosterhout>) at the School of Environmental Science.

Project Description

Deep learning, a powerful class of artificial intelligence (AI) algorithms, is emerging as a promising computational framework for inferring evolutionary signals from highly complicated population datasets. The key challenge here is to design and implement novel deep neuron networks that are capable of detecting the relationships between genomic sequencing data of individuals and the associated characteristics of these individuals. During the past few years, we have been working closely with collaborators to develop computational methods and tools for inferring evolutionary signals (e.g. recombination and introgression) from genomic datasets. Motivated by extending these tools to harness the recent progress in deep learning, this project will develop AI-based (e.g. deep learning) approach to inferring/detecting evolutionary signals from both genomic and phenomic datasets. It is expected that these tools will lead to further insights into the understanding of complex evolutionary forces mediating population evolutions, which will be key to understanding human population structures, predicting pathogen evolution, and designing effective conservation policies to mitigate environmental impacts on endangered species.

Qualifications: A Bachelor degree in Biology, Computer Science, Mathematics, Statistics, or a related area with at least an upper second class classification (or the equivalent) is expected. An interest in computational or mathematical biology is helpful, though prior knowledge is not necessary. Training will be provided in relevant areas, and the successful candidate will have the opportunity to work with researchers in the AI/Machine

Learning group and the Computational Biology group at UEA, and across the Norwich Research Park.

Application:

For more information, please contact Taoyang Wu (Taoyang.wu@uea.ac.uk) or Cock van Oosterhout (C.Van-Oosterhout@uea.ac.uk). We accept digital applications only. More information, instructions on how to apply, are available at <https://www.uea.ac.uk/course/phd-doctorate/assessing-the-extinction-risk-and-recovery-potential-of-species-with-deep-learning-wut-u23cmp> “Taoyang Wu (CMP - Staff)” <Taoyang.Wu@uea.ac.uk>

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UGreifswald Two BatPopulationMonitoring

We are offering two well funded PhD positions at the Applied Zoology and Nature Conservation Research Group at the University of Greifswald. The positions are part of the recently funded BatTrend project, which aims to both explore new methods and to optimize more established ones, all with the aim of improving bat monitoring and conservation. BatTrend explores both summer and winter monitoring and builds on the batlas (<https://batlas.info/>) to compile and provide these data to all.

One PhD project will use high-resolution long-term monitoring data to develop monitoring guidelines for forest-dwelling bats. The position offers the opportunity to conduct field work on wild bat populations at a number of sites in Germany and couple this with the analysis of large individualized long-term datasets with modern statistical methods. For details see: <https://www.uni-greifswald.de/en/-university/information/jobs/job/n/wissenschaftlicher-mitarbeiterin-zoologisches-institut-und-museum-23-will-167465/> The other PhD project will explore two new monitoring methods, long-term passive acoustic monitoring and environmental DNA. The project will involve fieldwork at different sites in Germany where bat communities are already well described, to validate these methods in different contexts. The PhD candidate will develop automated pipelines to extract relevant activity data from continuous acoustic recordings and evaluate the applicability of long-term passive acoustic

monitoring to track population dynamics. At the same time, the project will investigate the feasibility and suitability of eDNA from a variety of substrates, including air filters, leaf swabs and insect-derived DNA, to monitor bat populations. The eDNA work will involve laboratory work and bioinformatic analyses at the Helmholtz Institute for One Health (HIOH) in Greifswald. For details see: <https://www.uni-greifswald.de/en/university/information/jobs/job/n/-wissenschaftlicher-mitarbeiterin-zoologisches-institut-und-museum-23-wi12-167467/> Application deadline is July 10th. Please reach out if you have any questions!

Dr. Jan F. Gogarten | Applied Zoology and Nature Conservation - University of Greifswald | Helmholtz Institute for One Health | He/Him/His | website: <http://jangogarten.weebly.com> Jan Gogarten <jan.gogarten@gmail.com>

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UMainz EvolPlantHerbivoreInteractions

PhD Position available (50% EG13 TV-L)

University of Mainz, Institute of Organismic and Molecular Evolution

Supervisor: Prof Dr Meret Huber (<https://plant-evolutionary-ecology.uni-mainz.de/>)

Starting date: October 2023 or to be agreed upon

Real-Time Evolution of Plant-Herbivore Interactions

Background: One of the central paradigms in plant-herbivore interactions states that plants and their herbivores co-evolve. Yet, experimental evidence for this prediction is scarce. In this project, we aim to fill this knowledge gap by experimentally evolving duckweeds and one of its major native herbivores, the water lily aphid. By taking advantage of the rapid life cycles and the experimental manipulation possibilities in these species, we will observe and manipulate evolution in both interaction partners in real-time and thereby experimentally test a central hypothesis in plant-herbivore interactions.

We look for an enthusiastic and ambitious PhD student with strong interest in plant-herbivore interactions and evolution. The applicant should have a solid background in plant ecology or evolution and have interest

in combining molecular tools, chemical analytics and 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 dynamic and international 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 lively city center of Mainz. Mainz is situated 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 reviewing process will start 19.07.2023 and will continue until the position is filled. The successful candidate may start October 2023 or to be agreed upon.

For further information, please contact:

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

“Huber, Dr. Meret” <mehuber@uni-mainz.de>

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UManitoba 2-3 BiogeographicPatterns

POSITION START DATE: Flexible CLOSING DATE FOR APPLICATIONS: We will begin review of applications 1 July 2023 but the positions will remain open until filled CONTACT: Colin Garroway at colin.garroway@umanitoba.ca PLEASE SEND: Your CV and a brief cover letter introducing yourself, your research experience and interests, and tell me why you are interested in the positions.

Come work with the Garroway lab at the University of Manitoba! We are a diverse, open, inclusive, and collab-

orative research team. We aim to foster critical thinking and creativity within a supportive learning and research environment and encourage EVERYONE interested to apply. We know confidence gaps and imposter syndrome are natural, normal, and commonly felt. Don't let that hold you back?rest assured we want to hear from you!

The holders of these positions will work on research questions related to my NSERC Discovery Grant research program. This means research topics can be very flexible, and there will be lots of opportunities for students to pursue their own interests. We can accommodate broad interests across taxonomic groups. Depending on research interests we can focus on gaining skills and knowledge in any one or a combination of ecological, evolutionary, and population genetic/genomic research fields. These can be approached both applied and basic research directions. Research will be primarily computer-based and we will provide all the training needed for a successful research project.

Our general research aim is to build an understanding of the causes and patterning of biodiversity at the genetic level and to link genetic diversity to other levels of biodiversity. Genetic diversity is the foundation of biodiversity?it underlies population persistence, the capacity to adapt to environmental change, and, ultimately, ecosystem stability and resilience. Genetic diversity is also particularly vulnerable to human activities that degrade environments. Despite underlying all higher levels of biodiversity, the patterns and causes of variation in genetic diversity across species are largely unknown. Filling this knowledge gap will help us build our fundamental understanding of how biodiversity is generated and is critical for conservation.

Our approach to this work has come to be called 'macrogenetics'. Macrogenetics encompasses population genetic research that repurposes genetic data, whether collected from the literature or harvested raw data, to address new questions about the ecological and evolutionary causes and consequences of genetic variation across multiple species. The term macrogenetics is new, but the approach is old. However, interest in the area is growing due to the accumulation of publicly archived genetic data. The group has amassed a very large data set, so students can hit the ground running with data. But we will also expect students to expand the database in line with their own research questions and taxonomic interests.

Examples of the type of analyses and breadth of questions are listed below. Rest assured we can provide lots of project guidance as well.

* <https://royalsocietypublishing.org/doi/full/10.1098/rspb.2019.2497> (preprint: doi: <https://doi.org/>

[10.1101/733170](https://doi.org/10.1101/733170)) * <https://www.pnas.org/doi/abs/10.1073/pnas.2102860119> (preprint: <https://doi.org/10.32942/osf.io/wbq83>) * <https://onlinelibrary.wiley.com/doi/abs/10.1111/ele.14058> (free to read)

We have funding for stipends, conference travel and all research related expenses. If you have additional questions please get in touch!

You can explore the group more at <https://www.garroway-lab.com/> and <https://scholar.google.ca/citations?user=Sbz1W4oAAAAJ&hl=en> Colin Garroway Associate Professor Department of Biological Sciences University of Manitoba Winnipeg, Manitoba tel: (1) 204-474-8267

Colin.Garroway@umanitoba.ca

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UMilano CaveAdaptationGenomics

PhD position in population genomics and cave adaptation in Milan, Italy

The PhD in Sustainable Development and Climate Change (IUSS Pavia, <https://www.phd-sdc.it/>) has a 3-year open position (fully financed) at the University of Milan (UNIMI), to work on the theme "Conserving the evolutionary potential of endemic species under global changes", under the supervision of Dr. Raoul Manenti, Pr. Francesco Ficetola and Dr. Stéphanie Sherpa, from the Department of Environmental Science and Policy of UNIMI.

Research description: Italy is among the European countries with the largest number of endemic species. Endemic amphibians and cave invertebrates will be used as models, because of their vulnerability to climatic and habitat changes, and because they are particularly suitable for both modelling and genetic analyses. The aims of the project are: 1) Measuring genetic diversity in representative amphibian and subterranean invertebrate species using genetic markers covering the whole genome (e.g. rad-SEQ, exome capture); 2) Linking genetic variation with present-day environmental variation (e.g. along climatic gradients) and phenotypic variation (behaviour, morphology). This allows to identify local adaptations that are expected to better persist under climate change scenarios.

Suggested skills for this research topic: The candidate should possess a background on evolutionary and ecological themes and a general knowledge of molecular sciences basis. A certain knowledge of amphibian biology and / or subterranean biology could be useful, but it is not mandatory. We are looking for candidates with a strong interest on the use of genetic/genomic tools to study the evolution of intraspecific diversity. Applicants for the position will be hard-working, enthusiastic, independently motivated and willing to lead a significant part of the research project, and will join a highly-dynamic work group, with a strong emphasis on research excellence.

Details on the application: Full details on the application are available at: <https://www.iusspavia.it/en/node/2025>. The application can be performed at: <https://pica.cineca.it/iuss/dottorato-39/>. The deadline is the 17th of July at 13.00 (Italian time). Nevertheless, before the application, interested students are strongly encouraged to contact us before the 8th of July for more details on the planned activities. The net salary will be around 1200 euro / month and is tax exempt. For foreign students, the cost of medical insurance will be around 250 euro / year.

Contact: raoul.manenti@unimi.it
francesco.ficetola@unimi.it stephanie.sherpa@unimi.it

Stéphanie Sherpa <stephanie.sherpa@hotmail.fr>

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UMontpellier LepidopteraEvolution

We are looking for a motivated and diligent Ph.D. student in evolutionary genomics in Lepidoptera. The Ph.D. position is fully funded with a standard French salary, by Animal and Plant Quarantine Agence in South Korea, between October 2023 to September 2026.

Title: Adaptation and migration inferred from genomic analyses in Lepidoptera species

Project: The project is comprised of two parts. 1) The fall armyworm is one of the main pest insects in corn. The fall armyworm is native to North and South America, and the invasion of this species was first reported in 2016. Since then, the fall armyworm spread globally. During the Ph.D. project, the student will study population structure and infer the phylogenetic relationship among the main groups in the fall armyworm. The

project might include other evolutionary aspects, such as Bt or insecticide resistance. NGS resequencing data were already generated.

2) The codling moth is one of the major pest insects in apples, pears, and walnuts. Mating disruption has been used since the 1980s to control the codling moth with sexual pheromones, reducing the reliance on chemical pesticides. Kairomones are also used as attractants to trap adult insects and monitor codling moth dynamics for integrated pest management, enabling treatment at the stage when the insect is susceptible to these control measures. However, commercial sexual pheromones and kairomones efficacy might decrease through field-evolved codling moth adaptation. The student will use population genomics analyses and functional assays to test this hypothesis. The project also includes the inference of effective migration rates among different places in France using next-generation sequencing.

Supervision: The student will perform the study with the supervision and direction of Kiwoong Nam at UMR-DGIMI (INRAE, Montpellier). The second part of the projects will be performed through close collaboration with Myriam Siegwart and Bertrand Gauffre at PSH (INRAE, Avignon), as well as Phillip Lucas at iEES (INRAE, Versailles). The primary host unit will be UMR-DGIMI on the Triolet campus of the University of Montpellier. The student will be affiliated with the GAIA doctoral school at the University of Montpellier.

Eligibility: The candidate needs to have a master's degree at the time of the start. The student needs to have a robust background in genetics, genomics, or bioinformatics. The ability to computer-programming will be highly beneficial. Previous experience in entomology (insect manipulation) would also be appreciated.

The candidate needs to send an email with a CV with two references, a motivation letter, and transcripts from the bachelor's and master's degrees to Kiwoong Nam (ki-woong.nam@inrae.fr). The deadline for submission is 18th June. If we do not find a qualified candidate, we may re-advertise the position.

If you have any questions, please contact Kiwoong Nam.

Kiwoong Nam Chargé de Recherche UMR DGIMI 1333, INRAE B?t 24 4?me ?tage, Place Eug?ne Bataillon CC54 34095 Montpellier, France

<https://scholar.google.com/citations?user=-3DwW9e9cgAAAAJ> ?

Chargé de Recherche UMR DGIMI 1333, INRAE B?t 24 4?me ?tage, Place Eug?ne Bataillon CC54 34095 Montpellier, France

Tel. 33(0) 04 67 14 47 20 Fax. 33(0) 04 67 14 42 99

<https://scholar.google.com/citations?user=-3DwW9e9cgAAAAJ> ki-woong.nam@inrae.fr

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UParma PrimateEvolutionaryGenomics

GraduatePosition: Uni-
Parma.PrimateEvolutionaryGenomics.PhD.CallOut

Three year PhD position to study Primate evolutionary genomics at the Department of Chemistry, Life Sciences and Environmental Sustainability (SCVSA), University of Parma (Italy) (<https://scvsa.unipr.it/en>), under the supervision of Prof. Cristian Capelli.

The project aims at investigating the evolutionary history of primate species using available and newly generated genomic data comprising high and low coverage whole genome sequences. Given the nature of the project applicants will be expected to have previous proven experience in the handling of genomic data (whole genome sequences) within a population genomic context (including reads mapping, variants calling and biostatistical pop gen analyses) and use of high-performance computational clusters.

The call for applicants is now open, with deadline on August 3rd 2023. Candidates are expected to be interviewed in late August/early September, and the PhD will begin in Autumn 2023 (November 1st). Interested candidates fulfilling the indicate criteria are strongly advised to contact Prof. Capelli to discuss the project (email: cristian.capelli@unipr.it). Info on the call: <https://www.unipr.it/en/node/102704> The PhD is part of the Doctorate program in Biotechnology and Biosciences, which focuses on the study of the function, organisation and regulation of the genomes of microorganisms, animals and plants. The program recruits every year about 10 students and is one of the doctoral programs offered by the SCVSA department. Info on the PhD course in Biotechnology and Life Sciences: <https://www.unipr.it/sites/default/files/2023-06/ING%2039%C2%B0%20Biotecnologie%20e%20Bioscienze%20DEFIN.pdf>

The SCVSA department has been recognised Department of Excellence by the Italian Ministry of Education, University and Research (MUR), receiving dedicated funding.

University of Parma is one of the oldest in the world, originally founded in 962 by Emperor Ottonian. The University holds 9 Departments, 40 First Cycle Degree Courses, 6 Single Cycle Degree Courses, 46 Second Cycle Degree Courses (7 of which entirely held in English), as well as many Postgraduate schools, Teacher Training courses, several Master Programmes and PhDs. The size of the University (27,000 students, with more than 5,000 graduates per year and about 1,700 faculty and staff members), together with the quality of life in Parma has always attracted a large number of students from all over Italy. More than two-thirds of our registered students come from outside of Parma and its Province: for this reason the University deserves top ranking for attracting the most non-resident students nationwide.

Many facilities are available to students to enhance the quality of their studies and university life, including, language courses at the Foreign Language Centre, and many sports activities run by the University of Parma CUS, which offers courses in a number of disciplines in a wide range of structures - a swimming pool, athletics tracks, tennis courts, football pitches, a golf course, basketball courts, rugby pitches, etc.

Parma, the hometown of the famous Italian music composers Giuseppe Verdi and Arturo Toscanini, is located in the Emilia-Romagna region, in the North of Italy. The city hosts several famous historical buildings (the Renaissance Teatro Farnese among the others) and is placed within the beautiful Parma valley, also known as the “Food Valley” for its world-wide renowned gastro-nomic products.

Firma il tuo 5xmille all'Universit? di Parma, aiutaci a essere sempre pi? accoglienti e inclusivi verso le nostre studentesse e i nostri studenti - Indica 00308780345 nella tua dichiarazione dei redditi.

Cristian CAPELLI <cristian.capelli@unipr.it>

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UQueensland EvolutionAdaptation

Subject: PhD Scholarship in Evolutionary Systems Biology and Adaptation at UQ, Australia

The Ortiz-Barrientos Lab at The University of Queensland (UQ) invites applications for a PhD position in Evolutionary Systems Biology and Adaptation. The project employs evolutionary systems biology, computa-

tional biology, and evolutionary quantitative genetics to delve into the theoretical basis of complex adaptations. Successful candidates will join the ARC Centre of Excellence for Plant Success in Nature and Agriculture and collaborate with a diverse team of mathematicians, quantitative geneticists, and empiricists. There's considerable scope for independent theoretical development, alongside the opportunity to test predictions from the developed theory.

The Ortiz-Barrientos Lab's research primarily lies in uncovering the genetic and ecological basis of the origin of new species and traits. The lab strongly commits to diversity, mental health, and professional development.

Scholarship details:

* Value: \$32,192 per annum (2023 rate), indexed annually * Duration: 3.5 years with the possibility of extension * Open to: Domestic and International Students * Applications close: 5 July 2023

Eligibility: Candidates should meet UQ's requirements for a higher degree by research. A background in evolutionary genetics, population genetics, quantitative genetics, computational biology, mathematics, or physics is desirable. Knowledge of R and Python programming is highly beneficial.

Application: To be considered, email the following documents to Professor Daniel Ortiz-Barrientos (d.ortizbarrientos@uq.edu.au):

* Cover letter * CV * Academic transcripts * Proof of English language proficiency (TOEFL, IELTS) * Statement of Interest

This is not a full application for admission into UQ's PhD program. Selected candidates will be invited to submit a full application. For more info, visit www.uq.edu.au. Selection will be competitive, considering academic record, publication record, honours/awards, references and employment history.

For further details, visit <https://scholarships.uq.edu.au/-scholarship/evolutionary-systems-biology-and-adaptation>. Daniel Ortiz-Barrientos Professor and ARC Future Fellow The University of Queensland School of Biological Sciences St Lucia, QLD 4072 Australia

Email: d.ortizbarrientos@uq.edu.au Website: www.ortizbarrientoslab.org Mobile: +61 (0) 403 501 826 < <https://scholar.google.com.au/citations?hl=en&user=IvXxhGcAAAAJ> >

Chief Investigator ARC Centre of Excellence for Plant Success <https://www.plantsuccess.org/> I acknowledge Australia's Traditional Owners of Country and their

connection to lands, waters, and communities. I pay our respect to Aboriginal and Torres Strait Islander cultures and Elders past, present and emerging.

Daniel Ortiz-Barrientos <d.ortizbarrientos@uq.edu.au> (to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

UTrento EvolutionSpruceBarkBeetle

The University of Trento (<https://www.centro3a.unitn.it/en>), within the PhD program in Agrifood and Environmental Sciences, has developed a project in cooperation with the Institute for BioEconomy of the National Research Council (<https://www.ibe.cnr.it/en/>) and is recruiting a graduate student to study diapause in the European spruce bark beetle, the most destructive pest in Norway spruce forests in Europe.

Program: <https://www.unitn.it/en/ateneo/80909/-announcement-of-selection>

Official language: English

Start date: November 2023

Location: San Michele all'Adige (TN), Italy, which is in the Dolomites (UNESCO World Heritage Site) Region. The University of Trento is ranked 457th among the 1,400 universities in 2023 QS World University Rankings. Of the 41 Italian universities included in such ranking, the University of Trento is 10th, once again thanks to its scientific output. In the latest national Research Quality Assessment (VQR), the University of Trento ranks first for the quality of its scientific outputs.

Funding: €16.243,00 per year plus the opportunity to include a period abroad (with extra costs covered).

Project: the bark beetle *Ips typographus* is the most destructive pest in Norway spruce forests in Europe. Outbreaks are usually triggered by abiotic disturbance events providing high amounts of breeding material which usually result in a rapid increase of beetle population densities, followed by severe Norway spruce mortality. Due to the expected higher frequency of climate change-related weather extremes, the chance of bark beetle-caused disturbances is also expected to increase. In the study area (the Province of Trento), 19545 ha of forest were damaged by the Vaia storm in 2018 and, the population of this insect is still at epidemic level. In winter, adults can enter a reproductive diapause (a

dynamic process during which physiological activity is reduced to a minimum). Since little is known about the physiology of diapausing *I. typographus* individuals, we will investigate metabolism with respirometry and direct calorimetry measurements. In order to clarify aspects related to the thermal plasticity of the insect and shed light on the effects of an increasing temperature on the eco-physiology of this pest, we will apply a complementary approach. Comparing the metabolism of sympatric bark beetle species, we aim at verifying whether it contributes to the traits which predispose *I. typographus* to efficiently spread and establish. Moreover, we aim at characterizing the metabolism of *I. typographus* populations distributed along an altitudinal gradient (space for time approach). Investigating the physiology and environmental sensitivity of diapause is not only important to understand seasonality and life cycle regulation of insects, but it has also critical implications for pest management, since it influences the number of generations per year.

Qualifications: prospective students should have a strong interest in developing their knowledge of entomology, insect physiology, ecology, bioinformatics and forest sciences. Previous experience, during the bachelor and master degrees, is an asset. A good working knowledge of statistical analysis using R, strong organisational skills, and the ability to work both independently and collaboratively with a team and prior experience working with insects would be valuable.

To Apply: fill in the application online (<https://webapps.unitn.it/Apply/en/Web/Home/dott>) before July 10th, 2023, hrs. 12.00 PM (Italian time). Applicants should register well in advance of the deadline. Assessment schedule: starting from July 13th, 2023. Oral examination: starting from July 24th, 2023. For further information contact Prof. Mirco Rodeghiero (mirco.rodeghiero@unitn.it) or Dr. Livia Zapponi (livia.zapponi@ibe.cnr.it).

Livia Zapponi <livia.zapponi@ibe.cnr.it>

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Vienna PolygenicAdaptation

REMINDER: Apply by June 04, 2023

PhD positions are available within the *Special Research Program (SFB)* < [https://www.vetmeduni.ac.at/sfb-](https://www.vetmeduni.ac.at/sfb-polygenic-adaptation)

[polygenic-adaptation](https://www.vetmeduni.ac.at/sfb-polygenic-adaptation) >* “Polygenic adaptation: from single selected loci to the infinitesimal model” in Vienna, Austria*. Vienna is on top of the world’s most liveable cities and home to one of the largest communities of evolutionary research in Europe (www.evolVienna.at).

The SFB program is funded by the Austrian Science Fund (FWF) and brings together eight research groups at four institutions in and around Vienna with the common goal of elucidating the evolutionary genetics of adaptation of complex phenotypes: *Neda Barghi* < <https://www.vetmeduni.ac.at/en/population-genetics/research/barghi-lab/group-leader> > *, **Robert Kofler* < <https://www.vetmeduni.ac.at/en/population-genetics/research/kofler-lab> > *, **Christian Schlotterer* < <https://www.vetmeduni.ac.at/en/population-genetics/research/schlotterer-lab> > * (Vetmeduni); **Joachim Hermisson* < <https://www.mabs.at/team/> > *, **Himani Sachdeva* < <https://www.mabs.at/team/> > * (Univ. of Vienna); **Magnus Nordborg* < <https://www.oew.ac.at/gmi/research/research-groups/magnus-nordborg/> > *, **Kelly Swarts* < <https://www.oew.ac.at/gmi/research/research-groups/kelly-swarts> > * (Gregor Mendel Institute); **Nick Barton* < <https://bartongroup.pages.ist.ac.at/people/group-leader/> > * (ISTA)*. For young scientists, this cluster offers a unique environment for interaction and personal growth.

The SFB aims to develop a framework for understanding polygenic adaptation and to establish new standards for the analysis of adaptive polygenic traits in GWAS and experimental evolution studies. We will combine model-based conceptual work and data-driven approaches from GWAS and experimental evolution to achieve this goal. The models and methods that will be developed integrate population genetic and quantitative genetic approaches to detect, analyze, and interpret genomic patterns of the “architecture of polygenic adaptation”.

*SFB - a collaborative environment for research and learning: *The theoretical and empirical projects of the SFB are highly synergistic and the collaborative nature of the SFB will provide an inspiring academic environment and promote curiosity-driven research. The interaction between projects of the SFB is strongly facilitated by a long-standing track record of fruitful interactions among the PIs. The PhD students and postdocs in the SFB will benefit enormously from these tight interactions.

To ensure a good integration of experiment and theory, researchers have the opportunity to spend some time in a group from the other “camp”. These regular exchanges

will improve the mutual understanding of concepts and problems, ensure that the theoretical work is guided by experiments (and vice versa) and will represent a true added value of the SFB. In addition to the formal supervisor, both PhD students and postdocs will have at least one co-advisor with complementary expertise.

*Courses: *The recruited early-stage researchers in the SFB will have the opportunity to acquire experience beyond their own projects and working groups.

The SFB PIs participate in joint teaching activities and representatives of all institutions are contributing to the Vienna Graduate School of Population Genetics (www.popgen-vienna.at). The PhD students will be integrated in the Vienna Graduate School of Population Genetics, which offers a 5-week introductory course that covers subjects as diverse as statistics, population genetics, Drosophila genetics, programming, NGS data analysis (both DNA- and RNA-Seq) and quantitative genetics.

SFB postdocs will have the opportunity to participate in the teaching in introductory course in their areas of expertise. But at the same time can attend specific modules of the introductory course together with the PhD students. This joint event will have a tremendous impact on team-building and can enable scientists from different host institutions to establish strong ties which can result in research collaborations.

The IST Graduate School offers more advanced courses in evolutionary

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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>

ViennaU Austria PlantEvolutionaryCytogenetics

4-year PhD position (deadline: 07 July 2023) Evolution of the karyotypes and genomes of peppers (genus *Capsicum*, Solanaceae)

Department of Botany and Biodiversity Research Plant Evolutionary Cytogenetics Group University of Vienna, Austria

Employment details: Duration of employment: 4 years

(30 hours/week= full PhD position) Application deadline: 7th July 2023

Your profile MSc degree in biology (evolutionary biology, cell biology, genomics) or a related field. Experience with cytogenetic, molecular and cell biology techniques; basic bioinformatics skills as well as experience in working with plant chromosomes are desired; theoretical knowledge of genome structure and evolution Good English skills and the ability to communicate scientific research in English. The ability to work in an international and multicultural team. Motivation, interest in the research field, ability and willingness to master the broader skill set necessary for the successful completion of a research project

Project Description Chromosomal-level changes accompany species diversification and speciation, including polyploidy, chromosomal rearrangements, and dynamic changes of the repetitive DNA fraction. One of the approaches allowing for inference of structural genomic changes is chromosome painting which relies on the mapping of DNA sequences representing whole chromosomes or their fragments using fluorescence in situ hybridization (FISH). Although chromosome painting of plant genomes is still challenging due to a large proportion of repetitive DNA elements populating their genomes, recent methodological developments, offer new possibilities to overcome those challenges, as demonstrated in several species, including *Capsicum*. The genus *Capsicum* encompasses about 40 species native mostly to South America with five species domesticated and cultivated all over the world. All chile peppers species are diploid based on two base chromosome numbers, $x = 12$ or 13, with the former inferred to represent the ancestral number, and the latter inferred to have originated twice independently. Despite rather stable chromosome numbers, genome sizes in the genus vary nearly 4-fold, due to different dynamics of various repetitive DNA families. These taxa are particularly suited for analyses of chromosomal evolution because of the lack of polyploidy, availability of chromosomal level genome assemblies for domesticated species, well established phylogenetic relationships and an extensive collection of wild species. This PhD project aims to elucidate the evolution of karyotypes during the evolution of *Capsicum*. Chromosome-level painting of the genomes of chile peppers with oligo probes based on genomic and cytogenetic resources available for *Capsicum annuum* will provide the basis for comparative analyses of karyotypes of domesticated and wild species representing all major phylogenetic clades and closest sister genus, *Lycianthes*. The specific aims of this project are: (1) reconstruction of ancestral karyotype of the genus, (2) identification of mechanisms involved in karyotype rearrangements

and reconstruction of the sequence of events leading to the karyotypic variation after 14 million years of the evolution of the genus, (3) testing the hypotheses of base chromosome number evolution, and (4) inferences of the impact of human-assisted selection on the dynamics of the genome evolution by comparing the domesticated with the wild species.

We offer: A friendly, collaborative and productive working atmosphere in the Plant Evolutionary Cytogenetics group (<https://cytogenetics.univie.ac.at/>) An employment starting in Summer/Autumn 2023, limited

to 48 months (4 years) Work in a research centre with state of the art facilities and collaborations with scientists/experts from different countries

For more information and how to apply (online via Vienna Doctoral School of Ecology and Evolution) please go to: <https://vds-ecology-evolution.univie.ac.at/application/open-positions/#c978482> Contact: Dr. Hanna Schneeweiss (hanna.schneeweiss@univie.ac.at)

Hanna Schneeweiss <hanna.schneeweiss@univie.ac.at>

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CanberraAustralia PaidFieldAssistant

Job: CanberraAustralia.PaidFieldAssistant

Two field assistants required for bird breeding season for ~ 3 months (casual rate, Unimelb scale).

This is a great opportunity to gain valuable field skills, and experience in research and data collection. The focal species for these studies is the iconic superb fairy-wren.

Field site: Campbell Park, located a 10-minute drive from the city centre in Canberra, Australia. Fieldwork

has been conducted at this site for 20 years so data collected will contribute to a long-term dataset.

Details: The field assistant will be part of a small team of researchers, who will be in the field site some days. Most days will require independent data collection in the field and communication of findings. The assistant will be required to work 4 days per week, 5 hours per day in the field and must be physically fit as they will be required to walk around the park, sometimes 10km per day.

This is a paid casual position, and the rate will be appropriate for the qualification level of the candidate (using the University of Melbourne casual rate salary scale). Teamwork and communication skills are essential. The candidate must also be self-motivated, enthusiastic, reli-

able and have a good work ethic. Previous experience working with birds in the field or a degree in biology is desirable but not essential as we will provide training in the field methods required. In addition, previous bird banding experience is an advantage but not mandatory.

Main field duties: Finding nests, monitoring breeding attempts and documenting group dynamics throughout the breeding season. The field assistant will be required to identify individuals by their colour band code using binoculars.

Precautions for Covid-19 can be practiced during this work as social distancing can easily be implemented. Please note airfares and visas cannot not be paid for, as it is a paid position. Please check you are able to travel to Canberra (Australia) before applying, and also note that some visas have wait times for approval.

The field assistant will be required from the end of October 2023 to the end of January 2024.

If you are interested or require more information, please email me at claire.taylor2@unimelb.edu.au explaining a little about yourself, including interests, a CV with any prior experience and referees.

Claire Taylor Post-doctoral Researcher, The University of Melbourne

GeorgeWashingtonU LabTech EvolutionaryBiology

The Zhang Lab at the George Washington University is planning to hire a lab technician to work on host plant adaptation, speciation, and multi-trophic level interactions among herbivore insects. This position will include coordinating and carrying out field work, molecular experiment, general lab maintenance and administrative tasks, and data management & analysis. This position also provide opportunities to conduct independent research projects. Zhang lab addresses fundamental questions in adaptation and speciation, including the cause and maintenance of phenotypic, behavioral, and genomic divergence across the speciation spectrum. We apply interdisciplinary approaches including field surveys, natural history, behavior observation, manipulative experiments, simulations, and genomic techniques.

- Field work include: driving across the country to collect gall forming insects and their associated host plants.

- Lab activities include: plant and insect maintenance

and care, phenotypic measurement of galls and galling insects, DNA and RNA sample preparation.

- Experiment and data management duties include, maintaining a detailed lab book, organizing and keeping records about data storage for the lab's projects, collating and organizing protocols, experimental plans, data collection sheets, and collaborative work schedules.

- General laboratory duties include ordering and restocking supplies, organizing the lab, ensuring laboratory compliance for lab safety

- Research team duties include, providing assistance and training for incoming trainees, coordination of projects involving collaboration between lab members, participation in lab and research meetings.

- Other job duties and tasks as assigned.

*To apply for the job, use the link below: * <https://www.gwu.jobs/hr/postings/102524> Linyi Zhang <linyizhangecnu@gmail.com>

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HHMI Carnegie Stanford PlantEcoEvo

Research Assistant: Next Generation Sequencing and CRISPR in Plants

Moi Exposito-Alonso Lab - www.moilab.science Staff Associate, Principal Investigator, Carnegie Institution for Science

Assistant Professor (by courtesy) of Biology, Stanford University Stanford

Freeman Hrabowski Scholar, Howard Hughes Medical Institutes (HHMI)

Details

Lab location: 260 Panama st., Stanford, CA 94305, USA

Annual salary \$65,000

1 year contract, with potential extensions up to 4-5 years

Publication date: May 2023

Starting date: As early as possible

Closing date: accepting applications until filled

Description

We aim to recruit a highly motivated and skillful re-

searcher with training in molecular biology, plant genetics, or bioengineering. We seek to understand the impacts of climate change on plant species from a molecular evolution angle. The position will support research involving gene cloning, plant transformation, plant care in greenhouse and the field, sample processing for next generation sequencing, among others.

The MOILAB is a highly interactive and interdisciplinary lab, and many experiments are conducted in collaboration. In our lab, we target scientific excellence as well as building a positive community for growth. You can read our value statement here: <https://www.moilab.science/our-values> Responsibilities

* The position requires leading research independently, preparing publications, and presenting research in scientific meetings.

* Willingness to work closely with collaborators and lab members.

* Contributing to lab-wide chores towards a productive and positive lab.

Required skills

* Required qualifications for these positions are a BSc (exceptionally also a PhD) in any of the following areas: molecular biology, biochemistry, cell biology, genetics, bioengineering.

* A track record of research productivity and independence.

Contact

Informal inquiries about this position can be made by emailing Moises (Moi) Exposito-Alonso at admin@moilab.science. To be formally considered, please include: (1) a cover letter, (2) CV, and (3) three referees whom I can ask for letters of recommendation.

Equal opportunity employer

Carnegie is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, sexual orientation, gender identity, age, veteran status, disability or any other protected status in accordance with applicable laws. We aim to have a vibrantly diverse lab, which is essential to tackle scientific questions from different creative angles. The main requirement for these positions is that you are passionate about the topics above, so please apply!

Moisi $\frac{1}{2}$ s Expi $\frac{1}{2}$ sito Alonso
<moisesexpositoalonso@gmail.com>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca<<mailto:golding@mcmaster.ca>>)

KielU GroupLeaderMicrobialPhylogenomics

In the Institute of General Microbiology at Kiel University invites applications for

Research Group Leader (m/w/d) in “Microbial Phylogenomics”

The position is available for an initial period of three years (first phase) to start at 1 November 2023. Successful candidates will lead their own independent research group at the institute of general microbiology for a period of up to six years. After successful evaluation of the first phase, the aim is to extend the position for another period of three years (second phase). The future group will be associated with the Evolutionary Microbiology Group, whose interests are focused on microbial genome evolution with an emphasis on the study of horizontal gene transfer (see www.uni-kiel.de/genomik). The future job holder will be expected to contribute to teaching in either biostatistics, bioinformatics or molecular evolution at the Bachelor and Master levels. The position is accompanied by a modest annual budget (e.g., for travel and publishing), office space for a small group and access to an excellent infrastructure for computational research at Kiel University.

The weekly working time corresponds to 100% of full employment (38,7 hours). If the legal requirements under collective bargaining law are met, the tariff grouping is carried out up to pay scale 14 TV-L.

Well-motivated and highly-qualified postdoctoral scientists from all countries are welcome to apply. We are looking forward to your application to work with us in the beautiful landscape of Northern Germany.

Your profile: - PhD degree in Molecular Evolution / Microbiology / Bioinformatics or related fields. - Excellent research and publication record with a recognisable focus on prokaryote genome and molecular evolution, and/or phylogenetics - Ample experience in programming and data analysis - Any of following expertise is an advantage: biostatistical analysis, phylogenetic reconstruction, comparative genomics. - Good oral and written communication skills in English. - Experience in writing and publishing research articles. - Experience in tutoring students is an advantage.

German-speaking is not a necessary requirement for the employment; applicants are expected to acquire German

language skills at least at B2 level within 2 years in order to teach courses in English and also in German.

The position is aimed for scientists at an early career stage. We would therefore in particular like to explicitly invite scientists who have only carried out scientific activities for a short period after completion of their doctoral degrees to apply.

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 university strives to increase the proportion of female academics in research and teaching and therefore strongly encourages suitably qualified women to apply. Women are given priority in cases of equal aptitude, ability and professional performance.

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. Please send your application as a single PDF file including your CV, list of publication, a short description of research interests, future directions and at least two academic references by email to Prof. Tal Dagan. Please, refrain from sending us application photos.

Application deadline: 08.08.2023

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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LehighU LabManager MarineBiodiversity

Job Title: Laboratory Manager - Deep-Sea Group <<https://www.lehighoceans.org/opportunities> >

Institution: Lehigh University

Location: Bethlehem, PA, USA

Job Type: Full-time. The position is initially available for two years, starting in August of 2023 or as soon as possible, with the possibility of an extension depending on additional funding. Applications will be reviewed starting July 18, 2023. The position will remain open until filled.

Annual salary range: \$38,000-\$65,000 plus benefits, depending on qualifications.

About our group:

We are a research group dedicated to exploring the ocean's depths and understanding its complex biological and geochemical systems. Our group focuses on unraveling the mysteries of marine life and the water it lives in through advanced molecular and chemical techniques. We seek a highly motivated and skilled Laboratory Technician to join our team and contribute to our exciting research projects.

Job Description:

As a Laboratory Manager, you will play a crucial role in supporting our research activities. Your primary responsibilities will include assisting in the execution of laboratory procedures, maintenance of instrumentation and sampling equipment, managing and analyzing data, participating in seagoing expeditions, and ensuring the smooth functioning of the laboratory through effective organization and procurement.

Responsibilities:

- Conduct molecular and chemical experiments, including sample preparation, DNA extraction, PCR, gel electrophoresis, and spectroscopy.
- Carry out chemical analysis of water for pH, nutrients, major and minor ions, trace metals, and gases.
- Perform routine laboratory tasks, such as maintaining and calibrating lab equipment, preparing reagents, and ordering necessary supplies.
- Manage and analyze research data, including data entry, quality control, statistical analysis, and generating reports.
- Utilize basic bioinformatic skills to

process and analyze genetic and genomic data. - Lead mobilization and demobilization of field equipment, including packing and producing required documentation for transporting supplies and samples successfully. - Participate in multi-week seagoing expeditions to collect deep-sea samples and data, ensuring proper handling, shipment, and storage of samples and equipment. - Assist in the development and optimization of experimental protocols and procedures. - Assist in experiments and animal husbandry. - Maintain accurate laboratory records, including experimental protocols, data sheets, and inventory lists. - Collaborate with fellow researchers and contribute to research publications and presentations. - Ensure compliance with laboratory and field safety protocols and maintain a clean and organized working environment.

Desired Qualifications:

- Bachelor's or Master's in Biology, Marine Science, Molecular Biology, or a related field. Candidates with a Ph.D. degree will also be considered.
- Strong understanding and experience in molecular and chemical techniques, such as DNA purification, PCR, gel electrophoresis, and spectroscopy.
- Proficient in data management and analysis using software tools like Excel, R, or Python.
- Basic bioinformatic skills, including familiarity with genetic and genomic databases, sequence analysis, and statistical analysis.
- Previous seagoing experience, preferably in deep-sea research or marine expeditions.
- Excellent organizational skills with the ability to manage multiple tasks simultaneously.
- Practical procurement skills to ensure the timely acquisition of necessary supplies and equipment.
- Strong attention to detail and commitment to maintaining accurate and organized laboratory records.
- Ability to work both independently and collaboratively in a team-oriented research environment.
- Excellent written and verbal communication skills.

How to Apply: If you are passionate about marine science and eager to contribute to groundbreaking discoveries in deep-sea research, please submit (1) your resume or CV, (2) a cover letter describing your research experience, career goals, and fit for the position, (3) contact information for three references, and (4) any relevant publications or certifications to santiago.herrear@lehigh.edu. Please include "Lab Manager - Deep-Sea" in the subject line of your email.

Note: Only shortlisted candidates will be contacted for an interview.

Lehigh University is an equal-opportunity employer. We value diversity and encourage applicants from all backgrounds to apply.

Recognized among the nation's premier research universities, Lehigh has an exciting academic community of more than 520 faculty, ~2000 graduate,

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Leiden BiodiversitySystematics

Naturalis Biodiversity Center in Leiden is the Dutch national research institute for biodiversity and systematics. With our collection of 43 million specimens, one of the world's largest natural history collections, and our state-of-the-art research facilities we offer the (inter)national research infrastructure for species, identification and monitoring (for example in ARISE and DiSSCo). We closely collaborate with many Dutch universities, research institutes, industry, and government. We host over 120 researchers including 16 academia embedded professors and 50 PhD students. We present the history of our planet, and the diversity of life on Earth, through permanent and temporary museum exhibitions, educational programmes, and online presence, with more than 400,000 visitors per year. All in all, a unique combination of science and culture in the Netherlands and elsewhere in the world!

Naturalis is looking for a Group Leader for the research group Tropical Botany 32-36 hours a week

About us

Biodiversity drives the fundamental ecosystem processes that we depend on. Biodiversity is a multidisciplinary and multi stakeholder topic. So we do not cover all biodiversity research ourselves. Naturalis is about species. About discovering and identifying species. About the evolution, the interaction and monitoring of species. We combine our knowledge of species with promising novel technologies such as metagenomics, artificial intelligence, data science and 3D imaging.

We aim to accelerate the discovery of species and their interactions in ecosystems. For this, we create exciting new multidisciplinary lines of research and we train scientists, students and experts to become world-leading in this new frontier of research.

Ever since the 16th century, taxonomists have been naming and describing the plants, animals, fungi and

microorganisms that share our planet today and in the past. Although about 2 million species are now known, research suggests there are at least 10 and probably more than 20 million species on Earth, meaning that 80-90% of our world's biodiversity is still undiscovered! At the same time, we are witnessing alarming biodiversity declines. Reports indicate that 1 million species are currently threatened with extinction. It is increasingly recognized that biodiversity loss is one of the most significant threats to the environment and to our ability to transition to a sustainable future. These circumstances call for transformational scientific progress and serious action. We believe that we, as Naturalis, can play an important role in this transformation by:

Fostering excellence in science and innovation in the field of biology and earth sciences

Training scientists, students and experts to provide sustainable capacity building in the field of taxonomy

Providing a vibrant scientific environment for early-stage and mid-career researchers and foster their academic career

Providing and maintaining a sustainable state-of-the-art (inter)national research infrastructure

Further supporting and strengthening the national research community in the field of biology

Further developing an extensive (inter)national network that connects academia, society, government, industry and the general public

Extending our outreach to the general public by not only focussing on our visitors, but also by engaging with new audiences outside the museum, and by using citizen science

Expanding our role in Dutch national science policy by calling for an ambitious biodiversity strategy in societal and political agendas.

Find out more about our research, labs and collection.

Position The research group Tropical Botany focuses on describing species, understanding their distributions, evolutionary and ecological relationships and recognizing their role in human societies in the tropics. The group consists of 7 (senior) researchers, 2 postdoctoral fellows, 8 PhD students and 9 guest researchers and several students.

We are seeking an enthusiastic, ambitious, innovative senior scientist to fulfill the role of Group leader for the research group Tropical Botany. A strong representative within and outside Naturalis with a worldwide (scientific) botanical network (incl. herbaria). An inspiring and stimulating leader and team player with

a clear (long term) vision. An excellent experienced senior researcher with a strong scientific background in taxonomy/ systematics in Southeast Asia, who brings innovative technologies to improve taxonomy (e.g. phylogeny and state-of-the-art techniques such as DNA, image recognition, infrared scanning) and has field work experience. We are looking for someone with experience in teaching and fundraising, who can attract PhD students and Postdoctoral Fellows and is able to train them. Someone who values the importance of our collections.

The concrete assignment for this group leader is to strengthen and renew the research field of tropical botany and taxonomy within Naturalis,

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PurdueU ResTech MechanismsOfAdaptation

Research technician position in genetic and physiological mechanisms of adaptation

The Oakley lab at Purdue University is looking for a research technician for an NSF funded project connecting the genotype-phenotype-fitness map for cold acclimation, an adaptive plastic response in seasonally freezing environments. Cold acclimation is common in plants throughout the temperate zones and involves dramatic metabolic and physiological changes in response to cool autumn temperatures which condition winter freezing tolerance. It is likely to be energetically costly, particularly in cool but non-freezing environments, and climate change may exacerbate the negative fitness consequences of this cost.

This project (in collaboration with Brian Dilkes) is a unique opportunity to investigate the effects of a naturally occurring sequence polymorphism in a key regulatory gene on molecular and organismal phenotypes and fitness in contrasting conditions that mimic the native environments in which the ecotypes evolved. A loss of function allele in a gene that encodes the transcription factor CBF2 explains a large amount of ecotypic differences in cold acclimated freezing tolerance, and long term-field study suggests this locus is responsible for a

genetic trade-off. Planned experiments will use manipulated alleles of CBF2 using near isogenic and genetically engineered lines (in the native genetic backgrounds) in growth chamber experiments with longitudinal sampling of genome-wide gene expression (including allele specific expression), untargeted metabolomics, growth rates and other traits, and ultimately fitness.

Research activities will include (but are not limited to): Performing hand pollinations to generate seed for allele specific expression analyses, and to construct lines to directly test interactions between cis- and trans- effects on traits and fitness. Creation of lines with loss of function mutations in CBF2 in different ecotypic backgrounds using CRISPR-Cas9. Assisting with growth chamber experiments to measure gene expression, metabolites, traits, and fitness. Additional duties will include supervision of undergraduate research assistants, lab management tasks, and general plant care and lab upkeep. Other research in the lab is exploring the costs of cold acclimation in emerging perennial model species, and investigating the evolutionary ecology and genetics of heterosis, epistasis, and maladaptation. There may be opportunities to present research at a conference and/or be a co-author on publications.

A Bachelor's degree in ecology & evolution, genetics, plant biology, or related field is required. This position has a fixed term of 1 year and is ideally suited for someone who has very recently completed their degree and is looking to gain more experience prior to entering graduate school. No specific skills are required, but some combination of experience in experimental biology, molecular genetics, plant care, and bioinformatics is strongly preferred. Start date is September 5, 2023, but this is flexible within reason. Starting salary is \$35K.

Applicants should send (as a single PDF attachment): CV or resume, a short paragraph stating your research interests and fit to the lab and project, and the names and contact information for two professional references. Review of applications will begin July 28, 2023, and will continue until a suitable candidate is found.

Chris Oakley oakleyc@purdue.edu <https://dev.btny.purdue.edu/labs/oakley> "Oakley, Christopher G" <oakleyc@purdue.edu>

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Smithsonian NMNH microCT DataAnalyst

Hello Friends and Colleagues,

Please help spread the word about the below opportunity. This is a great ~1-year appointment for an early career evolutionary biologist, anatomist, or microCT specialist.

The National Museum of Natural History, Department of Invertebrate Zoology is hiring a contractor to process microCT scan data for the Pettibone Legacy Project of scale worms type specimens. This is an interesting opportunity to work with 3D anatomical data of an important group of marine segmented worms, to gain experience working with big data, morphological databases, museum collections, and uCT operations. The data generated in this project is used by a wide community and the project offers many opportunities to establish community standards and accessibility.

Work is expected to be started by the end of Sep 2023, but is flexible and an earlier start is welcome. The contractor is expected to produce 172 videos of polychaete type specimens from microCT scans of each, make videos available through NMNH-IZ online catalogue, and archive high resolution scans data among other associated tasks. Experience with microCT scanning of invertebrates, DragonFly, Amira or other similar software, and experience with data management is required. See the attached Statement of Work for specific tasks and deliverables (if stripped by the listserv, please contact osbornk@si.edu for a copy).

Below is a formal "Request for Quotes". That document provides general information about the position, and detailed information about the scope of work. The critical information about the project includes:

This is an independent contractor position.

1. The applicants must be registered in the federal government's contractor registry, SAM and provide a DUNS number. There is NO fee to register in SAM. Instructions for registering are included in the RFQ.

1. The project schedule and access to Smithsonian facilities are subject to all Smithsonian and NMNH COVID-19 requirements, restrictions, and guidelines. The period of performance for this contract is scheduled to begin by fall 2023 (flexible). Work to be completed at

the National Museum of Natural History, Washington, DC during standard business hours (Monday - Friday, excluding federal holidays or emergency closures, between the hours of 6:00 AM and 8:30 PM).

If interested, you will need to submit a formal bid to be considered. The bid package should include a copy of your most recent resume, and a clear and concise statement regarding expected compensation. To help applicants determine an appropriate compensation range I can offer the following guidance:

- Based on past experience, the work of the contractor can be completed within 1760 hours, but this is just an estimate. Actual performance times may be more or less and will be impacted by a number of variables, primary of which is experience with uCT software.
- The knowledge, skills and abilities required for the successful performance of the tasks associated with this project are very typical of those expected from an entry-level, federal "Data Analyst". The "Data Analyst" job series includes a variety of positions classified at the middle levels of the GS pay scales. Additional information, including a current federal salary table is available at www.opm.gov. I am available by e-mail, osbornk@si.edu, if there are questions about this opportunity. To be considered, a complete bid package including evidence of contractor registration in SAM (or in process), must be received no later than 25 June 2023. Please contact me with any questions about this opportunity.

Thank you. Karen

- Karen Osborn Research Zoologist/Curator of Polychaetes, Peracarids and Plankton Department of Invertebrate Zoology w 202.633.3668 osbornk@si.edu <http://orcid.org/0000-0002-4226-9257> Mail: Department of Invertebrate Zoology, Smithsonian National Museum of Natural History, MRC-163 P.O. Box 37012, Washington, D.C. 20013-7012 USA

Courier Address: Smithsonian Institution, MR 0163, Natural History, West Loading Dock, 10th and Constitution Ave NW, Washington, D.C. 20560

Technical or Professional, Non-personal Services

microCT Data Technician

This Request for Quote (RFQ) is issued by the National Museum of Natural History (NMNH), Department of Invertebrate Zoology for technical, professional, non-personal administrative assistant services to provide microCT Data Technician services.

I. Submitting Your Quote

Please submit your written quote, via email, to os-

bornk@si.edu by Sunday, 25 June 2023 at 11:59 PM EST, or sooner, to the attention of:

Karen Osborn

Research Zoologist, Department of Invertebrate Zoology
National Museum of Natural History

email: osbornk@si.edu

Phone: 202.633.3668

All questions regarding this contract should be directed to osbornk@si.edu

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SouthwesternOklahomaStateU TeachingEvolutionaryBiology

Biologist, Assistant Professor - Tenure-Track

Job Summary:

The Department of Biological Sciences at Southwestern Oklahoma State University invites applications for a tenure-track assistant professor (Ph.D)

Description of Job Duties: We are seeking a biologist committed to excellence in teaching and providing undergraduate students with genuine research opportunities. Candidates with a background in organismal biology, especially plant biology, are encouraged to apply. The candidate will contribute to majors and non-majors introductory courses, service courses (e.g., Human Anatomy), core biology courses and upper-division courses in their specialty. The candidate is expected to engage students in undergraduate research and work with colleagues to integrate research into the biology curriculum. Startup funds and research space are available. The candidate is expected to participate in department and university service. Our department values collegiality and inclusivity as we strive to provide an excellent learning environment for students.

Additional information about the department can be found at: <https://www.swosu.edu/biological-sciences/>. Review of applications will begin 28 August 2023 and will continue until the position is filled. We would

prefer a Spring 2024 start date but will also consider candidates interested in joining us in the Fall 2024.

< <https://swosu.csod.com/ux/ats/careersite/1/home/-requisition/345?c=swosu> > Biologist, Assistant Professor of Biological Sciences - Tenure Track swosu.csod.com [X]

rickey.cothran@swosu.edu

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TrierU TeachingEvolBiology

Im Fachbereich VI der Universität Trier ist im Bereich Biowissenschaften mit dem Schwerpunkt Biodiversitätsforschung baldmöglichst folgende Stelle zu besetzen:

Lehrkraft für besondere Aufgaben (m/w/d) (13 TV-L, 100 %, unbefristet)

Gesucht werden Biowissenschaftler:innen jeder fachlichen Ausrichtung, die sich in der Entwicklung eines Lehr- und Forschungsschwerpunktes im Bereich Biodiversität einbringen möchten. Diese Aufgaben erwarten Sie:

- Durchführung von Lehrveranstaltungen in verschiedenen biowissenschaftlichen Studiengängen (insbesondere Lehramt Biologie, Bachelor- und Masterstudiengang). Besondere Schwerpunkte in der Lehre liegen derzeit in den Bereichen Molekularbiologie, Mikrobiologie und Tierphysiologie. Eine breitere fachliche Aufstellung ist wünschenswert. - Betreuung von Übungen und Praktika. - Das Lehrdeputat beträgt 16 SWS. - Betreuung von Abschlussarbeiten sowie die Mitwirkung an der Organisation von Studiengängen. - Es besteht die Möglichkeit an Forschungsprojekten in den biologischen Fachbereichen des Fachbereichs VI mitzuwirken.

Das erwarten wir von Ihnen:

An der Universität Trier wird derzeit ein Forschungs- und Lehrschwerpunkt im Bereich Biodiversität etabliert. Eine fachliche Passung der Bewerber/innen in diesen Schwerpunkt ist besonders gewünscht, wobei Bewerbungen aus allen biologischen Fachdisziplinen willkommen sind. Die Einstellungs Voraussetzungen ergeben sich aus § 58 Abs. 3 in Verbindung mit § 57 Abs. 2 und 3 Satz 2 bis 4 HochSchG, Voraussetzung ist insbesondere ein abgeschlossenes wissenschaftliches Hochschulstudium (Master, Diplom oder vergleichbar),

eine der Tätigkeit entsprechende (qualifizierte) Promotion, begutachtete wissenschaftliche Publikationen, Erfahrung in der universitären Lehre sowie eine hauptberufliche Tätigkeit von mindestens zwei Jahren und sechs Monaten nach abgeschlossenem Hochschulstudium (die sich auf verschiedene Stellen verteilen kann). Die Tätigkeit, Lehrveranstaltungen in deutscher Sprache anzubieten, wird erwartet.

Die Universität Trier ist bestrebt, die Zahl ihrer Mitarbeiterinnen zu erhöhen und fordert Frauen nachdrücklich zu einer Bewerbung auf. Schwerbehinderte und ihnen nach § 2 Abs. 3 SGB IX gleichgestellte Menschen werden bei entsprechender Eignung bevorzugt berücksichtigt (bitte Nachweis beibringen). Näheres zur Verarbeitung Ihrer personenbezogenen Daten entnehmen Sie bitte den Datenschutzhinweisen für Bewerbungsverfahren nach Artikel 13 DSGVO auf unserer Homepage.

Bewerbung bitte per E-Mail an den Sprecher der Einheit Biowissenschaften senden: Mail: krehenwinkel@uni-trier.de

Prof. Dr. Henrik Krehenwinkel Biogeography Trier University phone: +49-(0)651-2014911 < <http://-biogeographie.uni-trier.de> > <https://www.uni-trier.de/-index.php?id=67447> —

In Faculty VI of the University of Trier is in the area of biosciences with a focus on biodiversity research as soon as possible Position to fill:

Teacher for special tasks (m/f/d) (13 TV-L, 100%, permanent)

We are looking for bioscientists of all disciplines, which is reflected in the development of a teaching and research focus in would like to contribute to the area of biodiversity.

Henrik Krehenwinkel <krehenwinkel@uni-trier.de>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca<mailto:golding@mcmaster.ca>)

UBalearicIslands Technician Genomics

Genomics laboratory support technician (3 year position)

**** This is a preliminary announcement ahead of its official publication on June 15, 2023. Some details regarding minimum qualifications and required experience might change****

We are looking for a person with experience in a genomics laboratory (minimum 2 years) to work under the supervision of the head of the genomics unit. The successful candidate must be organised, motivated, curious and eager to learn.

Tasks: 1) Applying, within the framework of an established protocol, the techniques for the preparation, characterisation and sequencing of nucleic acids; 2) Performing routine molecular biology experiments (nucleic acid extractions, high molecular weight DNA extractions, PCR, multiplex PCR, quality control of nucleic acids, construction of DNA/RNA libraries for high-throughput sequencing); 3) Compilation and management of the results of experiments; 4) Participation in the technical training of other users; 5) Scientific and technical support to users of the Centre; 6) Participation in the purchase of material, maintenance and management of the laboratory; 7) Carrying out systematic checks and adjustments of equipment; 8) Ensuring the application of health and safety regulations.

Team: The Balearic Biodiversity Centre (www.centrebaleardebiodiversitat.uib.es), at the University of the Balearic Islands gathers a team of researchers, technical staff, facilities and equipment whose motivation is the generation of knowledge about the rich natural environment of the Balearic archipelago and its biodiversity, the conservation of reference natural history collections and associated data. The CBB consists of four units: the Genomics Unit, the Natural History Collections Unit, the Data Management Unit and the Training and Outreach Unit. The person recruited will join the Genomics Unit but is expected to contribute to the establishment and development of the CBB as a reference in biodiversity studies, offering multidisciplinary services to the scientific community at regional and national level and being a strong partner in international initiatives.

Qualification requirements and competences - Degree in Biological Sciences, Biochemistry, Chemistry or similar - Theoretical and practical knowledge of techniques frequently used in the Centre (DNA/RNA extractions, PCR, quality control of nucleic acids, construction of DNA/RNA libraries). - Organisational skills and curiosity. - Ability to adapt an experimental protocol or equipment procedure manual according to the needs of the moment. - Ability to convey knowledge orally and in writing. - Open personality and ability to interact and communicate effectively with the team. - Spanish/Catalan and a sufficient level of English to communicate effortlessly and to understand and write protocols. - At least 2 years of laboratory work experience is required. - A Master's degree in Biology, Biochemistry, Biotechnology or a similar field will be positively considered. Experience as a scientific-technical service to R+D+i groups and/or genetics or genomics laboratories will be a plus, especially previous work with high-throughput sequencing equipment.

We offer - This position is funded by the HiTech Platform - Institute for Computational Applications and Community Code - Biodiversity (IAC3-BIO) at the University of the Balearic Islands. - Full monthly remuneration 2.018,66 ? (gross salary). - An academically stimulating environment. A friendly and inclusive workplace. - A good work-life balance and access to Spanish excellent public services and welfare schemes, including free and accessible education and healthcare.

How to apply - The formal application will be announced on the June 15, 2023 through the UIB website <https://investigacio.uib.es/Contractacio/-Convocatories-vigents/> and opened for about 10 days. You will be required to include a CV with a complete list of education, positions, teaching experience, administrative experience, project acquisition and coordination experience, other qualifying activities and a complete list of publications. A Selection Committee will only evaluate candidates who formally registered the application.

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UBalearicIslands Two Bioinformatics GenomicsLabTech

Bioinformatician (3 year position)

**** This is a preliminary announcement ahead of its official publication on June 15, 2023. Some details regarding minimum qualifications and required experience might change****

We are looking for a highly motivated and talented bioinformatician specialising in comparative genomics and sequence analysis. The appointee will work on collaborative research projects with members of the local scientific community that are generating novel data (whole genome sequences, transcriptomes, RNAseq, metagenomics).

Tasks: The selected person will be specifically responsible for: 1) Support to the Balearic Biodiversity Centre; 2) Genome and transcriptome assembly and annotation; 3) Comparative genomics; 4) Sequence analysis; 5) Setting up genomic data analysis pipelines on local servers.

Team: The Balearic Biodiversity Centre (www.centrebaleardebiodiversitat.uib.es), at the University of the Balearic Islands gathers a team of researchers, technical staff, facilities and equipment whose motivation is the generation of knowledge about the rich natural environment of the Balearic archipelago and its biodiversity, the conservation of reference natural history collections and associated data. The CBB consists of four units: the Genomics Unit, the Natural History Collections Unit, the Data Management Unit and the Training and Outreach Unit. The person recruited will join the Genomics Unit but is expected to contribute to the establishment and development of the CBB as a reference in biodiversity studies, offering multidisciplinary services to the scientific community at regional and national level and being a strong partner in international initiatives.

Qualification requirements and competences - Master's degree in Bioinformatics, Computer Science, Computational Biology, Evolutionary Biology, Biomedical Engineering, Telecommunications Engineering or related fields. - Proficiency in English and Spanish/Catalan as working languages. - At least five years of experience. - Demonstrable experience in computer programming,

bioinformatics tools and genome assembly and annotation. - Hands-on experience in bioinformatics programming (e.g., python, C, and/or java) and git repositories. - Unix and command line experience. - Experience in genome assembly and annotation, particularly using NanoPore long fragments. Knowledge of Epi2me ONT - Experience with next generation sequencing data analysis, such as whole genome sequencing, RNA-Seq and population genomics. - Experience in setting up genomic data analysis pipelines and using Nextflow type tools. - Interest in the study of biological patterns using genomic approaches - Contribution to the development and maintenance of bioinformatics tools and collaborations in solid scientific work (peer-reviewed publications in high quality journals) - Good communication and collaborative skills - The use of bioinformatics tools developed in singularity, docker, galaxy or elixir will be positively valued.

We offer - This position is funded by the HiTech Platform - Institute for Computational Applications and Community Code - Biodiversity (IAC3-BIO) at the University of the Balearic Islands. - Full monthly remuneration 2.718,20 euro (gross salary). Full time position. - An academically stimulating environment. A friendly and inclusive workplace. - A good work-life balance and access to Spanish excellent public services and welfare schemes, including free and accessible education and healthcare.

How to apply - The formal application will be announced on the June 15, 2023 through the UIB website <https://investigacio.uib.es/Contractacio/Convocatories-vigents/>, and opened for about 10 days. You will be required to include a CV with a complete list of education, positions, teaching experience, administrative experience, project acquisition and coordination experience, other qualifying activities and a complete list of publications. A Selection Committee will only evaluate candidates who formally registered the application. - Do not hesitate to contact centre.biodiversitat@uib.es if you need help with

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UdeSaoPaulo EvolutionaryBiology

The Institute of Biosciences of the University of São Paulo invites applications to fill one full time position at the rank of *Professor Doctor in the Department of **Zoology*, with a salary of R\$ 13,357.25 (March, 2022), in the area of “*Systematics and Biogeography of Non-Chordate Metazoans**.” Applications must be received by 6:00 p.m. (Brazilian Standard Time, UTC-3) on August 14th, 2023.

The program for the public competition includes the following 11 subjects:

1. The taxonomic impediment in the face of the biodiversity crisis in the Anthropocene
2. Species concepts and delimitation
3. Character, homology, homoplasy, and the use of different sources of information in phylogenetic inference
4. Optimality criteria in phylogenetic inference
5. Taxonomic categories and codes of biological nomenclature
6. The role of phenomic data in the genomics era
7. Challenges, limitations, and advances in the use of high-throughput sequencing in diversity and evolution studies
8. The theoretical and methodological development of biogeography
9. Divergence time estimation
10. Area of endemism, dispersal, and vicariance
11. Relationships between systematics, ecology, and biogeography

Applications must be submitted online at <https://uspdigital.usp.br/gr/admissao> For details, including procedures for validation of doctoral degrees issued by foreign institutions, please contact: academica@ib.usp.br

The Institute of Biosciences of the University of São Paulo invites applications to fill one full time position at the rank of *Professor Doctor in the Department of Zoology*, with a salary of R\$ 13,357.25 (March, 2022), in the area of “*Inferences in Animal Diversification”*;

Applications must be received by 6:00 p.m. (Brazilian Standard Time, UTC-3) on August 14th, 2023.

The program for the public competition includes the following 11 subjects:

1. Temporal variation and spatial heterogeneity among lineages in the dynamics of speciation and extinction
2. The effects of biotic and abiotic factors on the dynamics of speciation and extinction
3. Equilibrium and non-equilibrium models in species diversification
4. Background extinction and mass extinction
5. Adaptive radiations in the context of lineage diversification
6. Challenges, limitations, and methodological advances in inferring the dynamics of speciation and extinction
7. The relationship between diversification rates and latitudinal diversity gradients
8. Patterns, processes, and rates of phenotypic evolution
9. Challenges, limitations, and methodological advances in inferring phenotypic evolution
10. Selection at different hierarchical levels of biological organization
11. The relationship between micro- and macroevolution in understanding the dynamics of speciation

Applications must be submitted online at <https://uspdigital.usp.br/gr/admissao> For details, including procedures for validation of doctoral degrees issued by foreign institutions, please contact: academica@ib.usp.br

— Benefits, promotions, and general information (v. 17/05/2023)

In addition to the base-salary, USP provides a number of financial and non-financial benefits. Below, you will find a summary of these benefits, along with information about promotions and other services available on campus. Please note that this summary serves as a general overview, and prospective professors are encouraged to explore the provided links for more detailed information.

*1. Benefits**[1]* <#_ftn1>

a. Grocery Allowance

The grocery allowance enables the purchase of food-stuffs.

Monthly amount: R\$ 1,090.00 (as of February 1, 2022).

Available on the 4th business day of each month through credit on an electronic chip card for use at affiliated commercial establishments.

b. Meal Voucher

The meal voucher subsidizes the daily acquisition of restaurant meals for work days (minus any travel per diems received in the same period).

Benefit value: unit value of R\$ 45.00 (as of February

1, 2022). Beneficiaries contribute 20% of the monthly amount received, deducted from their payroll.

Available on the 4th business day of each month through credit on an electronic chip card for use at affiliated commercial establishments.

c. Daycare Allowance

The daycare allowance covers part of the expenses of employees in the care of their dependents up to 6 years of age, except those enrolled in an USP daycare, infant recreation center, or school.

Benefit amount: R\$ 793.44 per month per dependent (as of February 1, 2022).

d. Special Education Allowance

Financial assistance benefit to employees with children with special needs according to Article 4 of Federal Decree No. 3,298/99, who are enrolled in official education, culture, or leisure establishments.

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ULaval Evolutionary Developmental Biology

Department of Biology, Faculty of Sciences and Engineering, Université Laval (ULaval).

The Department of Biology invites applications for a tenure-track faculty position in the field of evolutionary developmental biology (evo-devo).

The selected candidate will be expected to: 1. Develop, participate in and teach one or more courses on evolutionary developmental biology; 2. Develop an original research program in evolutionary developmental biology; 3. Supervise student research projects at graduate and undergraduate levels; 4. Promote the field of evolutionary developmental biology; 5. Participate in the academic life and advancement of Université Laval.

Selection criteria PhD in biological sciences or related discipline. Scientific training and relevant experience in the field of evolutionary developmental biology. Postdoctoral experience is desirable. The candidate must have demonstrated their ability to conduct university-level research and have the potential to develop an autonomous

and original research program in the field of evolutionary developmental biology. They will also have to demonstrate their skills and potential for university teaching at both undergraduate and graduate levels, in the supervision of graduate students, and their commitment to educational innovation as well as their ability to communicate and integrate into the French-speaking context of the institution.

The application must also describe how the candidate's professional abilities and potential align with the key competencies required for the position of university professor: - Judgement and capacity to analyze and organize information - Creativity and innovation; - Capacity to communicate; - Interpersonal skills and openness; - Ability to work in a team and with partners; - Autonomy and sense of responsibility; - Sense of ethics and duty; - Capacity to supervise.

Hiring and treatment Appointment will be made at the Assistant Professor level or above. Position leading to tenure. Salary according to the current collective agreement.

Candidature Application deadline: August 31, 2023. The review of applications will begin September 1st 2023 and continue until the position is filled

Starting date: March 1, 2024 (at the latest)

Candidates should send a single pdf-type document including a letter of intent and motivation, a complete curriculum vitae including the names and contact details of three people who can provide a letter of support, a detailed document of up to five pages describing their avenues of teaching and research, and a one-page description explaining the contribution to the field of their most relevant contributions, to: Stephane Boudreau, Chair Department of Biology Faculty of Sciences and Engineering Université Laval Alexandre-Vachon Pavilion, room 3058 1045 Medicine Avenue Quebec City, Québec G1V 0A6, Canada directeur@bio.ulaval.ca

General Information More than just a campus, Université Laval is a vibrant community in Quebec City (a UNESCO World Heritage Site) and a leading university recognized for its culture of excellence both in teaching and research. The Department has 25 professors and around 475 students, including 125 at the graduate level. The Department offers undergraduate and graduate programs in Biology as well as a Ph.D. program in Oceanography. Further information about the Department is available at <http://www.bio.ulaval.ca> (in French)

Valuing equity, diversity and excellence, Université Laval is fully committed to providing an inclusive work and living environments for all its employees. For Université

Laval, diversity is a source of wealth, and we encourage qualified individuals of all origins, sexes, sexual orientations, gender identities or expressions, as well as persons with disabilities, to apply. Université Laval also subscribes to an equal access to employment program for women, members of visible or ethnic minorities, Aboriginal persons and persons with disabilities. Adaptation of the selection tools can be offered to persons with disabilities according to their needs and in complete confidentiality. In accordance with Canadian immigration requirements, priority will be given to qualified individuals with Canadian citizenship or permanent residency.

Nadia Aubin-Horth <Nadia.Aubin-Horth@bio.ulaval.ca>

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ULeicester GenomicsNeurogenetics

Two permanent Lecturer roles available are in the areas of Genomics and Neurogenetics, within the Department of Genetics and Genome Biology (<https://le.ac.uk/ggb>) at the University of Leicester. The appointees will join a vibrant and successful research department and will be expected to conduct high quality research in related fields and to undertake teaching, tutoring and administrative duties at undergraduate and postgraduate levels in the School of Biological Sciences and wider College of Life Sciences. The College of Life Sciences has several Doctoral training programs providing access to PhD studentships and opportunity for doctoral level training input.

Closing date for applications: 09 Jul 2023.

For further details and to apply: <https://www.nature.com/naturecareers/job/12799148/-lecturer-in-genomics-or-neurogenetics-2-positions-available/> or <https://jobs.le.ac.uk/vacancies/7585/-lecturer-in-genomics-or-neurogenetics-2-positions-available.html> Prof Mark A. Jobling Professor of Genetics Deputy Head of Department Department of Genetics & Genome Biology University of Leicester University Road Leicester LE1 7RH UK

tel.: +44 (0)116 252 3427 mob.: +44 (0)7955 882334 email: maj4@le.ac.uk

“Jobling, Mark A. (Prof.)” <maj4@leicester.ac.uk>

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ULisbon ResTech GeneticBarriers

The University of Lisboa and FCII (Associação para a Investigação e Desenvolvimento de Ciências) are opening a call for a Research Technician with a Master Degree within the scope of the project GeneticBarriers: Interactions between reproductive isolation mechanisms (Ref. 2022.03475.PTDC).

1. The Laboratory Technician will be responsible for the maintenance and transfer of populations of spider mites within an experimental evolution project. The work plan will involve: a) Maintenance and transfer of population of spider mites; b) Conducting experiments to estimate fitness of spider mite populations and experiments to test mating choices in spider mites; c) Growing plants to rear spider mites; d) Laboratory management, specifically ensuring orders, management of consumables and reagent stock, ensuring the maintenance of laboratory..

2. Applications can be submitted by candidates of any nationality a master degree (MSc) in Biological Sciences or equivalent areas.

3. Skills and competences: i) Demonstrated experience in the maintenance of laboratory populations or behavioural assays (required) ii) Research experience in laboratory (preferred) iii) Professional experience in laboratory management (preferred) iv) Experience with spider mites or similar systems (preferred) v) Experience in maintaining plants (preferred) The candidate should be able to work well within a team and have excellent English and communication skills.

4. Application formalization: 4.1 Applications will be submitted online, through the electronic platform of FCII (<http://concursos.fcencias-id.pt>).

The following documents are required in a digital form (PDF format): i) Curriculum vitae; ii) Motivation Letter (including a brief description of research experience and why the candidate is suitable for the announced position); iii) Qualification Certificates; iv) Other relevant documentation

4.2. The application period is from 29th May until 27th June 2023.

Expected starting date: 1st September 2023.

Complete description of the job offer: <https://www.euraxess.pt/jobs/111424> For queries, please contact Inês Fragata (irfragata@ciencias.ulisboa.pt) and Alex Blanckaert (apblancaert@ciencias.ulisboa.pt)

Alexandre Blanckaert <blancaert.a@gmail.com>

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URichmondVA LabManager EvolutionaryGenetics

The Erickson lab < <http://www.ericksonlab.net/> > in the Department of Biology < <https://biology.richmond.edu/> > at the University of Richmond (Virginia) seeks to hire a full-time post-baccalaureate lab manager as part of an NIH-funded project to study rapid adaptation in an introduced species of insect, the African Fig Fly (*Zaprionus indianus)*. The project < <https://reporter.nih.gov/search/fFZsAkEmEUaZupgdxg6T6g/project-details/-10438436> > aims to characterize genetic and phenotypic evolution across North American populations following introduction to new environments. The work will integrate field studies, population genetics, and laboratory studies of ecologically relevant traits. The position will consist of roughly 75% research functions (field collections, laboratory experiments to measure fitness-related phenotypes, and data analysis) and 25% lab manager duties (maintaining fly stocks, making fly food, ordering, and other routine lab maintenance). The position will require traveling to orchards in Virginia and out-of-state to conduct field collections of wild fruit flies; applicants should have a drivers' license and be comfortable working outdoors as well as in the lab. A BS/BA in Biology or a related science, previous research experience (which may include field work, lab work and/or bioinformatics), interest in evolutionary genetics, strong communication skills, excellent organization skills, a willingness to work with undergraduate researchers, and a pleasant attitude are all requirements. Experience with R is strongly preferred. Experience with *Drosophila* husbandry is favorable but not a requirement. The position includes university benefits with health insurance. While a small amount of remote work may be possible, this position will generally require full-time work on campus at UR or in the field. This position is ideal for a candidate looking to gain more research experience and possibly

publications before applying to a graduate program. The position has the possibility to be renewed once for a total of two years.

Both the Erickson Lab and Department of Biology value diversity, and the lab is a welcoming and inclusive place to work. We encourage applications from those who identify with groups historically underrepresented in STEM.

Anticipated start date is the week of July 17th or July 24th, 2023.

Interested candidates should send a cover letter outlining their qualifications and interest in the position, a CV/resume, and names and contact information for three references to perickso[at]richmond[dot]edu with the subject line "Postbac Application". Review of applications will begin immediately and continue until a candidate is chosen. Address any questions to Dr. Erickson at perickso[at]richmond[dot]edu

Priscilla Erickson <priscilla.erickson@gmail.com>

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USussex EvolutionaryBiology

The University of Sussex is looking to appoint a lecturer (equivalent to an assistant professor) within the Evolution, Behaviour and Environment subject group. The University of Sussex has a long history of research in evolutionary biology starting with John Maynard Smith who founded the school of life sciences. Current areas of activity include molecular evolution, the evolution of plants, pollinators, social insects, behaviour and visual systems. The position is open to applications across the field of evolutionary biology. Further details of the department can be found at <http://www.sussex.ac.uk/-lifesci/ebe/> and the official job advertisement can be found at <https://www.sussex.ac.uk/about/jobs/lecturer-in-biology-education-research-ref-20493including> how to apply; the closing date is June 30th 2023. Informal enquiries can be made to Professor Daniel Osorio (d.osorio@sussex.ac.uk) or Professor Adam Eyre-Walker (a.c.eyre-walker@sussex.ac.uk).

Adam Eyre-Walker <a.c.eyre-walker@sussex.ac.uk>

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UZurich EvolMedicine

Assistant Professorship with Tenure Track for “One Health with Focus in Evolution” 100 %

The Faculty of Medicine of the University of Zurich invites applications for an Assistant Professorship with Tenure Track for “One Health with Focus in Evolution”.

The One Health Institute (OHI) is a newly founded institute at the University of Zurich, which will hold initially three professorships in One Health with respective focus areas in evolution, epidemiology and digitization, and with research interests in zoonotic diseases, antimicrobial resistance or metabolism. Zurich offers an excellent academic environment with the opportunity for interdisciplinary collaboration with groups at the University of Zurich, the University Hospitals and the nearby ETH Zurich.

The assistant professorship for “One Health with focus in Evolution” will be a dual professorship at the Faculty of Medicine and the Vetsuisse Faculty. The desire and ability to work in an interfaculty environment and an open spirit for a collaborative network is therefore essential.

The newly appointed assistant professor will foster research in Evolutionary One Health and one of three focus areas of the One Health Institute: zoonotic diseases, anti-microbial resistance, or metabolism. The professorship is intended to have a joint affiliation with the Institute of Evolutionary Medicine, University of Zurich with state-of-the-art paleogenetics facilities. Thus, a research focus on paleogenetics / paleoproteomics is encouraged. In addition to research, the professorship is expected to engage in establishing and running teaching activities in the One Health field including existing and planned Master programs.

Successful candidates must hold an MD, DVM, PhD or equivalent degree and must already have an excellent track record of academic achievements as a basis for successful third party fund raising. We seek a visionary person with a strong research program, broad network in One Health, interdisciplinary research experience and extensive expertise in the focus areas of the One Health Institute.

The University of Zurich is an equal opportunities employer and in particular strives to increase the percentage of women in leading positions. Therefore, qualified

female researchers are encouraged to apply.

The University of Zurich sees researchers as modern leadership personalities who conduct excellent research - taking into account the Open Science principles - through their own research projects, promote excellent young researchers and who help to shape a forward-looking university with innovative research-based teaching.

Please submit your electronic application for this position by July 09, 2023. Applications by mail or e-mail will not be considered. For any information, please contact the President of the Appointment Committee, Prof. Hanns Ulrich Zeilhofer (zeilhofer@dekmed.uzh.ch) and the Dean of the Medical Faculty Prof. Frank Rühli (frank.ruehli@iem.uzh.ch). Details on the application procedure are also available on the website of the Faculty of Medicine

linda.adamikova@uzh.ch linda.adamikova@uzh.ch

UZurich EvolutionaryMedicine

Dear colleagues

We would like to draw your attention to an open Assistant Professorship position in One Health at the University of Zurich:

UZH: Assistant Professorship with Tenure Track for One Health with Focus in Evolution

This position is shared between the Institute of Evolutionary Medicine (Medical Faculty) and the Veterinary Faculty, and will be located at the first One Health Institute in Europe (University of Zurich).

Please share widely as you see fit.

Thank you very much, best wishes, Nicole

PD Nicole Bender, MD PhD

Head Clinical Evolutionary Medicine Group

Institute of Evolutionary Medicine (IEM)

University of Zurich

Winterthurerstrasse 190

CH-8057 Zurich, Switzerland

Office Waltersbachstrasse 5

Phone +41 44 635 05 31

nicole.bender@iem.uzh.ch

[https://www.iem.uzh.ch/en/people/clinicalevol/-](https://www.iem.uzh.ch/en/people/clinicalevol/)

[Nicole-Bender.html](#) Nicole Bender
<nicole.bender@iem.uzh.ch>

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WilliamMaryU VisitingProf TeachingEvolution

Visiting Assistant Teaching Professor of Biology (Con-
servation Biology/Ecology/Evolution)

The Department of Biology at William & Mary, a public university of the Commonwealth of Virginia, invites applications for a 1.5-year, non-tenure eligible specified-term visiting instructional position that will begin January 10, 2024 (Spring semester 2024 through AY 2024-2025). We seek an individual with expertise in organismal biology, evolution/ecology, and biostatistics who can teach an upper-level conservation biology course and a biostatistics course. The successful applicant will be expected to be an effective teacher and will have a 3-3 teaching load (multiple sections count as separate courses).

Required: A Ph.D. in organismal biology/conservation biology or a closely related field is required at the time appointment begins (January 10, 2024).

Preferred: Previous experience teaching undergraduate courses, postdoctoral research experience, and the ability to offer special topics courses in the areas of conservation biology and/or ecology and evolution will be viewed favorably.

Applicants must apply online at <https://jobs.wm.edu/postings/54498>. Submit a curriculum vitae, a cover letter, a statement describing previous professional experience or future plans (or both) that demonstrate a commitment to diversity and inclusion, and a statement of teaching interests. You will be prompted to submit online the names and email addresses of three references who will be contacted by the system with instructions for how to submit a letter of reference.

For full consideration, submit application materials by the review date, August 14, 2023. Applications received after the review date will be considered if needed.

William & Mary values diversity and invites applications from underrepresented groups who will enrich the research, teaching, and service missions of the university. The university is an Equal Opportunity/Affirmative Ac-

tion employer and encourages applications from women, minorities, protected veterans, and individuals with disabilities. William & Mary conducts background checks on applicants being considered for employment.

Information on the degree programs in the Department of Biology may be found at <https://www.wm.edu/as/-biology/index.php>. For more information about the position, please reach out to Matthias Leu (mleu@wm.edu), Helen Murphy (hamurphy@wm.edu) or Kurt Williamson (kewilliamson@wm.edu).

“Murphy, Helen” <hamurphy@wm.edu>

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Wisconsin FishPopulationGenetics

Hello,

The Northern Research Station, a part of Research and Development in the USDA Forest Service, is announcing a vacancy for a Research Ecologist (Aquatic, fisheries) GS-0408-11/12 in Rhinelander WI. We are seeking an aquatic ecologist to join our Landscape Ecology research unit to develop a research program related to the effects of environmental heterogeneity on fish and aquatic species distribution and abundance, including leverage of genetic approaches (e.g., environmental DNA, population genomics).

Applications must be submitted in the USAJOBS - Research Ecologist (Aquatic) Job Announcement < <https://www.usajobs.gov/job/730562000> > no later than June 28, 2023.

For more information, contact Dr. Deahn Donner (deahn.donnerwright@usda.gov).

Thank you, Rachel

[Forest Service Shield] Rachel Toczydlowski, PhD Research Landscape Geneticist and Evolutionary Biologist Forest Service Institute for Applied Ecosystem Studies, Northern Research Station p: 715-362-1111 rachel.toczydlowski@usda.gov 5985 Co. Hwy K Rhinelander, WI 54501 www.fs.usda.gov [USDA Logo] < <https://usda.gov/> > [Forest Service Twitter] < <https://twitter.com/forestservice> > [USDA Facebook] < <https://www.facebook.com/pages/US-Forest-Service/1431984283714112> > Caring for the land and serving people

“Toczydlowski, Rachel - FS, WI” ing@mcmaster.ca)
<Rachel.Toczydlowski@usda.gov>

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Europe DevelopingBiodiversityGenomicsApplications

Call for Expression of Interest for financial support for: Developing biodiversity genomics applications for species in Europe to support the mission of Biodiversity Genomics Europe

Genomics, anchored on the analysis of high quality reference genomes and additional genome-wide data, is a key component of biodiversity research, conservation efforts and bioeconomy. This is particularly relevant today when global environmental change is causing a massive biodiversity loss, with an estimated 25% of species threatened with extinction worldwide. A coordinated global effort is crucial to fight biodiversity decline. The Biodiversity Genomics Europe (BGE, <https://biodiversitygenomics.eu/>) consortium has the goal of advancing the use of genomic science to improve our understanding of biodiversity, monitor biodiversity change, and guide interventions to prevent its decline. To achieve this goal, BGE brings together two newly formed networks: BIOSCAN Europe (<https://www.bioscaneurope.org/>) that focuses on DNA barcoding, and the European Reference Genome Atlas (ERGA: <https://www.erga-biodiversity.eu/>) that focuses on reference genome generation and is the European node of the Earth BioGenome Project (<https://www.earthbiogenome.org/>). To achieve its goals, BGE intends to involve institutions outside of the project consortium, who are interested in developing Case Studies

that build genomic biodiversity applications. BGE is therefore calling for Expressions of Interest for parties to develop case studies focused on European species that (1) demonstrate the application of reference genomes and genomic data to the conservation of species affected by anthropogenic changes in climate, habitats and ecosystems, or (2) demonstrate the application of reference genomes and genomic data for species of economic importance or disease control, thus contributing to the sustainability of ecosystem services. All submitted projects must include (i) focus on a biological system in Europe, suitable to develop one of the two application types; (ii) genomic analyses based on at least one high quality reference genome and additional downstream data; (iii) a plan for sampling, genomic data collection and data analysis; and (iv) a plan for stakeholder engagement.

Priority will be given to Expressions of Interest for projects implemented in Widening Countries*, to increase and diversify participation in European biodiversity genomics endeavours and the targets of biodiversity genomic application studies. The goal of this call for Expressions of Interest is to extend the reach of genomic applications developed by BGE and build capacity in biodiversity genomics in the priority countries. Therefore, local engagement is crucial. The Case Study Teams should include researchers from the country or countries of provenance of the target genomic resources and fulfil requirements for access and benefit sharing.

*List of eligible widening countries: Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary (except public interest trusts established on the basis of the Hungarian Act IX of 2021 or any entity maintained

by such a public interest trust that are not eligible under EU Council Implementing Decision 2022/2506), Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and all Associated Countries with equivalent characteristics in terms of Research & Innovation performance (Albania, Bosnia & Herzegovina, Kosovo, Montenegro, North Macedonia, Serbia, Turkey, Armenia, Georgia, Moldova, Morocco, Tunisia, Ukraine, Faroe Islands).

Requirements:

- The applicants must be ERGA members. Non-ERGA members interested in applying should become ERGA members before the application deadline.
- The responsible researcher of the Expression of Interest should be from an official institution in the country or one of the countries where the model species are sampled, and should be responsible to comply with all local and EU regulations. We will consider applications of collaborative nature if the incentive of capacity building in the country of sample origin is clear.
- The delivery of projects should allow completion before August 2025.
- Applicants should have all the required collection permits and Nagoya authorization for collecting and exporting species before the start of the project. The permits need to allow for open access deposition of the sequencing data, as all sequencing data generated within the project will be automatically deposited in ENA after their completion. Protected specimens will not be collected unless with permission.
- Applicants should adhere to the open data and FAIR principles

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PhilInBioMed AwardLecture

The *PhilInBioMed Award* is given annually for an outstanding contribution to the advancement of biology or medicine through the use of philosophical and theoretical tools.

To complement this recognition, the laureate receives a prize of 5,000 euros, which is awarded by the PhilInBioMed Institute < <https://www.philinbiomed.org/> > in Bordeaux, France.

The first laureate of the PhilInBioMed Award is *Elliott*

*Sober**, who is the Hans Reichenbach Professor and William F. Vilas Research Professor in the Department of Philosophy at University of Wisconsin-Madison, USA.

The ceremony will be held at the *University of* Bordeaux, France (Talence Campus, Building C)* on *June 12th*, 2023, at 2pm (French time, GMT+1)*. It will also be available *via Zoom** (see below).

The title of Elliott Sober's Award Lecture is:

“Darwin on Group Selection and Phylogenetic Inference - Simpson's Paradox and the Law of Likelihood”

*Three leading biologists** will comment on Elliott Sober's lecture:

- *Ford Doolittle** (Professor Emeritus at Dalhousie University in Halifax, Nova Scotia, Canada) (via Zoom)
- *Kevin N. Lala** (Formerly Laland) (Professor, Centre for Biological Diversity, University of St Andrews, UK) (in person)
- *Silva De Monte** (CNRS Researcher, Eco-evolutionary Mathematics Team, Ecole Normale Supérieure, Paris, France) (in person).

*It is very likely that a Call for Commentaries will be launched soon (please check webpage below) and that the Lecture together with the Commentaries and Replies by Elliott Sober will be published.**

*Schedule and detailed information.**

<https://www.philinbiomed.org/event/pibm-award-2023-sober/> Attendance is free and open to everyone. Please contact Thomas Pradeu <thomas.pradeu@u-bordeaux.fr> if you'd like to attend.

The ceremony will be accessible virtually via Zoom. Again, please contact Thomas Pradeu if you'd like to receive the Zoom link.*

Sincerely,

Thomas Pradeu, for the PhilInBioMed network.

Thomas Pradeu CNRS Research Director in Philosophy of Science Immunology Unit ImmunoConcEpT, UMR5164, CNRS & University of Bordeaux Team Leader Conceptual Biology and Medicine Team < <https://immunoconcept.cnrs.fr/conceptual-biology-medicine/> > Coordinator of the Philosophy in Biology and Medicine Network < <https://www.philinbiomed.org/> > (PhilInBioMed) 146 rue Leo Saignat 33076 Bordeaux, France & Institute for the History and Philosophy of Science and Technology < <https://www.ihpst.cnrs.fr/en> > Pantheon-Sorbonne University 13 rue du Four, 75006 Paris, France

thomas.pradeu@u-bordeaux.fr

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RoyalSociety Photo requests

Submit your Behaviour image by 18 August for a chance to win 1000 (or equivalent currency)!

We're asking scientists from across the world to send in their images according to 2 key criteria: they should be aesthetically pleasing and convey an interesting scientific phenomenon in one of the following categories:

- Behaviour - Astronomy - Earth science and climatology
- Ecology and environmental science - Micro-imaging

The winners of these categories will be narrowed down by our judges to an overall winner, as well as a winner and runner up for each category, a full Article Processing Charge (APC) waiver and the chance to feature on the cover of a Royal Society journal. Winners of the categories not chosen as the overall winner will receive a prize of 500.

Submit your entry via photocompetition@royalsociety.org

For more information visit <https://bit.ly/-RSPphotocomp> Closing date 18 August 2023

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

WildlifeMalariaNetwork

Dear All,

We have recently secured funding through the EU COST (Co-operation in Science and Technology) for a Wildlife Malaria Network, to co-ordinate research and capacity building over the next four years for those working on malaria and other haemosporidians in wildlife, starting in autumn 2023. This includes those working on the evolution of this parasite group.

Further details can be found here, and the network is now open for people to sign up to working groups: <https://www.cost.eu/actions/CA22108/> Applications

are open to anyone with an interest in wildlife malaria (pre- and post-PhD, academics and those working outside academia, those from within the EU/Europe and from outside the EU/Europe). Applications from women, younger researchers (<40 years old), and those from COST Inclusiveness Target Countries are strongly encouraged.

COST Inclusiveness Target Countries are: - EU Member States: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia - EU Member States Outermost Regions: French Guiana, Guadeloupe, Martinique, Mayotte, Reunion Island and Saint-Martin (France), Azores and Madeira (Portugal), and the Canary Islands (Spain) - Full Members that are not EU Member States: Albania, Armenia, Bosnia and Herzegovina, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Turkey, Ukraine

Any questions about the network, please contact me: JDunn@lincoln.ac.uk

Best wishes,

Jenny

Dr Jenny Dunn (she/her) Senior Lecturer in Animal Health and Disease, Postgraduate Research co-Lead, School of Life Sciences, University of Lincoln, Joseph Banks Laboratories, Lincoln, LN6 7TS, UK
Twitter: @jennycdunn Skype: jennycdunn Google Scholar: <https://scholar.google.co.uk/citations?user=0GP7Tv0AAAAJ&hl=en> I may have sent this email outside office hours, but I do not expect a response outside of yours

Situated in the heart of a historic city on the beautiful Brayford Pool Waterfront, the University of Lincoln is proud of its reputation for putting students at the heart of everything it does. We are ranked in the top 30 UK universities for student satisfaction in the Guardian University Guide 2023, listed in the world's top 130 universities in the Times Higher Education's (THE) Young University Rankings 2022, and hold a top five-star score overall in the QS Stars rating system of global universities.

The information in this e-mail and any attachments may be confidential. If you have received this email in error please notify the sender immediately and remove it from your system. Do not disclose the contents to another person or take copies.

Email is not secure and may contain viruses. The University of Lincoln makes every effort to ensure email is sent without viruses, but cannot guarantee this and recommends recipients take appropriate precautions.

The University may monitor email traffic data and content in accordance with its policies and English law. Further information can be found at: <https://www.lincoln.ac.uk/legal> . Jenny Dunn <JDunn@lincoln.ac.uk>

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WoodsHole Internship ThermalAdaptation

(Please share with any students you know who might be interested! Thank you! - Carolyn.)

We are seeking a guest student - ideally from Alaska - for a North Pacific Research Board-funded project led by scientists at Woods Hole Oceanographic Institution investigating the adaptation of thermal tolerance in the invasive golden star tunicate *Botryllus schlosseri*. We anticipate that the guest student appointment will be full-time for approximately ten weeks during the summer of 2023, with some flexibility including the opportunity to continue contributing to the project part-time during the following semester. The appointment is a mix between remote participation based in the student's home community and fieldwork (see field details below). This appointment is ideally suited to an advanced undergraduate student, for example, one having already completed their junior year, though students of all levels will be considered.

The guest student will participate in all stages of the investigation, learning techniques in ecophysiology, evolutionary biology, marine ecology, data analysis, and

marine non-indigenous species research. They will also join us on at least two, two-week long field trips: one to Bodega Bay, CA in mid-July and a second to Sitka, AK in late August, with the potential to join a third field trip to San Diego, CA in October. The student will be encouraged to develop their own research question under the umbrella of the larger project, and we will guide them as they develop a talk or poster on their research to present at the Alaska Marine Science Symposium in January 2024 in Anchorage, AK. Travel expenses (travel, accommodation, conference registration, and meals) will be covered for fieldwork and conference attendance.

Required qualifications - Interest and basic knowledge in marine biology/ecology/adaptation - Basic computer skills - Strong work ethic - Willingness to travel - Ability to work in a team and independently - Comfortable with a remote advising arrangement (we are based in Massachusetts) - Currently enrolled student (unfortunately, we are not able to appoint recent graduates)

Preferred qualifications - Previous experience with data analysis in R and/or Python - Previous experience reading and synthesizing primary scientific literature

Stipend \$680/week (no benefits)

We specifically hope to recruit an Alaska resident and especially encourage submissions from Alaska Native tribal members.

Please respond to this posting no later than June 9th by emailing a statement of interest and resume to Dr. Carolyn Tepolt (ctepolt@whoi.edu) and Zachary Tobias (ztobias@whoi.edu). Applications will be reviewed as soon as they are received.

Carolyn Tepolt <ctepolt@whoi.edu>

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Aix-en-Provence RedSquirrelLandscapeGenetics

Hi everyone,

We are looking for applicants to a post-doctoral position in landscape genetics. Location: Aix-en-Provence, France. Start date: September. More details below. There was an issue with the initial posting of this message, a few weeks earlier, so the deadline for applying is very soon. But if you are interested, email us, we can think of extending the deadline.

Best,

Aurélie.

Study of the effect of landscape configuration on gene flow in red squirrels

General information Contract duration: 12 months (renewable for 1 year) Expected date of employment: September 2023 Remuneration: Between 2889 and 4540 €gross per month depending on experience

Context The loss and fragmentation of natural habitats is a major threat to biodiversity. On the one hand, there is a strong consensus that conserving biodiversity requires preserving a large amount of natural habitats, while on the other hand, the spatial configuration (or arrangement) of habitats to conserve biodiversity has been the subject of intense debate since the 1970s. More precisely, for a certain quantity of habitats in a landscape,

are there spatial configurations that are really more favourable than others for maintaining biodiversity? This debate is extremely lively in the current literature, with two opposing scientific communities: those who defend the fact that managing the spatial configuration of habitats is essential for conservation versus those who assert that managing the configuration is of little interest and that conservation only requires the preservation and restoration of natural habitats. The two phenomena, habitat loss and fragmentation, are not independent: when the amount of habitat in a landscape decreases, the remaining 'pieces' of habitat become smaller and more widely spaced, making the debate difficult to resolve. Given the high land pressure around the world today, the opportunities to maintain or restore habitats in large quantities are limited. Designing territories to optimise the spatial configuration of habitats and the resistance of the landscape matrix (i.e. the difficulty organisms have in crossing the spaces between habitat areas) appears in this context to be the only option for conserving biodiversity. Resolving this debate on habitat fragmentation has therefore become urgent. In this context, the host team of this post-doc has set up the SCALED research project (<https://www.scaled-erc.eu> < <https://www.scaled-erc.eu/> >), using a landscape genetics approach to identify the respective roles of habitat quantity and configuration on movements (gene flow) in red squirrels (*Sciurus vulgaris*). To answer these questions, hair samples are being collected in different landscapes selected to represent various habitat quantities and configurations.

Missions The post-doctoral fellow will contribute to the

collection of genetic and spatial data on the red squirrel. He/she will analyse these microsatellite genotypic data - some of which are already collected - from different landscapes, in order to study the relative roles of landscape structure and composition on gene flow in red squirrels. He/she will write up the results in the form of scientific papers, with the aim of publishing them in A-rank scientific journals. He/she will also present these results in one or more scientific conferences.

Skills required Knowledge of population genetics and spatial data analysis Good level of scientific English Teamwork Plus: Spatial modelling and/or analysis of telemetric data

Host team The post-doc will work in close collaboration with Cécile Albert and Aurélie Coulon (CEFE & CESCO). He/she will be based at IMBE in Aix en Provence.

How to apply Send CV and cover letter to Cécile ALBERT cecile.albert@imbe.fr and Aurélie COULON aurelie.coulon@mnhn.fr before June 16th 2023. The selected applicants will be interviewed during the week of July 3rd.

References Albert, C. H., Rayfield, B., Dumitru, M. & Gonzalez, A. Applying network theory to prioritize multispecies habitat networks that are robust to climate and landâchange. *Conserv. Biol.* 31, 1383-1396 (2017).

Coulon A., Fitzpatrick J.W., Bowman R. & Lovette I.J. (2012) Mind the gap: genetic distance increases with habitat gap size in Florida Scrub Jays. *Biology Letters* 8, 582-585.

Fletcher Jr, R. J. et al. Is habitat fragmentation good for biodiversity? *Biol. Conserv.* 226, 9-15 (2018).

Fahrig, L. et al. Is habitat fragmentation bad for biodiversity? *Biol. Conserv.* 230, 179-186 (2019).

Darinot F., Le Petitcorps Q., Arnal V., Coulon A. & Montgelard C. (2021) Effects of landscape features and flooding on the genetic structure of a small wetland rodent, the harvest mouse (*Micromys minutus*). *Landscape Ecology* 36: 1755-1771.

Diamond, J. M. The island dilemma: lessons of modern biogeographic studies



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Angers HostMicrobeInteractions

A two-year position for a postdoctoral researcher is open at the IRHS (Research Institute on Horticulture and Seeds) in Angers, France (<https://www6.angers-nantes.inrae.fr/irhs>). The position will be part of the EU-funded project “Bexyl - Beyond Xylella, Integrated Management Strategies for Mitigating Xylella fastidiosa impact in Europe” (<https://bexylproject.org/>). This project involves 30 partner institutions from 14 countries, providing extensive opportunities for international collaborations.

PROJECT Xylella fastidiosa is a phytopathogenic bacterium with a strong adaptive capacity, as evidenced by its genetic diversity and wide range of host plants. It specifically colonizes the xylem of plants and is transmitted by hemipteran insects that feed on xylem sap. Originally from the Americas, the bacterium is now present in several European countries due to accidental introductions of infected plant material. These introductions have caused the emergence of new diseases in Europe (e.g. the “Olive quick decline syndrome” in Italy or Almond Leaf Scorch in Spain). The aim of this project is to investigate the mechanisms shaping the adaptation of this pathogen to its host plants, including the host-associated microbiota. This is particularly relevant in its new areas of distribution, where *X. fastidiosa* may establish new pathogen-plant relationships compared to its native area, effectively increasing its host range. This has been the case in the south of France, where multiple strains have been introduced decades ago: the bacterium infects mostly ornamental plants and native plants of the Mediterranean shrubland, providing a unique opportunity to investigate pathogen adaptation to new host plants in a diverse landscape. Indeed, it has been hypothesized that a diverse plant community would select for more generalist (and potentially less virulent) genotypes and maintain a higher genetic diversity in the pathogen population compared to crop monocultures.

Within this project, the postdoctoral researcher can investigate several research avenues, depending on interest: * Investigate the genetic basis underlying host plant adaptation in *X. fastidiosa*. The availability of high-quality genomes from a large panel of strains isolated in France allows the identification of genes under selection that might be involved in pathogen-plant interactions.

The impact of these candidate genes on pathogenicity can then be functionally validated in planta, benefitting from the advantage that *X. fastidiosa* mutants are produced very easily. * Compare the host range, infection dynamics and pathogenicity of introduced and alien strains on typical Mediterranean host plants as well as classic *X. fastidiosa*-pathosystems (e.g. grapevine) * Investigate interactions between *X. fastidiosa* and the host-associated microbiota, which represents an integral part of the host environment encountered by the bacterium. Whereas investigations regarding the bacterial and fungal communities present in the plant xylem will be performed as part of a concomitant PhD project, the postdoctoral researcher could focus on the viral community, including bacteriophages.

REQUIREMENTS We are looking for a highly motivated early career researcher with a PhD in microbiology microbial ecology or microbial genomics and a keen interest in host-microbe interactions. The successful candidate should therefore have good experience in the lab (microbiology, molecular biology, genetics) as well as with bioinformatics (genome analysis). Additional work experience or knowledge about plants as host organisms would be an advantage. The candidate must be fluent in English (speaking and writing) and have good organisational and communication skills.

RESEARCH ENVIRONMENT The project will be supervised by Marie-Agnès Jacques and Jessica Dittmer. The postdoctoral researcher will integrate the Emersys research group at the IRHS (Research Institute on Horticulture and Seeds). The IRHS is a joint research unit (260 staff) affiliated with the French National Research Institute for Agriculture, Food and Environment (INRAE), the University of Angers and the Institut Agro, a French higher education institute in Agriculture, Food, Horticulture and Landscape Sciences. The IRHS has very strong expertise in plant pathology, plant physiology, microbial ecology and plant phenotyping. It has extensive research facilities, including 9000 m² greenhouse facilities, a high-throughput plant phenotyping platform, an in-house DNA sequencing facility and core servers for data storage and analysis. It also houses the French Collection of Plant-associated Bacteria (CIRM-CFBP) as well as S3 laboratories to work with GMO and quarantine organisms.

Angers is a vibrant middle-sized city in western France, about 300 km



ArizonaStateU EvolutionaryBiology

Postdoctoral Positions, Center for Mechanisms of Evolution, Lynch Lab

Looking for postdocs with strong backgrounds in mathematics / computational analysis to develop theory on the evolution of organismal diversity. One project is focused on the joint roles played by drift, selection, mutation, and recombination in determining the evolution of mean phenotypes. The second is focused on the development of population-genetic models for the evolution of interspecific interactions, mutualisms in particular. In both cases, familiarity with stochastic processes and population-genetic theory will be useful.

Additional opportunities exist for research in the areas of evolutionary / population genomics of *Daphnia*, and in the pursuit of understanding the rate of error production at the level of translation (this requires a familiarity of methods in proteomics). Appointments will initially be for two years and may be extended.

The Lynch Lab is housed within the Center for Mechanisms of Evolution, Arizona State University, which hosts seven diverse labs with interests in both the experimental and theoretical sides of evolutionary biology, with perspectives ranging from population genetics to cell biology to biophysics. The CME, consisting of ~100 students, postdocs, and research scientists, is also supported by an NSF Biological Integration Institute grant on Mechanisms of Cellular Evolution. Many other evolutionary biology groups, as well as substantial programs in mathematical biology and biophysics, reside at ASU.

If interested, please send a resume with a statement of interests and names of two to three potential references to: Misty.L.Smith@asu.edu For further questions about the science, contact Michael Lynch: mlynch@asu.edu

Misty Smith <Misty.L.Smith@asu.edu>

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Bolzano Italy InsectPestGenomics

A Postdoctoral position is offered at the Free University of Bozen-Bolzano (Italy) at the Competence Centre Plant Health in the lab of Hannes Schuler. The position is initially funded for one year with a possible extension.

Our lab is broadly interested in various aspects regarding the evolutionary ecology of insect pest species. One of our primary research questions addresses the association of microbes with insects and their impact on the ecology and evolution of their hosts. Moreover, we investigate insect vectors of plant diseases and the invasion dynamics of invasive species. Our study systems are Psyllids, Tephritid fruit flies and other agricultural pest species as well as Forest pests such as the European spruce bark beetle. Our research projects are addressed by a combination of metagenomic and population genomic approaches as well as ecological experiments in the laboratory and in the field.

We are a young and dynamic research group studying various aspects of insect ecology in a collaborative atmosphere <http://hschuler.people.unibz.it>. The selected candidate is expected to contribute to the functioning of the lab, identify new research opportunities, supervise students, publish results in scientific journals and participate in scientific conferences. We are specifically looking for an enthusiastic candidate with a strong background in insect ecology and evolution. Competences with ecological studies, collection, and handling of insects as well as experience with molecular genetic methods, next generation sequencing and bioinformatics are desired.

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 study environment guaranteed by its excellent facilities are some of the reasons why unibz regularly reaches top positions in national and international rankings. The Competence Centre for Plant Health is a newly founded joint institution which consists of several research groups in the field of Biology, Agricultural Sciences and Engineering. <https://www.unibz.it/en/home/research/-competence-center-plant-health/>. General requirements for the position: PhD degree (or soon to be finished) in Agricultural Sciences, Agricultural Biotechnology, Ecology and Evolution with a multidisciplinary profile. The

candidate should have excellent communication skills and should be fluent in English.

The project is expected to start in September 2023, but the starting date is negotiable. Application deadline is 04.07.2023 (noon).

All documents for the application procedure can be found here: <https://www.unibz.it/en/home/position-calls/positions-for-academic-staff/6523-general-and-applied-entomology-prof-schuler?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 Agricultural, Environmental and Food Sciences 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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Budapest Vienna SocialBehaviourShorebird

Social and environmental determinants of successful parents

Two post-doctoral positions: University of Veterinary Medicine Vienna, Austria (3.5 years), University of Veterinary Medicine Budapest, Hungary (2.5 years)

Background What makes some parents more successful than others? In species with parental care, successful reproduction relies on overcoming diverse challenges including locating breeding habitats, conflict and competition with conspecifics, and nurturing young to independence. Understanding the drivers of different parental strategies to meet these challenges has key implications for our understanding of life history decisions, sexual conflict and population productivity. However, we are yet to uncover how parents balance strategies to successfully navigate environmental conditions, while adopting social strategies that minimise conflict and maximise social benefits such as attaining social information.

Our international team is embarking a challenging field-based project that aims at clarifying the causes and implications of successful parenting by using state-of-the-art tracking technology to characterise movement patterns of parents through their ecological environment

and social structure using an island-breeding population of Kentish plovers. The work will advance studies of social behaviour and breeding systems and contribute to biodiversity conservation. The project is built upon decades of investigations that resulted in publications in top research journals.

Fieldwork will be carried out in a tropical island in Cabo Verde where we are monitoring the local Kentish plover population since 2007. Beyond cutting edge research in evolutionary biology, behavioural ecology and population demography, the project will facilitate the conservation and management of the locally breeding Kentish plover population, and join to an international collaborative effort to understand sex roles, mating system and parental care evolution in shorebirds (<https://elvonalsshorebirds.com/>).

This is a collaborative project between Uni Vet Med Budapest and Uni Vet Med Vienna where one post-doc each will be based. In addition, the project will involve collaboration with NGOs and local universities in Cabo Verde. The project is led by Dr Andras Kosztolanyi (Budapest) and Dr Ivan Maggini (Vienna) with scientific advice by Prof Tamas Szekely (Univ Bath, UK) and Dr Grant C. McDonald (Uni Vet Med Budapest).

Jobs A senior post-doctoral researcher based in Uni Vet Med Vienna for 3.5 years, and an early-stage post-doctoral researcher based in Uni Vet Med Budapest for 2.5 years

Dates The positions are available from 1 September 2023.

Responsibilities The main responsibilities of both positions will be: - Conducting avian fieldwork (capture, ringing, deployment of tracking devices, measurement of physiological and habitat parameters) in remote locations (e.g. Maio, Cabo Verde) for extended periods (2+ months per year) - Supporting an international team of scientists and collaborating with other researchers in the field - Analysing spatial data and constructing social networks - Writing articles for top-ranked journals in the field - Participating in international conferences and communicating results to the broader public - Working in partnership with locally based NGOs and participating institutions

Necessary knowledge and qualifications for both positions: - PhD or comparable title in life sciences (e.g. ecology, evolution, animal behaviour) - Experience with the analysis of spatial or temporal data - Computational/programming skills in R statistical software - Excellent written and spoken English - Valid driving licence

Additional skills and abilities for the Austrian position:

- Experience in leading and managing scientific projects
- Experience in animal tracking in wild populations
- Strong experience in analysis of social network or animal movement data

Additional skills and abilities for the Hungarian position:

- Experience in studying wild populations, preferably birds
- Experience in analysing large datasets

How to apply Application deadline is 30 June 2023. The application should include the title of the job, a max two pages cover letter, a CV with list of publications, and the name and contact details of three referees preferably from research, academia or conservation. The applications should be emailed to Drs Maggini and Kosztolanyi (Ivan.Maggini@vetmeduni.ac.at and Kosztolanyi.Andras@univet.hu). Interviews will be in late July/early August.

For information on institutional employment conditions for each position, please contact I Maggini for senior post-doc particulars and A Kosztolanyi for early-stage post-doc particulars.

Selected publications Aispuro A.A., V. Canoine, M. Illa, L. Fusani, I. Maggini (2023, in press) Stopover territoriality in songbirds crossing the Sahara: aggression and

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ColoradoStateU PlantMutationEvolution

The Sloan Lab at Colorado State University is looking for a postdoctoral researcher with experience in plant molecular genetics and/or biochemistry to investigate the mechanisms responsible for extreme variation in mutation rates and genome stability in plant mitochondria and plastids. These plant organelles maintain exceptionally low point mutation rates, while exhibiting rapid rates of rearrangements and structural evolution. Our collaborative project to understand the mechanistic basis of these unusual genome properties. This project fits into the broader focus of our research, which is on the evolution of organelle genomes and their coevolution with the nucleus. More information about our research

projects and publications is available at our lab website: <https://sites.google.com/site/danielbsloan/> We seek someone who is excited about addressing evolutionary questions at the molecular level and wants to contribute to a positive and collaborative intellectual environment. Start date is flexible but preferably in summer or fall 2023.

Applicants should have expertise in plant biology and one or more of the following areas:

-Genetics, transformation, and genome editing - Mechanisms of mutation and DNA damage/repair - Protein and nucleic acid biochemistry -Mitochondrial and chloroplast biology -Library construction for next-generation sequencing -Comparative genomics and bioinformatics

Our lab is in the Department of Biology at Colorado State University, which is housed in a state-of-the-art research facility that opened in 2017. The department includes numerous labs in the fields of both plant molecular biology and evolutionary biology, so there are ample opportunities for collaboration outside the lab group. The university is in Fort Collins, Colorado, which routinely ranks among the top locations in the country in terms of overall quality of life.

Interested researchers should e-mail Dan Sloan (dan.sloan@colostate.edu) and include a CV, along with a brief statement of research/career goals and how they pertain to the position. Review will begin June 23, 2023, but inquiries are still very much encouraged after that date.

“Sloan,Dan” <Dan.Sloan@colostate.edu>

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Copenhagen BiodiversityGenomics

Postdoc in Biodiversity Genomics

Department of Biology Faculty of Science University of Copenhagen

Link to the advertisement: <https://employment.ku.dk/-faculty/?show=159422> A 2-year postdoctoral position in Biodiversity Genomics is available at the Section for Ecology and Evolution with a focus on phylogenomics and conservation genomics of syngnathiform fishes, starting from 01 October 2023 or as soon as possible thereafter.

Overall description of the project

The position is funded by a Villum Young Investigator research grant and a Revive&Restore/Morris Animal Foundation grant to Assistant Professor Josefin Stiller. The postdoc will work on two projects. The first project involves a large-scale genomic dataset of hundreds of whole genomes of Syngnathiformes that our lab is generating, on which the postdoc will perform phylogenomic analyses to understand the evolutionary relationships and the sources of phylogenetic incongruence. These phylogenetic insights will be important for ongoing comparative genomics analyses on this dataset. Secondly, the postdoc will lead a conservation genomic project that aims to investigate connectivity, adaptive potential, and genetic diversity of leafy and common seadragons using whole genome resequencing for ca. 200 individuals. The goal is to develop a conservation genomic assessment of the population genetic health of these two species to inform conservation stakeholders in Australia.

The postdoc is expected to participate in the design of experiments, perform bioinformatic analyses, present results, and prepare manuscripts for publication. Important research approaches will include bioinformatics, phylogenomics and population or conservation genomics. The postdoc's duties will include research within biodiversity genomics, student supervision, as well as teaching. The post may also include performance of other duties.

Further information on the Department is linked at <https://www.science.ku.dk/english/about-the-faculty/organisation/>. Inquiries about the position can be made to Assistant Professor Josefin Stiller (josefin.stiller@bio.ku.dk).

The University wishes our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates regardless of personal background.

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.

Negotiation for salary supplement is possible.

Qualifications

- PhD degree in evolutionary biology, marine biology or zoology, conservation, bioinformatics, or similar fields - Demonstrated record of independent research in the field (first authorship) in one or more of the relevant fields (comparative genomics, phylogenomics, conservation genomics, population genomics) - Research experience in

bioinformatic analysis of high-throughput sequencing data - Excellent English communication and writing skills - Experience in project coordination is advantageous, but not required

The application, in English, must be submitted electronically by clicking APPLY NOW below.

Please include

- Letter of motivation including a description of research experience most relevant to the position (max 2 pages) - Curriculum vitae (max 2 pages) - Complete publication list - Diplomas (Master and PhD degree or equivalent) - Separate reprints of 3 particularly relevant papers or preprints, if available

The deadline for applications is 2 July 2023, 23:59 GMT +2.

After the expiry of the deadline for applications, the authorized recruitment manager selects applicants for assessment on the advice of the Interview Committee.

You can read about the recruitment process at <https://employment.ku.dk/faculty/recruitment-process/> . Interviews will be held during week 30.

Josefin Stiller <josefin.stiller@bio.ku.dk>

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Czech Republic Genomics Asexual Reproduction

POSTDOCTORAL RESEARCH POSITION IN EVOLUTION OF ASEQUAL REPRODUCTION A postdoctoral position for up to 2.5 years is available in comparative genomics, population genomics, transcriptomics and / or cytogenetics at the Czech Academy of Sciences. (details to be found also here: <https://euraxess.ec.europa.eu/jobs/-/101298#additional-information>; and here: <https://meritcb.eu>) The postdoctoral fellow will join the research team of Dr. Karel Janko at the Institute of Animal Physiology and Genetics, which studies how and why multicellular organisms deviate from canonical sex and switch to non-Mendelian inheritance. By studying these phenomena, we strive to unravel the implications of non-sexual reproduction for the evolutionary processes and rise of polyploidy. As a postdoctoral fellow, you will have the opportunity to shape your research within the framework of our ongoing studies in the Lab-

oratory of Non-Mendelian Evolution. This autonomy allows you to explore your own research interests while contributing to our collective understanding of this captivating field.

Research Focus: Our research areas encompass a range of intriguing topics, including (but not only):

- 1) Life history traits and ecology of organisms with non-Mendelian, or clonal, reproduction.
- 2) Genomic, epigenomic, and cellular changes associated with aberrant reproductive strategies and asexuality.
- 3) The role of interspecific hybridization and asexual reproduction in speciation and the emergence of evolutionary novelties.
- 4) Identification of genetic sex-determination systems and their role in hybrid sterility and asexuality.
- 5) Assessing how restricted recombination impacts on adaptive potential to changing environment.
- 6) Linking non-Mendelian reproduction with evolution of polyploidy.

Lab website: <https://www.iapg.cas.cz/en/laboratories/-Laboratory-of-Non-Mendelian-Evolution/Research/>
Google Scholar: <https://scholar.google.cz/-citations?user=azHnMBgAAAAJ&hl=cs&oi=ao>

Research Infrastructure: Our state-of-the-art research infrastructure enables interdisciplinary investigations from various angles, including phylogeography, population genomics, genotype-by-environment interactions, gene and allele expression, epigenomics, cytogenetics, and meiotic analyses. A list of representative publications from our lab is provided below.

Collaboration Opportunities: Our team actively collaborates with scientists from Europe and the USA. As a postdoctoral fellow, you will also have the chance to participate in a secondment at one of our collaborating institutions, or another institution of your choice, broadening your research horizons and establishing valuable connections.

Candidate Requirements: We are seeking an individual who possesses a solid publication track record in peer-reviewed journals given his/her career stage. Depending on particular research topic chosen by the applicant, it would be good to have the additional knowledge or experience in some of the areas like programming languages, Genome Wide Association Studies, statistical methods applied to biological data, cytogenetics and/or reproductive physiology. We are looking for an individual who is enthusiastic, creative, highly motivated, willing to work both independently and as a part of a team, and having good written and oral communication skills in English. Location and Accommodation: Our institute

is situated in proximity to two beautiful historic towns, Melnik and Prague, where finding accommodation is convenient and enjoyable.

Application Process: For inquiries and information about this position, please email to: janko@iapg.cas.cz. Official information about the position, application process, and eligibility criteria are listed below (<https://meritcb.eu/>).

Representative publications of the lab:

Bartoš O, Röslein J, Kotusz J, Paces J, Pekárik L, Petrů M, Halačka K, Četková Kašparová E, Mendel J, Boroň A, et al. 2019. The Legacy of Sexual Ancestors in Phenotypic Variability, Gene Expression, and Homoeolog Regulation of Asexual Hybrids and Polyploids. *Mol Biol Evol* 36:1902-1920.

Choleva L, Janko K, De Gelas K, Bohlen J, Člehtová V, Rábová M, Ráb P. 2012. Synthesis of Clonality and Polyploidy in Vertebrate Animals by Hybridization Between Two Sexual Species. *Evolution* 66:2191-2203.

Dedukh D, Majtánová Z, Marta A, Pánička M, Kotusz J, Klíma J, Juchno D, Boron A, Janko K. 2020. Parthenogenesis as a Solution to Hybrid

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Helsinki Evolutionary Behavioral Ecology

The research group of Ulrika Candolin (<https://www.helsinki.fi/en/researchgroups/behavioural-ecology>) is seeking a highly motivated postdoctoral researcher to join our research project: 'Coping with light pollution: integrating behavioural, physiological, and genetic research in the study of the European glow-worm'

The aim of the project is to determine the impact of light conditions - both natural and artificial - on the ability of organisms to cope with modern LED lights, and to evaluate the underlying mechanisms, using the glow-worm as the model species. Insights gained will be used to identify measures that can be taken to reduce negative effects of man-made lighting systems on the species and biodiversity in general.

In the European glow-worm (*Lampyris noctiluca*), females emit a bioluminescent signal to attract flying males; they are thus likely to be sensitive to light pollution. We will integrate behavioural, physiological and genetic research to assess their responses to LEDs along three gradients: 1) a latitudinal gradient to evaluate the impact of natural light conditions, 2) an urbanisation gradient to evaluate the impact of earlier exposure to artificial light, and 3) a temporal gradient to evaluate the impact of the time populations have been exposed to artificial light. We will assess both behavioural and physiological responses to artificial light in experimental work, and determine the genetic underpinnings of the responses by screening for signs of selection across the genome. The research will provide information on the ability of the glow-worms to cope with modern LED lights, both phenotypically and genetically, and the degree to which this depends on past light conditions and exadaptations. The results will be used to predict the expected trajectory of populations depending on future scenarios of light pollution, and to evaluate changes needed to artificial lighting systems to reduce negative effects on biodiversity. At a more general level, the insights will be used to assess the degree to which information on past conditions can be used to predict species responses to rapid human-induced environmental change.

The salary will be based on level 5 of the demands level chart for teaching and research personnel in the salary system of Finnish universities. In addition, the appointee will be paid a salary component based on personal performance. The gross salary will be 3300 - 4000 euro /month, depending on qualifications and experience. Standard Finnish pension benefits, occupational health care and health insurance are provided.

The earliest starting date is 1st September 2023. The position is for a fixed term of two years, with the possibility of extension for a third year. There will be a trial period of six months in the beginning.

How to apply: The application should include the following attachments as a single pdf-file - Motivation letter describing your background and motivation to apply for the position (max. 2 page) - CV with a list of publications and a brief summary explaining your own contributions - Contact information of two referees, who can provide reference letters upon request

Please submit your application using the University of Helsinki Recruitment System via the Apply link: <https://career2.successfactors.eu/careers?company=helsinginy> The deadline for submitting the application is 21st of July 2023.

For more information, contact ul-

rika.candolin@helsinki.fi

“Candolin, A Ulrika” <ulrika.candolin@helsinki.fi>

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ing@mcmaster.ca)

HHMI Carnegie Stanford Two PlantEvolution

Postdoc or Staff Computational Biologist: Quantitative
Evolutionary Genomics and Ecology in Plants

Moi Exposito-Alonso Lab - www.moilab.science Staff
Associate, Principal Investigator, Carnegie Institution
for Science

Assistant Professor (by courtesy) of Biology, Stanford
University Stanford

Freeman Hrabowski Scholar, Howard Hughes Medical
Institutes (HHMI)

Details Lab location: 260 Panama st., Stanford, CA
94305, USA

Annual salary \$70,000 | 1 year contract, potential ex-
tensions up to 4-5 years (or \$80,000 for Staff Comp.
Bio.)

Publication date: May 2023

Starting date: Flexible | Closing date: accepting appli-
cations until filled

Description

We aim to recruit a highly motivated and skillful post-
doc or staff computational biologist with training in
evolutionary quantitative genomics and bioinformatic-
s. We seek to understand the impacts of climate
change on plant species from a genomics angle. Po-
tential projects include study of large-scale Evolve &
Resequencing data to understand rapid adaptation (
GrENE-net.org), meta-analysing global population ge-
nomic datasets (see MAR < <https://www.science.org/doi/10.1126/science.abn5642> >), leveraging common
gardens and genomics to understanding genetic and de-
mographic drivers of population extinction (see past gar-
dens < <https://www.nature.com/articles/s41586-019-1520-9> >).

The MOILAB is a highly interactive and interdis-
ciplinary lab, and many experiments are conducted in
collaboration. In our lab, we target scientific excel-
lence as well as building a positive community for

growth. You can read our value statement here: <https://www.moilab.science/our-values> Responsibilities

* The position requires leading research independently,
preparing publications, and presenting research in sci-
entific meetings. Senior researchers in the lab are also
examples and mentors to graduate students.

* Willingness to work closely with lab members, and
collaborators.

* Contributing to lab-wide chores towards a productive
and positive lab.

* The staff computational biologist position requires
building and maintenance of lab pipelines, training lab
members, and administering computational facilities,
and performing as a team leader

Required skills

* A BSc + PhD in any of the following areas: genomics,
bioinformatics, population/quantitative genetics, evolu-
tion.

* A track record of research productivity and indepen-
dence.

Contact

Informal inquiries about this position can be made
by emailing Moises (Moi) Exposito-Alonso at ad-
min@moilab.science. To be formally considered, please
include: (1) a cover letter, (2) CV, and (3) three referees
whom I can ask for letters of recommendation.

Equal opportunity employer

Carnegie is an equal opportunity employer. All quali-
fied applicants will receive consideration for employment
without regard to race, religion, color, national origin,
sex, sexual orientation, gender identity, age, veteran
status, disability or any other protected status in ac-
cordance with applicable laws. We aim to have a vi-
brantly diverse lab, which is essential to tackle scientific
questions from different creative angles. The main re-
quirement for these positions is that you are passionate
about the topics above, so please apply!

—

Postdoc: The Genetics of Dehydration Tolerance in
Plants Part of BII Water and Life Interface Institute
(<http://walii.science>)

Moi Exposito-Alonso Lab - www.moilab.science Staff
Associate, Principal Investigator, Carnegie Institution
for Science

Assistant Professor (by courtesy) of Biology, Stan-
ford University Stanford Freeman Hrabowski Scholar,
Howard Hughes Medical Institutes (HHMI)

Details Lab location: 260 Panama st., Stanford, CA 94305, USA

Annual salary \$70,000 | 1 year contract, with potential extensions up to 4-5 years

Publication date: May 2023

Starting date: Flexible | Closing date: accepting applications until filled

Description

We aim to recruit a highly motivated and skillful researcher with training in genetics, molecular biology, or bioengineering, with strong interest in evolution. As part of the WALII < <http://walii.science> >.science NSF biological integration, we seek to understand the genetics of plant dehydration tolerance in plants using *Arabidopsis thaliana* and other species as model systems, with an eye to study the impacts of climate change on plant species from a molecular evolution angle. This project will leverage field experiments, screening of natural variation and gene knock-outs or knock-ins in seeds or other tissues with strong dehydration characteristics.

The MOILAB is a highly interactive and interdisciplinary lab, and many



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>

Hyderabad SoilArthropodPopGenomics

Postdoctoral researcher position -A 3-year postdoctoral researcher on phylogenomics and population genomics soil arthropods from peninsular India at Evolutionary Ecology Lab at CSIR-Centre for Cellular and Molecular Biology, Hyderabad, India.

About the project:We are seeking a motivated and enthusiastic postdoctoral researcher to work on phylogenomic and population genomics of soil arthropods in peninsular India. The position is part of a project funded by DBT/Wellcome India Alliance on arthropod venom and its role in speciation is relatively understudied predatory soil arthropods“Venom evolution in ancient predatory soil arthropods: evolutionary and ecological perspectives”.We are interested in examining

evolutionary relationships and spatial genetic variation across multiple closely related species. Particularly interested in understanding the role of geoclimatic, geographic and ecological processes that determine the distribution and, consequently, genetic variation within and among species.

Your key responsibilities will be to: - lead research projects on phylo and population genomics of soil arthropods in peninsular India - generation and analyses of large phylogenomic and population genomic data sets from soil arthropods to ask key questions in evolutionary biology - present the results of the research at seminars and conferences - write papers for publication in peer-reviewed journals - work effectively as part of a team - mentor masters and/or graduate students in the lab Please find more details about our research here Please write to me for more details at Jahnvi Joshi -jahnvi@csirccmb.org

Desirable qualification:research experience in the field of evolution and ecology, preferably in molecular ecology Sanctioned Salary:42,000/month +HRA Advertisement and Application Portal -here is the link to the online application and official advertisement on the CCMB website

Junior Research Fellow Position - A two-year Project Associate-Ion systematics, biogeography and diversification of soil arthropods from peninsular India at Evolutionary Ecology Lab at CSIR-Centre for Cellular and Molecular Biology, Hyderabad, India.

We are looking for a motivated and enthusiastic researcher to work on systematics, biogeography and diversification of soil arthropods from peninsular India.

The position is part of a project funded by CSIR-MLP.We are interested in examining evolutionary relationships, distribution and diversity patterns and underlying processes for these patterns.

Please find more details about our research here.

Please write to me for more details at Jahnvi Joshi -jahnvi@csirccmb.org Job description- Research work will involve field sampling of soil arthropods, DNA extraction, running PCRs, and DNA sequencing. Also, the candidate will help in the morphology-based identification of soil arthropods.

Essential qualification:Master’s in any branch of biology or equivalent degree with a minimum 55% mark or equivalent GPA score.

Desirable qualification:A strong motivation for research in Evolutionary Biology is important.Experience in field-work or molecular ecological techniques will be strongly preferred but is not mandatory.

Sanctioned Salary:31,000/- p.m. + HRA as applicable/admissible to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions. (ii) 25,000/- p.m. + HRA as applicable/admissible for others who do not fall under (i) Advertisement and Application Portal - here is the link to the online application and official advertisement on the CCMB website

Jahnvi Joshi <jahnvi@csircmb.org>

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IowaStateU GossypiumEvolution

Colleagues:

I would be most grateful if you could pass this message along to anyone you know of who might be looking for a post-doctoral position, as described here. Our major goals are listed below, but we hope to hire someone who is excited to explore our projects with us, as well as complementary areas and personal interests. So the position will have a lot of freedom!

Also, the salary is competitive for starting post-docs (\$58,000, in Ames, Iowa dollars, which go farther than in many other places).

Thank you,

Jonathan

Summary of Position: We (Jonathan Wendel and Corinne Grover) are seeking a post-doctoral colleague to work with us on computational and genomic analyses of evolutionary processes in *Gossypium*. The position has quite a bit of flexibility with respect to research goals, including:

To elucidate the population genomics and genetics of polyploid cotton accompanying domestication, crop improvement, and interspecific gene flow
 To understand the phenomenon of duplicate gene regulation and expression at the whole plant and single-cell level in a phylogenetic context
 To refine our knowledge of interspecific introgression and phylogenetic relationships within the genus
 To participate in our teacher-training program and other outreach efforts.

Required Minimum Qualifications:

PhD or Doctoral Degree in the Biological Sciences (by the start date)

Preferred Qualifications:

Demonstrated proficiency in bioinformatics/computational biology
 Experience in evolutionary biology, phylogenetics or population genetics
 Experience publishing scientific work and presenting work at scientific conferences
 Experience with mentoring in an educational environment.
 Proposed Start Date (flexible): September 1, 2023

Apply here:

https://isu.wd1.myworkdayjobs.com/IowaStateJobs/-job/Ames-IA/Postdoc-for-EEOB_R12173 Jonathan F. Wendel, Distinguished Professor Department of Ecology, Evolution, & Organismal Biology, Iowa State University Ames, IA 50011 Voice (515) 294-7172; FAX 515-294-1337; jfw@iastate.edu <https://faculty.sites.iastate.edu/~jfw/> <http://www.eeob.iastate.edu/> (Department home page)

“Wendel, Jonathan F [EEOB]” <jfw@iastate.edu>

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JGU Mainz AntCognition

Postdoctoral researcher to study the molecular regulation of learning and forgetting in ants

An 18-month postdoctoral position is available at Johannes Gutenberg Mainz, Germany, starting from 1 July 2023 (or later). The work will be carried out in the research group headed by Dr Susanne Foitzik and in collaboration with Dr Inon Scharf (Univ Tel Aviv, Israel) and Dr Romain Libbrecht (Univ Tours) and is funded by the DFG (German Science Foundation). Extension of position might be possible.

Context: The proposed project aims to investigate the molecular underpinnings and fitness consequences of spatial learning in the context of foraging in *Cataglyphis* ants. Experiments on the influence of epigenetic regulators on the ability of foraging ants to learn and forget their way through a maze were conducted by our collaborative team in Israel. The task of the postdoc is now to analyze the transcriptional basis and epigenetic changes underlying these cognitive performances.

Prerequisites: PhD and demonstrated experience through publications in the field of evolutionary biology, molecular genomics and bioinformatics.

Interested candidates should apply by sending (1) a letter of motivation, (2) a CV with publication list and (3) the names, institutions and email addresses of three references to Susanne Foitzik at foitzik@uni-mainz.de. Position is open until filled, if interested send a short email announcing your interest to apply.

Prof. Dr. Susanne Foitzik Institute of Organismic and Molecular Evolution Johannes Gutenberg University Mainz Biozentrum Hanns Dieter Hübisch Weg 15 D-55128 Mainz Germany Tel: +49 (0) 6131 39 27 840 Fax: +49 (0)6131 39 27 850 Email: foitzik@uni-mainz.de

“Foitzik, Susanne” <foitzik@uni-mainz.de>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca<mailto:golding@mcmaster.ca>)

JyväskyläU Evolutionary Genetics And Genomics

A position for a post-doctoral researcher is available in the group of Ilkka Kronholm at the department of Biological and Environmental Sciences at the University of Jyväskylä, Finland. Starting earliest on 1st of September 2023 or later in the autumn, for a fixed term of three years.

The genetics, epigenetics, and evolution group lead by Ilkka Kronholm studies the properties of mutations and spontaneous epigenetic changes, parental effects, and genetic architecture of complex traits. Our research questions are focused on understanding how different intrinsic and extrinsic factors affect evolutionary adaptation. As model systems we use the filamentous fungus *Neurospora crassa* and fission yeast.

The researcher will join an ERC-funded project that studies the properties of epistatic interactions. Epistatic interactions are known to play an important part in certain aspects of evolution, such as speciation. However, role of epistasis in adaptation has remained controversial. In this project, we will estimate the probability that a pair of new mutations will exhibit an epistatic interaction, and study the distribution of epistatic effects. We will estimate mutational and epistatic effects empirically using mutation accumulation experiments, genetic analysis, and genomics in the filamentous fungus

Neurospora crassa, and fission yeast.

Recent work from the group includes developing mutation accumulation lines for the filamentous fungus *Neurospora crassa*, and analysis of how chromatin modifications affect mutation rate, see:

Villalba de la Peña et al. 2023. Chromatin structure influences rate and spectrum of spontaneous mutations in *Neurospora crassa*. *Genome Research* 33: 1-13 <https://doi.org/10.1101/gr.276992.122> While the postdoctoral researcher is expected to contribute to the current project, and jointly supervise students, there is also the possibility to develop your own interests within the framework of the project or to participate in teaching if the researcher so wishes.

To be eligible, the candidate needs to have a doctoral (PhD) degree in evolutionary biology, population genetics, genetics or a related discipline with strong interest in evolutionary genetics. Previous experience with fungal genetics is not required. Experience in analysis of different types of sequencing (NGS) data, as well as good computational skills and statistical knowledge, is considered an advantage. Good written and oral communication skills in English are required.

The initial annual salary will be approximately 41 800 49 000 EUR (gross income, including a holiday bonus), depending on the qualifications and experience of the candidate.

Finland has a high standard of living, with free schooling (also in English), affordable childcare, good family benefits, and healthcare. Jyväskylä is located in central Finland in the Finnish lakeland, and has excellent opportunities for different nature, outdoor, and sports activities. The city of Jyväskylä is a major educational center and the city has a large student population. As such there is a vibrant cultural scene in the city.

To find useful information about the University of Jyväskylä, the City of Jyväskylä and living in Finland, see the international staff guide:

<https://www.jyu.fi/en/workwithus/international-staff-guide> Please attach the following documents to the online application form:

1. Curriculum vitae, including contact information of two people willing to provide a reference
2. Cover letter explaining your motivation, research interests, and career plans
3. List of publications
4. Relevant certificates / diplomas

Please submit your application at the latest by 20 July 2023 by using the link found on page:

<https://tinyurl.com/39bwztpw> Informal inquiries are welcome and should be directed to Ilkka Kronholm

email: [ilkka.kronholm\(at\)jyu.fi](mailto:ilkka.kronholm(at)jyu.fi)

lab website: ikronholm.net

twitter: @kronholmlab

Please note that I also have a PhD Researcher position open, so be sure to apply to the correct position.

“Kronholm, Ilkka” <ilkka.kronholm@jyu.fi>

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LehighU CavefishEvoDevo

The Kowalko lab at Lehigh University is recruiting a postdoc!

The lab aims to understand the genetic and developmental mechanisms that underlie behavioral variation and evolution. We use a broad array of approaches, including gene editing, behavioral quantification, and genetic mapping.

We are looking for a colleague interested in studying the genetic and neural mechanisms that underlie natural variation in social behaviors in the blind Mexican cavefish, *Astyanax mexicanus*. *Within this position, there is significant room to develop projects based on personal interests.

Applicants should have a PhD in Biology, Genetics, Neuroscience, or a related field.

This position is funded by an NIH grant, with a starting salary following the NIH postdoctoral salary scale. To apply or for more information, please send a CV, a brief letter explaining your interest in the position, and references to Johanna Kowalko: jok421@lehigh.edu.

Please do not feel obliged to reply outside of your normal working hours.

Johanna Kowalko, PhD Assistant Professor Lehigh University Department of Biological Sciences Iacocca Hall 111 Research Dr Bethlehem, PA 18015 (610) 758-3694 she/her/hers

Johanna Kowalko <jok421@lehigh.edu>

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LinköpingU Sweden DrosophilaEvolGenomics

Postdoctoral opportunity in Evolutionary Genomics/Bioinformatics - Sweden

We are looking for a highly motivated postdoctoral fellow in Evolutionary Genomics/Bioinformatics for a two-year position at the Department of Physics, Chemistry and Biology, Linköping University in Urban Friberg’s research group (<https://liu.se/en/research/friberg-lab>).

Our research group primarily focuses on the evolution and genetics/genomics of ageing and sex differences. Ongoing projects involve the transcriptomics of ageing, condition dependence of sex-biased gene expression, and factors that influence the penetrance of deleterious mutations. All these projects utilize *Drosophila melanogaster* as a model organism. The postdoctoral fellow will be expected to contribute to these projects, as well as to develop a new line of research on factors that govern the germline mutation rate. Recent advances have revealed unexpected variation between species and individuals with respect to the occurrence of de novo mutations, but our understanding of the causes to this variation is yet limited.

The ideal candidate holds a PhD in evolutionary biology (with substantial experience in bioinformatics - RNA-seq and/or analysis of whole genome sequence data) or in bioinformatics. Proficiency in handling large-scale next-generation sequence data is particularly welcome. Competence in statistics and evolutionary genomics, as well as experience of fruit flies or other insect systems, is a merit. The working language at the department and in the lab is English. A high standard of spoken and written English is required.

Linköping University is a modern university with a vibrant and growing biology division. The university attracts some 27 000 students from all over the world, offering an international and stimulating research environment as well as providing a multitude of opportunities for collaboration and social interactions. Linköping is situated in central Sweden, conveniently located only a couple of hours by train/car from Stockholm and have beautiful and easily accessible surroundings.

Applications should be written in English and include i) a cover letter detailing earlier research, a list of skills,

and a motivation to work on above mentioned projects (max 3 pages), ii) a complete CV, and iii) the names and email addresses of 2-3 independent referees. Applications should be sent as one PDF to urban.friberg@liu.se. Applications will be reviewed continuously, but for full consideration please apply by June 19. The position will remain open until filled. The expected starting date is between September and November 2023.

Urban Friberg <urban.friberg@liu.se>

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LundU ModellingPollinationDynamics

Post-doctoral fellow ? Modelling of eco-evolutionary pollinator responses to land-use Lund University, Centre for Environmental and Climate research:

Lund University was founded in 1666 and is repeatedly ranked among the world's top 100 universities. The University has 40 000 students and 7 600 staff based in Lund, Helsingborg and Malm?. We are united in our efforts to understand, explain and improve our world and the human condition.

The Faculty of Science conducts research and education within Biology, Astronomy, Physics, Geosciences, Chemistry, Mathematics and Environmental Sciences. The Faculty is organized into nine departments, gathered in the northern campus area. The Faculty has approximately 1500 students, 330 PhD students and 700 employees.

The Centre for Environmental and Climate Research, CEC (<http://www.cec.lu.se>) conducts research, education and communication on environmental science and climate research at Lund University.

The postdoctoral position is funded by BECC (Biodiversity and Ecosystem services in a Changing Climate), an interdisciplinary strategic research area based on collaboration between more than 250 researchers at the universities of Lund and Gothenburg. BECC develops research that contributes to the visualization and generation of knowledge to predict and manage the combined effect of climate change and land use on biodiversity, ecosystems and ecosystem services. BECC's strength is its existing and successful research leaders from many different disciplines such as biology, political science, ge-

ology, mathematics, physical geography and economics that together develop BECC. The Center for Environmental and Climate Research, CEC, hosts BECC. CEC is both a physical and a virtual center at Lund University. CEC conducts research, education and communication about environmental science and climate research.

You will work with mathematical modeling and computer simulations to increase understanding of the ecological and evolutionary processes that underlie pollinating insects' response to land use in agricultural landscapes. Sustainable agriculture is promoted by mutualistic interactions between plants and pollinators, which contribute to crop pollination and thereby create economic and societal values. However, these interactions are influenced by changes in agricultural practices and landscape structure. Traditionally, the focus has been on how plant-pollinator interactions are affected by changes in pollinator community composition. In this project, we take an additional step by including evolutionary responses to agricultural change. We aim to do this by formalizing the plant-pollinator community's response to landscape structure and agricultural intensity using spatially explicit and trait-based eco-evolutionary models. An important component of the work is to inform the models with land use data and test the models against observed adaptation and population dynamics of bees, bumblebees, and butterflies. The aim is to study how insects can respond to agricultural intensification and landscape simplification, taking into account both short- and long-term effects, with a focus on adaptation of functional insect traits. By fitting the models to data, we aim to quantify active processes in the study area and communicate ways to optimize ecosystem services for stakeholders and decision-makers.

Duties:

The main duties involved in a post-doctoral position are to conduct research. Teaching may also be included, but up to no more than 20% of working hours. The position shall include the opportunity for three weeks of training in higher education teaching and learning.

More specifically the project involves:

- Conceptualization and modeling of the complexity in which ecological interactions and evolution of organisms may affect mutualistic interactions, population dynamics and community dynamics in a changing environment.
- Design and implementation of spatially explicit, trait-based, and eco-evolutionary models of plant-pollinator interactions and dynamics.
- Connect modeling plant-pollinator dynamics with concepts in agricultural and environmental economics to determine policy implications.
- Model parameterisation and validation given available data, using computational and statistical (e.g.

Bayesian) approaches.

Qualification requirements:

Appointment to a post-doctoral position requires that the applicant has a PhD, or an international degree deemed equivalent to a PhD, within the subject of the position, completed no more than three years before the date of employment decision. Under special circumstances, the doctoral degree can have been completed earlier.

Additional requirements: - The candidate should have a Ph.D. in environmental science/ ecology/evolutionary biology alternatively in Physics,

— / —

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Lyon Paris PhenotypicEvolution

Postdoc: Multiscale approaches and phenotypic diversity. Lyon/Paris. A postdoctoral position at the math-bio interface is available to work on project “A micro-macro analysis of the stochastic evolution of phenotypic traits diversity” in collaboration with the following research groups located in Lyon and Paris:

NUMED Inria team (UMPA, ENS de Lyon). H el ene Leman <http://www.umpa.ens-lyon.fr/recherche/numed> Mod elisation de la biodiversit e (IBENS, ENS Paris). H el ene Morlon <http://www.biologie.ens.fr/phyloeco/-index.html> SMILE group (Coll ege de France): Amaury Lambert <http://www.lpsm.paris/smile> Modeling the evolution of the phenotypic traits of species, such as their body mass, morphology, or life history traits, is fundamental to understanding the different factors that shape this evolution. At the macro-evolutionary scale (i.e. on geological time scales), trait evolution is traditionally modeled by a Markov process, such as a diffusion, or a diffusion with jumps, running on a species phylogeny. Coupled with inferential approaches, these models allow us to study the modes and rates of trait evolution from observed traits of fossil and/or present-day species. The aim of this project is to study the deterministic and stochastic macro-evolutionary outcomes of micro-evolutionary mechanisms (mutation, dispersal, adaptation, genetic drift) underlying phenotypic evolu-

tion. The approach will combine techniques of quantitative genetics, adaptive dynamics, and comparative phylogenetics. This work will allow us to better understand, partition and predict the effects of ecological and micro-evolutionary mechanisms in the dynamics of traits at the macro-evolutionary scale and more specifically, to understand and identify its stochastic component. The mathematical techniques considered will include micro-macro scale limits, studies of stochastic differential equations and Markovian processes.

We are looking for a highly motivated post-doc with interest in phenotypic evolution, phylogenetics and probabilistic models. Applicants should have a good background in probability and in evolutionary theory. Programming skills would be welcome. Excellent written, verbal, and interpersonal skills are desirable. Speaking French is not mandatory.

The project is funded by IMPT (<https://impt.math.cnrs.fr/>). The position is for one year. It will be hosted in one of the three labs, with regular visits in the other ones. Starting date is expected to be before the end of this year. Salary will be commensurate with experience and will range from 25 to 30 K euro /yr (free of charge but before income tax) - schools and healthcare in France are cheap when not free. Questions could be sent to helene.leman@inria.fr and helene.morlon@bio.ens.psl.eu Applications will be received until Sunday, June 25. To apply please submit :

- i) a cover letter summarizing research interests and expertise;
- ii) a CV;
- iii) a list of publications;
- iv) names and contact information of two references,

on <https://emploi.cnrs.fr/Offres/CDD/UMR5669-HELLEM-001/Default.aspx> . H el ene MORLON <helene.morlon@bio.ens.psl.eu>

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MNHN Paris ButterflyspeciationGenomics

3-year postdoctoral position on Speciation genomics in Amazonian Morpho butterflies

We are seeking a highly motivated postdoctoral researcher to join our team working on the diversification of trait and species in the butterfly genus *Morpho*. The postdoc will be hired for 3 years in the Center for Interdisciplinary Research in Biology at Collège de France in Paris (France), and will participate to the ERC project OUTFOTHEBLUE, led by Violaine Llaurens. The OUTFOTHEBLUE project will start in October 2023 at the Collège de France, where the team of Violaine Llaurens will move. From this date, the postdoc can start as soon as he/she will be available. Population genomics and demographic inference skills, as well as interest for the speciation process are requested for this position.

Whether ecological specialization plays a role in initiating speciation or simply in reinforcing barriers to gene flow is nevertheless still largely unknown. In the butterfly genus *Morpho*, up to 13 species can be observed in sympatry, with specialization in different micro-habitats (canopy vs. understory) and different temporal niches (divergent pattern of daily activities), making this genus a relevant system to test for the role of ecological interactions on speciation and reinforcement.

Though not chemically-defended, blue *Morpho* species are scarcely caught by bird predators (Pinheiro & Campos, 2019) due to their fast and erratic flight (Le Roy et al., 2021a). Their iridescent blue dorsal pattern strongly contrasts with their cryptic brownish ventral pattern resulting in a series of flashes during flapping flight, that increases the difficulty in capturing them (Murali, 2018). This colour pattern may in turn act as a signal of their strong escape ability and hence deter potential attacks (Pinheiro et al., 2016). Evasive mimicry may therefore be promoted among sympatric species in a manner similar to Mâllerian mimicry (Pâpez et al., 2021), hence favouring local convergence in wing colour patterns. Consistent with this hypothesis, we demonstrated a striking parallelism in the phenotypic diversification of three closely-related blue *Morpho* species throughout their sympatric distribution, resulting in multiple local convergence in the width of their dorsal blue band (Llaurens et al., 2021). Using a behavioral

experiment in the field in Amazonian Peru, we also documented substantial reproductive interference generated by colour pattern resemblance, with aggressive interactions between males and courtship with females from all three mimetic species (Le Roy et al., 2021b).

The postdoc will use population genomic approaches to determine the history of sympatry and gene flow among these three closely-related species, using demographic inference methods applied to multiple populations within the three species. He/she will also investigate the genetic and developmental basis of colour pattern convergence in the 3 sister-species of the genus *Morpho*, to test for molecular convergence. The postdoc will aim at identifying the relative role of ecological and genomic barrier to gene flow, together with other team members working on the phenotypic variations and ecological interactions in the field.

Reference genomes for the three focal species are already available (Bastide, Lopez-Villavicencio et al. 2023), as well as resequencing data for several populations for these three species, throughout their geographic range, allowing the postdoc to start analysing relevant datasets as soon as he/she will start the project. The postdoc will then have the freedom to determine his/her main axes of research, depending on her/his own interest and to design the right sampling strategy with the whole team. The current team working on the ERC Project in Paris, supervised by Violaine Llaurens (Director of Research at CNRS), includes Vincent Debat and Manuela Lopez-Villavicencio, both assistant professors at the Muséum National Histoire Naturelle of Paris, as well as two Phd students investigating phenotypic variations and ecological interactions in natural populations.

Applications should be sent through the dedicated website from CNRS: [<https://emploi.cnrs.fr/Offres/CDD/-UMR7205-VIOLLA-003/Default.aspx?lang=EN>]

Note that the application deadline will be extended until July 15th, and that you can contact [violaine.llaurens@mnhn.fr] if you have some trouble to apply through the website.

References

Bastide H, Lâpez-Villavicencio M, Ogereau D, Lledo J, Dutrillaux AM, Debat V, Llaurens V, (2023) Genome assembly of three Amazonian *Morpho* butterfly species reveals Z-chromosome rearrangements between closely-related species living in sympatry. *Gigascience*, in press
 Le Roy, C., Amadori, D., Charberet, S., Windt, J., Muijres, F. T., Llaurens, V., & Debat, V. (2021a). Adaptive evolution of flight in *Morpho*

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NHGRI-NIH Bethesda Bioinformatics Comparative Genomics

— Computational and Statistical Genomics Branch
National Human Genome Research Institute National
Institutes of Health — Postdoctoral Fellowship in Bioinformatics and Comparative Genomics

— A postdoctoral position is currently available in the Computational and Statistical Genomics Branch (CSGB) of the National Human Genome Research Institute (NHGRI). The position is in the laboratory of Andy Baxevanis, Ph.D., whose research group uses comparative genomics approaches to better understand the molecular innovations that drove the surge of diversity in early animal evolution. The overarching theme of Dr. Baxevanis' research program is in line with the NIH Intramural Research Program's renewed emphasis on developing new animal models for the study of basic biology.

Dr. Baxevanis' group is currently leading efforts to analyze the genomes of colonial hydrozoan species. The regenerative abilities of colonial hydrozoans such as Podocoryna and Hydraetia make them excellent models for the study of key questions related to pluripotency, allrecognition, and stem cell biology, work that will be significantly advanced by the availability of high-quality whole-genome sequencing data from these organisms. The successful applicant will have the opportunity to develop and apply bioinformatic approaches to these and other large-scale genomic data sets, focusing on the evolution of specific protein families and biological pathways.

Candidates should have or be close to obtaining a Ph.D. or equivalent degree in bioinformatics, computational biology, computer science, molecular biology, or a closely related field.—Candidates with a background in comparative genomics or evolutionary biology are particularly encouraged to apply.—Programming skills and experience in the application of computational methods to genomic data are highly desirable. Applicants must possess good communication skills and be fluent in both spoken and written English. The ability to learn how to use new software and quickly become expert in its

use, critical thinking, problem-solving abilities, and the ability to work semi-independently are required.

The NIH Intramural Research Program is on the Bethesda, Maryland campus and offers a wide array of training opportunities for scientists early in their careers. The funding for this position is stable and offers the trainee wide latitude in the design and pursuit of their research project. The successful candidate will have access to NHGRI's established and robust bioinformatics infrastructure, as well as a Top 500 high-performance computing resource available through NIH's Center for Information Technology.

Interested applicants should submit a—curriculum vitae, a detailed letter of interest, and the names of three potential references to Dr. Baxevanis at—andy@mail.nih.gov.—Postdoctoral traineeships are not available to scientists who have more than five years of relevant research experience since the receipt of their most recent doctoral—degree.—

For more information, please visit—<https://irp.nih.gov/pi/andy-baxevanis>.— — The NIH is dedicated to building a diverse community in its training and employment programs. — — — —

“Baxevanis, Andy (NIH/NHGRI) [E]”
<andy@mail.nih.gov>

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NHM UOslo Evolution Ecol Biodiversity

With this competitive two-year postdoctoral fellowship, the Natural History Museum in Oslo (NHMO) aims to bring in a talented researcher to enhance our STADIS hub. STADIS is a hub at NHMO with the long-term goal of establishing a Norwegian Centre of Excellence. STADIS focuses on stability and discontinuity in and between different biological system levels, such as genomes, phenotypes, species, communities, and ecosystems. The hub encompasses empirical and theoretical research as well as method development. Please take a look at our webpage at <https://www.nhm.uio.no/english/research-groups/stadis/> and contact us for further information (see the contact information below). The successful candidate for this position will work in close collaboration with staff members of at least two of NHMO's research groups. The position comes with an independent re-

search budget of 100,000 NOK per year.

More details on the position can be found here: <https://www.jobbnorge.no/en/available-jobs/job/-247022/postdoctoral-fellow-stadis-hub> You will also have to submit your application via the above link.

NHM has approximately 160 employees and is located in Oslo's Botanical Garden, which is very close to the city center, and at ?kern. The Botanical Garden and the city of Oslo provide a vibrant environment for both work and personal life, with proximity to the forest, the Oslofjord and mountain areas. For almost 200 years, specimens of animals, fungi, plants, rocks, minerals and fossils have been collected, studied and preserved at NHM. With over 6 million specimens, NHM has the largest natural history collection in Norway. The improvement, maintenance and use of scientific collections is central to our work. The herbarium and fungarium comprise over 1.4 million and 600,000 plant and fungal specimens, respectively, of which the majority are Nordic. The zoological collections jointly comprise more than 2.5 million objects. The museum also houses over 1 million paleontological and geological collections. The NHM DNA bank holds several hundred thousand tissue samples and DNA extracts. The museum provides excellent research facilities in-house, including various molecular- and microscopy laboratories. NHM has ten research groups that pursue research and education within basic and advanced biosystematics and biodiversity as well as geological studies.

Deadline: October 1st. Hence, you have plenty of time to develop your project together with your hosts. Starting date: January 1st or as soon as possible thereafter.

Contact information: About the fellowship: Professor Hugo de Boer (h.de.boer@nhm.uio.no)

About information on the STADIS hub and the proposal for a Norwegian Center for Excellence: Professor Torsten Struck (t.h.struck@nhm.uio.no)

About the recruitment system: HR-Adviser Thomas Br?n? (thomas.brana@nhm.uio.no)

On a personal note, I am personally cannot be the primary host of a PostDoc with a ground-breaking project as I already host one, but I am more than happy to point you to possible hosts when you provide me with a brief description of your planned project.

I know that our researchers would be more than happy to host you. Links to our research groups you can find here: <https://www.nhm.uio.no/forskning/index.html> Looking forward to see your applications,

Torsten.

- CONTACT INFORMATION - Torsten Hugo Struck

Professort of Evolutionary Genomics & Curator of the Helminth collection

Frontiers in Evolutionary Zoology Department of Research and Collections Natural History Museum

phone: +47-228-51740 e-mail: t.h.struck@nhm.uio.no twitter: @fez_nhm web-page: www.frontiersinevolutionaryzoology.com blog: blog.annelida.de

t.h.struck@nhm.uio.no

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NIH Maryland ViralEvolution

National Center for Biotechnology Information National Library of Medicine National Institutes of Health

Postdoctoral Fellowship in Virus Evolution and Spillover

The post-doctoral scholar will study how rapidly evolving RNA viruses (e.g., influenza, coronavirus) spillover, transmit, and evolve at the human-animal interface, using advanced Bayesian phylogenetic approaches and large-scale genomic data. The post-doctoral scholar will perform a central role in data analysis within an interdisciplinary team of international scientists conducting fieldwork, experimental studies, and statistical analyses on emerging pathogens. Note that this position is strictly computational (no fieldwork or lab work required). This project is part of a longstanding government-academic partnership spanning multiple Federal agencies and academic institutions to study disease spillover between humans, wildlife, and livestock and identify successful intervention strategies to break transmission in real-world settings.

Candidates should have or be close to obtaining a Ph.D. or equivalent degree in bioinformatics, computational biology, computer science, molecular biology, or a closely related field. Candidates with a background in Bayesian approaches to phylodynamic analysis of virus populations are particularly encouraged to apply. Programming skills (e.g., R, python) and an ability to learn how to use new software and quickly become expert in its applications to genomic data are essential. Applicants must possess good communication skills and be prepared to work collaboratively within a fast-paced team of international scientists to inform time-sensitive outbreak responses.

Interested applicants should submit a curriculum vitae, a detailed letter of interest, and the names of three potential references to Dr. Martha Nelson at nelsonma@mail.nih.gov.

The NIH is dedicated to building a diverse community in its training and employment programs.

“Nelson, Martha (NIH/NLM/NCBI) [E]”
<nelsonma@mail.nih.gov>

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SmithCollege TeachingBioinformatics

Teaching Postdoctoral Fellow in Bioinformatics/Genomics

The Department of Biological Sciences at Smith College invites applications for a 2-year, benefits-eligible, combined teaching/postdoctoral position to begin no later than December 15th, 2023.

The selected candidate will be hosted in one of the labs carrying out bioinformatics/genomics-related research (Barresi, Katz, Lama, Williams), and will be expected to undertake postdoctoral research linked to the goals/methods of the host lab. In addition, the selected candidate is expected to teach a 300-level undergraduate seminar in bioinformatics, along with an associated bioinformatics lab, in the spring semester in each of the two years of the appointment, and to supervise research projects for undergraduates.

Candidates should have a strong foundation in bioinformatics and genomics. Ph.D. in bioinformatics, genomics or computational biology or a relevant field is expected by the time of appointment. Candidates from groups underrepresented in the life sciences are encouraged to apply.

Located in Northampton, MA, Smith College is the largest women’s college in the country and is a member of the Five College Consortium. More details about the Department of Biological Sciences may be found at <https://www.smith.edu/academics/biology>. Submit application at <http://apply.interfolio.com/125359> with a cover letter, curriculum vitae, teaching statement, research statement and a diversity/inclusion statement as well as contact information for three references. Review of applications will begin in early June, and will

continue until the position is filled.

Questions and inquiries should be directed to Laura Katz (lkatz@smith.edu) or Robert Dorit, Chair (rdorit@smith.edu).

Laura Katz <lkatz@smith.edu>

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SouthernAfrica eDNA metabarcoding

Postdoctoral fellowship in eDNA metabarcoding of freshwater and marine aquatic biodiversity in southern Africa

Applications are open for a full-time, two year postdoctoral position to be hosted by the von der Heyden lab at the Department of Botany and Zoology at Stellenbosch University, South Africa. The successful fellow will take on a leading role projects that makes use of eDNA metabarcoding and species distribution modelling of fish and invertebrate communities in southern Africa and investigate the use of metabarcoding data for various ecological questions. The primary focus of our research projects is to use environmental DNA metabarcoding to characterise community diversity in a variety of marine (South African coastline) and freshwater ecosystems (including the Okavango Delta) in South Africa, to not only allow comparison between sites, but to assess this methodology as a tool for monitoring change in ecosystems. Our lab has built significant expertise in developing and carrying out eDNA based research in marine and freshwater ecosystems in the region. The project is based in the research group of Prof. Sophie von der Heyden and has collaborators in Botswana, Namibia, Japan and Canada. The starting data for this position is flexible, but ideally at the beginning of September/October 2023.

Qualifications and experience: Preference will be given to applicants with a strong background in at least one, but ideally two, of the following fields: eDNA metabarcoding, molecular ecology, species distribution modelling, biological statistics, coastal ecology or freshwater biology. Applicants should have at least three peer-reviewed outputs in an international peer-reviewed journal; the outputs need to demonstrate senior/lead authorship with a strong focus on eDNA metabarcoding in aquatic environments. A valid driver’s license is a requirement due to the extensive field work along the

South African coastline. Applicants should be motivated, independent, and willing to engage and mentor postgraduate students at several levels (ranging from Honours to PhD), as well as be willing to work in remote environments.

Responsibilities: Applicants will be required to collaborate with all collaborators and students, with the fellow be able to plan and lead field trips, as well as analyse data, writing and publication of peer-reviewed articles, presentations at national and international conferences, and science communication initiatives. Mentorship and some teaching opportunities will be possible for the successful fellow depending on level of experience.

Duration: This is a two year position starting from September 2023 - August 2025.

Value: The position carries a value of R320 000 per year (tax free) and is available for two years. Contributions towards relocation (flights costs) are available.

Background: The postdoctoral fellow will be based at the von der Heyden Lab at Stellenbosch University, one of Africa's leading aquatic (marine, estuarine and freshwater) research groups specializing in the use of molecular tools to understand patterns and processes driving southern Africa's rich marine biodiversity. We are a dynamic lab, with a strong emphasis on research excellence as well as student training and support. Our work spans population genetics and phylogeography, fisheries management/stock identification, historical biogeography and the impacts of historical and contemporary climate change on species distributions. To do this, we utilise a wide range of tools including genomics and environmental DNA, with our overarching goal of promoting the integration of molecular tools into conservation and sustainable utilization of southern African marine species and resources. You can find out more about the von der Heyden lab and marine research at Stellenbosch University here: www.vonderheydenlab.com, via FaceBook: www.facebook.com/vonderheydenlab or on Twitter: @vonderheydenlab.

The von der Heyden lab is housed in the Department of Botany and Zoology at the University of Stellenbosch. This university is one of the top-ranked in the southern Hemisphere, with strong undergraduate and postgraduate training and research. Stellenbosch is a historical, safe and vibrant community surrounded by magnificent mountains, close to the sea. Find out more at www.sun.ac.za. Queries and applications: Please direct all enquiries to Prof. Sophie von der Heyden (svdh@sun.ac.za). In order to apply, please submit (1) a detailed CV with all relevant experience including publications and conference attendance, (2) three contactable referees, (3) a letter of motivation. Closing date

Please note that we are committed to supporting candidates based on excellence as well as equity.

The integrity and confidentiality of this email are governed by these

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TexasAMU CropMolecularBiologyGenomics

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-Genomics_R-062639 Job Title Post-doctoral Fellow Crop Molecular Biology and Genomics

Agency Texas A&M Agrilife Research

Department Institute for Advancing Health through Agriculture-Project Management

Proposed Minimum Salary Commensurate

Job Location College Station, Texas

Job Type Staff

Job Description 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. Assist in coordinating lab inventory and equipment.

Preferred experience (but not required):

- Experience growing any of the following crop plants such as rice, maize, sorghum or wheat, and conducting experiments in greenhouses and growth chambers. -

Ability to prepare samples for next-generation sequencing (NGS) including extracting and purifying RNA, DNA, and possible rRNA cleanup. - Ability to work with basic command line NGS pipelines for mapping DNA or RNA Illumina reads to a reference genome and conduct SNP analysis or differential expression analysis. - Experience installing command line software. - Sample preparation and experience running instruments for metabolomics or ionomics (eg. ICP-MS) or willingness to learn.

Required Education:

A PhD degree in plant biology, biochemistry, genetics, microbiology, or other closely related fields.

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 <tim.paape@ag.tamu.edu>

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TrinityC Dublin DiseaseModelling

Postdoc:,Trinity_College_Dublin.disease_modelling

I am looking for a postdoctoral fellow with an interest and expertise in modelling disease dynamics under changing and variable temperatures. Over the last five years our lab group has conducted numerous experiments measuring the thermal performance of the *Daphnia-Ordospora* host-parasite system under varied thermal conditions and we are now looking to incorporate these results into disease models to test if we can accurately forecast how diseases will be affected by both the rising mean temperatures and the increasing number of extreme weather events associated with global change.

The position and application The position is expected to start the 1st of September for one year, with a second

year depending on the (likely) extension of the SFI grant funding the project. Salary will be euro 45,819 per year. You will be based in the research group of Pepijn Luijckx at the Zoology Department of Trinity College Dublin. If you are interested in applying, please send me your CV and a cover letter with your research interests and why you think you would fit the position. The application package and any questions you may have can be sent to Luijckxp@tcd.ie before the application deadline of 1st of August.

Expectations The successful candidate is expected to develop theoretical models to predict disease dynamics, disease outbreaks, and within-host proliferation for the *Daphnia-Ordospora* host-parasite system under heat-waves and temperature fluctuations. This could include but is not limited to: expanding on the existing for the *Daphnia-Ordospora* Susceptible-Infected (S-I) model developed for predicting disease outbreaks under constant temperatures (see Kirk et al 2018 and Kirk al 2020, for parameterization and model validation); testing if non-linear averaging of host and parasite performance can be used to capture host and disease parameters under variable temperatures; evaluating if the Metabolic Theory of Ecology can be used to predict model parameters; and modelling the acclimatisation of both host and parasite to shifting temperatures. However, the candidate has the opportunity to shape the direction, scope and approach of the project to fit their own strengths and interests.

Optional opportunities There is an opportunity to do empirical work to test model predictions, using the variable temperature facility of the lab (capable of running 1800 individual animals or 72 whole populations under 24 temperature regimes), if that is of interest to the candidate. As a senior member of the team you will also have the opportunity, if desired, to supervise PhD, master and undergraduate projects. This could include co-supervised empirical projects measuring model parameters and testing model predictions or theoretical projects under the candidate's supervision. While not required, teaching & outreach opportunities are also available if the candidate would like additional experience. Finally, there are also opportunities to write grants for additional funding if desired.

The lab-group My lab currently consists of 3 PhD students and myself. A research assistant is also expected to join the team to support testing model predictions and parameter estimations. Currently two of the PhD students are working on various experiments involving extreme temperature events (this includes numerous measurements that could be used to parametrise models) while the 3rd PhD student is focused on understanding the effects of host density and diversity on disease

spread and outbreak. The lab uses the *Daphnia*-disease system as a model to address various ecological and evolutionary questions including the effects of climate change on disease, evolution of sexual reproduction, the genetic basis of resistance and the impact of multiple stressors.

The Zoology Department and Trinity College The Zoology Department of Trinity College Dublin is a small, close-knit department consisting of eleven research groups with interests in modelling, climate change, biodiversity, and aquatic biology. Members of different research groups frequently interact and collaborate and there are several ongoing activities such as NERD-Club, R-Club and various social activities. The department is located on the main campus of Trinity College in the heart of Dublin, providing access to a wide variety of pubs, restaurants, cinema and others. The College and the lab group are committed to equality, diversity and inclusion and I welcome applications from all individuals, including those with disabilities, those that had non-traditional career paths or those that have taken time out for reasons including family or caring responsibilities.

Pepijn Luijckx <LUIJCKXP@tcd.ie>

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UBritishColumbia LocalAdaptationEvolGenomics

A post-doctoral fellowship on the population genomics of local adaptation is available in the labs of Tom Booker and Mike Whitlock at the University of British Columbia.

Project description:

We plan to explore how the evolution of local adaptation affects the genealogies of selected loci and how information about gene genealogies may be used to better understand the genomic basis of local adaptation. Current methods for inferring the genetic basis of local adaptation rely on genotype-environment association (GEA) (the correlation of allelic state and the environment) to infer which loci are important for local adaptation and such approaches may not take full advantage of information present in genetic data. This project will explore how the rich information captured by ancestral recombination graphs may potentially be

used to better understand the genetic basis and evolution of local adaptation. The ultimate goal of the project is to develop a deeper understanding of the evolution of local adaptation and the genetics of local adaptation.

This position will involve landscape genomic simulations (e.g. using SLiM) to model a variety of demographic scenarios and genetic parameters and analysis of population genomic data. We are looking for a recent PhD with experience in programming and an interest in the population genetics of adaptation.

The position is funded for one year, with a salary of \$60,000 (CAD) plus benefits, with the possibility of extensions through internal fellowship opportunities. The position will be jointly hosted by the Department of Forest and Conservation Science and the Department of Zoology, connected to the Biodiversity Research Centre at the University of British Columbia in Vancouver, Canada. Please contact Tom Booker (Thomas.booker@ubc.ca) or Mike Whitlock (whitlock@zoology.ubc.ca) for more information or to apply. To apply, please send a CV, a cover letter connecting the research project to your interests and skills, and a list of approximately three persons who could be contacted for references. Applications will be considered until the position is filled.

We encourage applications from members of groups that have been marginalized on any grounds enumerated under the BC Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Métis, Inuit, or Indigenous person. We understand that career paths vary. Legitimate career interruptions will in no way prejudice the assessment process and their impact will be carefully considered.

“Whitlock, Michael” <michael.whitlock@ubc.ca>

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UBritishColumbia VirulenceEvolution

The King Lab in the Departments of Zoology and Microbiology & Immunology (Faculty of Science) at the University of British Columbia (UBC) is seeking an enthusiastic and self-motivated Postdoctoral Fellow to advance knowledge and improve understanding of the

factors driving pathogen virulence evolution. Dr. Kayla King leads a diverse team with an interdisciplinary approach to studying the evolution and ecology of host-pathogen interactions.

This position is part of a larger program examining the evolutionary biology of infectious disease amidst climate change and biodiversity loss. The successful applicant will have the opportunity to conduct experimental evolution in a wild invertebrate-microbial pathogen system and to develop complementary virulence evolution theory in collaboration with Dr. Sally Otto (UBC Zoology). In addition, there are several opportunities to contribute to ongoing studies in The King Lab.

We are looking for a recent PhD (evolutionary biology, ecology, infectious disease) with experience in culturing microbes and developing/testing mathematical theory. Bioinformatics experience is an asset, but not essential. Start date is negotiable. Funding for this position is available for 2 years with possibility of extension. Salary will start at \$60,000 (CAD) with a generous extended health benefits package. Salary will be commensurate with qualifications, experience, and any independent funding secured. Only shortlisted candidates will be notified. Contact Dr. Kayla King (kayla.king@ubc.ca) for more information or to apply. To apply, please send a CV, a letter of interest, and names/contact information for 2-3 references in one file (Last Name, First Name: PDF.Virulence.Evolution)

For more details about The King Lab and post-doctoral opportunity, please see: <http://thekinglab.com> Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person. We understand that career paths vary. Legitimate career interruptions will in no way prejudice the assessment process, and their impact will be carefully considered.

Kayla C King (She, Her, Hers) Professor Depts of Zoology and Microbiology & Immunology Life Sciences Institute and Biodiversity Research Centre University of British Columbia | Musqueam Traditional Territory

www.thekinglab.com @kaylacking

“King, Kayla” <kayla.king@ubc.ca>

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UEdinburgh InsectChromosomeEvolution

Dear all,

I am looking for a postdoctoral researcher to join my lab at the Institute of Ecology and Evolution, as part of an ERC starting grant. This project investigates the evolution and molecular mechanisms of unusual chromosome behaviour in fungus gnats, a clade of flies with arguably the most complex chromosome system of any organism. Their development includes several rounds of chromosome elimination associated with soma/germline differentiation, sex determination and spermatogenesis.

The Opportunity:

Possible avenues of research, depending on the interests of the postdoc include: 1) Studying the molecular evolution of different chromosomes depending on their patterns of inheritance and elimination. 2) Using the fast turnover of sex determination within the clade as a model for studying sex chromosome evolution. 3) Studying the molecular mechanisms of chromosome elimination and meiotic drive. There will also be scope for the postdoc to develop their own research plans with an view to becoming an independent investigator. The project will involve collaboration with partners within the UK and overseas. There are substantial funds within the grant for data collection, experimental work and conference attendance. The project will be funded till the end date of the grant, June 2025.

Your skills and attributes for success:

* Interest in population genetics, chromosome biology and insect reproduction. * PhD in evolutionary or molecular genetics * Experience with analysing genome and transcriptome data * Knowledge of computational biology tools, including R and command-line interfaces. * Experience with basic molecular genetics wet lab techniques.

UE07 36,333 - 43,155 Per Annum

College of Science and Engineering / School of Biological Sciences / Institute of Ecology and Evolution

Fixed-term, expected dates: 1/08/2023-03/06/2025

Full time (35 hours per week)

For more information please email me laura.ross@ed.ac.uk and you can apply for the

position here: View the external job posting < <https://elxw.fa.em3.oraclecloud.com/hcmUI/CandidateExperience/en/job/7562> >

best wishes, laura

Dr Laura Ross Senior lecturer and Dorothy Hodgkin fellow Institute of Evolutionary Biology The University of Edinburgh Ashworth Laboratories Charlotte Auerbach Road Edinburgh EH9 3FL, UK laura.ross@ed.ac.uk +44 (0)131 650 7708 <http://lauraross.bio.ed.ac.uk> Please note that I generally do not work on Mondays

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Laura Ross <Laura.Ross@ed.ac.uk>

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UFlorida MarineInvertStemCellRegeneration

University of Florida, Whitney Lab for Marine Bioscience, St. Augustine, FL: Postdoctoral Associate in Marine Invertebrate Stem Cell Biology

JOB DESCRIPTION

The University of Florida, Whitney Laboratory for Marine Bioscience, Schnitzler Lab (<https://www.whitney.ufl.edu/people/current-research-faculty/christine-e-schnitzler-phd/>) seeks a highly motivated postdoctoral researcher to work on our NIH-funded stem cell heterogeneity project titled “Characterizing the molecular regulators of stem cell populations during homeostasis and regeneration in *Hydractinia*, an emerging cnidarian research organism” using modern experimental and computational biology techniques.

The position is based at the University of Florida's Whitney Laboratory for Marine Bioscience in St. Augustine, FL. Additional information regarding the position can be found at: <https://www.whitney.ufl.edu/people/current-research-faculty/christine-e-schnitzler-phd/opportunities/> Information about the Whitney Laboratory can be found at <http://www.whitney.ufl.edu/> The project includes characterizing subpopulations of adult stem cells including investigating how stem cells are maintained and how progenitor populations are specified in different contexts, including regeneration.

The work includes molecular biology, cellular biology, imaging, cell sorting, and bioinformatics approaches. The position will involve performing research as part of a team, as well as training and mentoring other lab members.

The position is guaranteed for one year with the possibility of renewal and is available August 1st, 2023 with a preference to applicants that can start by October 1st, 2023 or earlier. Salary is \$55,000 + benefits for first-year postdocs.

A Ph.D. is required. Desired experience includes molecular and cellular biology and fluorescence imaging techniques. Experience with cnidarians or other marine invertebrate organisms would be advantageous. Experience with cell sorting and/or single-cell RNA sequencing would be advantageous. Background knowledge and experience with stem cells and regeneration would be preferred. Other relevant experience, such as functional genomics experience should be highlighted in the application. Diversity is a core value of our research group, and we are committed to fostering an inclusive and equitable work environment.

Minimum requirements: Candidates should have or be close to obtaining a Ph.D. in cell and molecular biology, evolutionary developmental biology, zoology, or a related subject. We are a lab that supports diversity and inclusion. Candidates from groups that are traditionally underrepresented in the sciences are strongly encouraged to apply.

To apply, applicants should email the following to Dr. Christine Schnitzler (christine.schnitzler@whitney.ufl.edu):

1. CV
2. One-page to two-page research statement including motivation for seeking this position. Statements that include demonstrable commitment to diversity, equity, and inclusion are encouraged.
3. Names and contact information of three references

Review of applications will start July 10, 2023 and continue until the position is filled.

ADDITIONAL INFORMATION

The University of Florida is an equal opportunity institution dedicated to building a broadly diverse and inclusive faculty and staff.

Hiring is contingent upon eligibility to work in the US.

The Whitney Laboratory for Marine Bioscience (<http://www.whitney.ufl.edu/>) is a University of Florida research center. Founded in 1974, the Whitney Lab is dedicated to using marine model animals for studying

fundamental problems in biology and applying that knowledge to issues of human health, natural resources, and the environment. The Laboratory is situated on a narrow barrier island with both the Atlantic Ocean and the Intracoastal Waterway within a few hundred feet of the facility. It is located in Marineland, about 18 miles south of St. Augustine and 80 miles from Gainesville. The academic staff of the Whitney Laboratory consists of 10 tenure-track faculty members, together with approximately 50 postdoctoral fellows, students, lab managers, lab technicians, and visiting scientists. Dr. Mark Q. Martindale is the Director. Fields of research conducted at Whitney Laboratory include: Evolutionary Developmental Biology; Wildlife Genomic Medicine; Fish Aquaculture; Biomechanics and Neurobiology of Fish Locomotion; Natural Products Chemistry; Genomics, Memory, and Neuronal Evolution; Wetland Biogeochemistry; Bioinformatics and Evolutionary Biology; Evolutionary and Functional Genomics; Regeneration; and Neurobiology and Physiology. The lab also

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UFlorida SilkGenomicsEvolution- ButterfliesMoths

The Kawahara Lab at the McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, USA, is currently seeking a postdoctoral fellow to conduct research on the silk and silk glands of Lepidoptera (butterflies and moths). The postdoc will be part of a large-scale NSF IntBio grant, “Collaborative Research: Silk protein innovation and novelty (SPIN): integrating across disciplines to decipher silk fiber evolution” between multiple institutions (AMNH, BYU, George Washington U., U. of Utah) to study the genotype and phenotype of insect silks. The postdoc will be supervised by co-PI Akito Kawahara (UF) and will work closely with Kawahara Lab students, postdocs, and staff. They will also regularly communicate with other senior personnel and co-PIs on the SPIN project, including Ed Stanley (UF, CT-Scanning), Whitney Stoppel (UF, Engineering), Paul Frandsen (BYU, genomics), Cheryl Hayashi

and Richard Baker (AMNH), Russel Stewart (Univ. of Utah), and Arnaud Martin (George Washington Univ.).

The position is for a minimum of 2 years, with a possibility of extension. Position available immediately.

Required: A Ph.D. in biology, preferably either in 1) genomics/transcriptomics, or 2) insect phenotyping. Experience with computer programming / scripting / data analysis (e.g. R, Python), and excellent communication and writing skills.

Strong interest in entomology/invertebrate biology is preferred, but not required.

The successful candidate will work closely with students and staff in the lab and lead projects on butterfly and moth silk genomics/evolution and silk gland phenotyping (CT-Scanning). Responsibilities include data analysis and interpretation, contribution to analysis strategy, code development, review of relevant literature, and preparation of project reports and manuscripts for publication in peer-reviewed journals.

The McGuire Center is committed to creating a safe and equitable work environment. Candidates from groups that have historically been underrepresented in science are strongly encouraged to apply.

Salary: \$60,000. To ensure full consideration please send a single pdf that includes: 1) 1-2 page cover letter detailing your relevant experience and fit for this position, 2) curriculum vitae, and 3) names and contact information of at least three references familiar with your work. Any questions regarding this position may be directed to Dr. Akito Kawahara, Florida Museum of Natural History, University of Florida (kawahara@flmnh.ufl.edu). Lab website: <http://www.flmnh.ufl.edu/mcguire/kawahara/> Formal review of applications will begin June 30, and opened until the position is filled.

Akito Y. Kawahara, Ph.D. Curator and Professor McGuire Center for Lepidoptera and Biodiversity Florida Museum of Natural History University of Florida Powell Hall, 3215 Hull Road Gainesville, FL 32611-2710 USA Tel: 352.273.2018 Email: kawahara@flmnh.ufl.edu <http://www.flmnh.ufl.edu/mcguire/kawahara/> “Akito Y. Kawahara” <kawahara@flmnh.ufl.edu>

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UHawaii Hilo BioinformaticsGenomics

Overview: The Hawai'i Cooperative Studies Unit (HCSU) is recruiting an HCSU Postdoctoral Research Analyst with experience in genomics/bioinformatics to contribute to a collaborative research project with the USGS Pacific Island Ecosystems Research Center (PIERC) and other stakeholders. This postdoc will contribute to a study of mosquito population dynamics, evolutionary biology, and ecology in preparation for landscape-scale mosquito control using Wolbachia Incompatible Insect Technique (IIT) to be implemented as part of avian conservation efforts in Hawai'i.

Job Summary

Regular, Full-Time, RCUH Non-Civil Service position with the Hawai'i Cooperative Studies Unit (HCSU) at the University of Hawai'i at Hilo (UHH) in collaboration with the United States Geological Survey Pacific Island Ecosystems Research Center (USGS PIERC). Work location is in the USGS PIERC office in Hawai'i Volcanoes National Park on the island of Hawai'i. Continuation of employment is dependent upon program/operational needs, satisfactory work performance, availability of funds, and compliance with applicable Federal/State laws.

MONTHLY SALARY: Salary commensurate with qualifications.

DUTIES: Contributes to a study of mosquito population dynamics and ecology in preparation for landscape-scale mosquito control using Wolbachia Incompatible Insect Technique (IIT). Develops novel approaches to characterize mosquito population demographics and identify biotic and abiotic factors that contribute to population connectivity using next-generation sequencing datasets, climate datasets, and landscape features. Assists with planning for other types of disease reduction techniques that might be enacted in the future, including synthetic biology approaches for vector or disease control. Coordinates with state, federal, and/or international agencies and researchers to collect additional Culex specimens and processes samples in the lab (e.g., dissection, DNA extraction, next-generation sequencing library preparation, analysis). Carefully documents analysis and performs data management and database archiving. Reviews relevant literature and works with the research

team leads and collaborators. Authors or co-authors scientific manuscripts related to the Mosquito Genomics project, and more broadly, mosquito ecology, mosquito control, and related topics. Assists with preparing all research products for the United States Geological Survey (USGS) policy and quality reviews, such as Fundamental Science Practices (FSP). Edits and formats scientific manuscripts. Produces project summaries for internal or general distribution at scientific meetings, workshops, and presentations, including outreach products for different audiences.

PRIMARY QUALIFICATIONS: EDUCATION: PhD from an accredited college or university in Bioinformatics/Genomics, Ecology, Biology, Zoology, Fisheries/Wildlife, or other related field.

EXPERIENCE: One to three (1-3) years of experience working or conducting research in the field of genomics, bioinformatics, ecological modeling, and applied statistics or data analysis. Includes experience with study design, scientific writing, and publishing peer-reviewed scientific papers.

KNOWLEDGE: Must have proficiency in molecular biology and in commonly used bioinformatic programs for analysis of high throughput sequencing data. Must have familiarity with landscape genomics tools to perform statistical analysis, and with mining public repositories for landscape features and climate variables.

ABILITIES & SKILLS: Must possess strong molecular biology, data management, and quantitative analytical skills. Ability to prepare written reports of study results and analyses with good grammar and proficiency. Ability to evaluate and analyze existing techniques and procedures. Demonstrated excellent oral and written communication skills. Ability to work independently to manage, analyze, and interpret written reports and data. High degree of attention to detail, high level of organization, and problem-solving skills. Ability to work effectively as part of a multidisciplinary team.

POLICY/REGULATORY REQUIREMENT: As a condition of employment, employee will be subject to all applicable RCUH policies, procedures, and trainings and, as applicable, subject to University of Hawai'i's and/or business entity's policies, procedures, and trainings. Violation of RCUH's, UH's, or business entity's policies and/or procedures or applicable State or Federal laws and/or regulations may lead to disciplinary action (including, but not limited to possible termination of employment, personal fines, civil and/or criminal penalties, etc.).

SECONDARY QUALIFICATIONS: Experience with strategies for gene-based population control tools,

Diptera genomics, vector control studies, and climate change studies, population abundance analysis, and survey techniques. Experience in the use of statistical models for the analysis of management decisions or

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UHelsinki UrbanDiseaseEvolution

The University of Helsinki is an international scientific community of 40, 000 students, faculty and other staff. It is one of the leading multidisciplinary research universities and ranks among the top 100 universities in the world. The Organismal and Evolutionary Biology Programme is one of the three research programmes at the Faculty of Biological and Environmental Sciences. Most of its activities are centered at the Viikki campus where it comprises roughly 40 research groups which employ 40 principal investigators and 120 researchers.

Helsinki Urban Rat Project, an multidisciplinary research project, invites applications for a

POSTDOCTORAL RESEARCHER IN URBAN DISEASE ECOLOGY in the Academy of Finland funded project “Urban rats as a model species for disease ecology” for a fixed term of four years, with six month trial period, starting at 1st September 2023.

Helsinki Urban Rat Project (HURP; <https://www.helsinki.fi/en/projects/urban-rats>) is a multidisciplinary research project, started in 2018, striving to understand how rats live in urban areas and how they interact with humans. The overarching aim of the project is more peaceful coexistence between humans and rats. We use a multitude of approaches from ecology to environmental policy research and visual arts. For this project, we have received funding from Academy of Finland to delve deeper into the effects of lethal rat control in the city areas. Urban rats encounter continuous population perturbations caused by pest management professionals’ actions. Interestingly, this pest management provides a potential pseudoexperimental setting in looking at the effects of population changes on rat movement, pathogen and parasite prevalence and population structure before and after treatment. While the core of the project is in disease ecology, it can linked more towards movement ecology, population genetics, different

pathogens or parasites or applied ecology in relation to the applicant’s interest. HURP has previously surveyed the pathogen and parasite diversity, tools for studying rat movement and city-level population dynamics and has established connections with stakeholders, including property-owners and pest management companies. Thus, this project presents an excellent position to perform highly impactful scientific work in multidisciplinary and societally relevant context.

We are looking for a candidate who is able to 1) help in recruiting field sites, 2) lead fieldwork, 3) lead pathogen analysis, 4) work with collaborators in collating other data and eventually 5) analyze and communicate these results in both scientific articles and to lay audiences such as stakeholders and local citizens. The candidate should have completed a PhD in a relevant field, such as zoology, ecology, wildlife biology, microbiology or virology. Previous experience on field work, pathogen analysis in lab, shown track record on publishing in international peer-reviewed journals and excellent communication skills (in English, Finnish and Swedish additional assets) are required. It is also possible that this position is filled with two persons with two-year contracts, where the first person concentrates on fieldwork and the second in lab work. Additional assets include driver’s license and license to perform animal experiments (e.g., FELASA C). We encourage applications from recently graduated PhD holders.

We strive to be a truly interdisciplinary project, thus interaction with biologists, social scientists and artists working within HURP may form a substantial part of the project and interest to interdisciplinary work is an asset. The project sites will be quite literally in people’s backyards, so ability to work with local citizens and other stakeholders is of high importance. Postdoctoral researcher will be located in University of Helsinki, Viikki campus. The position is for 48 months starting in September. Later starting date is possible, but this shortens the length of contract. The salary of the postdoctoral researcher will be based on level 5 or 6 of the demands level chart for teaching and research personnel in the salary system of Finnish universities. In addition, the appointee will be paid a salary component based on personal performance. The starting salary of the postdoctoral researcher will be ca. 3 400-3 800 euros/month, depending on the appointees’ qualifications and experience. The University of Helsinki offers comprehensive services to its employees, including occupational health care and health insurance, sports facilities, and opportunities for professional development. The International Staff Services office (<https://www.helsinki.fi/en/-university/working-at-the-university>) assists employees from abroad with their transition to work and life in

Finland. A six-month trial period will be applied.

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UInnsbruck HeatwaveAdaptation

Dear EvolDir Community!

JOB OFFER: Postdoc Position: UInnsbruck.HeatwaveAdaptation

A postdoc position is available in the group of Aquatic Evolutionary Ecology at the University of Innsbruck (Research Department for Limnology, Mondsee), Austria.

In this position, you can experimentally examine the evolutionary ecology of the responses of the freshwater snail *Lymnaea stagnalis* to changing environmental conditions under climate change. The specific goals are to evaluate (1) if natural snail populations are adapted to local temperature conditions that they experience, and (2) if and how much evolutionary potential exists in their heatwave responses. The project is linked to other work in the research group focusing on natural selection on and quantitative genetics of heatwave responses of *L. stagnalis*.

General information about the research group and the institute can be found at <https://www.uibk.ac.at/limno/>

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.

We invite highly motivated persons with a strong background in evolutionary ecology and experimental research to apply for this position. A PhD degree is required. Earlier experience with the study system is not necessary.

The project is funded by the Austrian Science Fund (FWF) for a maximum of 27 months depending on the starting date. The salary is based on the personnel cost rates of the FWF

<https://www.fwf.ac.at/en/research-funding/personnel-costs> Start of the project: as soon as possible.

Qualified persons are invited to apply by email. Please attach a single PDF file including a letter of motivation, CV, a research statement (max 2 pages), and names plus contact information of two references to otto.seppaelae@uibk.ac.at. The subject line should read “postdoc 2023”. Evaluation of the applications starts June 16, 2023. Only complete applications are considered. Top candidates will be interviewed.

Prof. Otto Seppälä

“Burggraf, Sonja” <Sonja.Burggraf@uibk.ac.at>

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ULodz VertebrateEvolution

Postdoc: EXILE - University of $\text{Å}\acute{\text{o}}\text{d}\text{Å}\text{O}$, Poland - Department of Ecology and Vertebrate Zoology

REVIEW OF APPLICATIONS WILL CONTINUE UNTIL THE POSITION IS FILLED

An exciting postdoctoral position funded by the Polish National Science Centre (NCN, grant EXILE) is still available at the Department of Ecology and Vertebrate Zoology of the University of $\text{Å}\acute{\text{o}}\text{d}\text{Å}\text{O}$ (Poland) under the supervision of Philippe Kok (STELLAR Research Group, see <http://www.philippekok.com/stellar-research-group/>). The position is offered for one year, renewable for an additional year (thus 2 years total) and is available immediately.

Brief scientific summary of the project: While potential responses of vertebrate communities to environmental constraints have been widely tested in post-Pleistocene landscapes, extrinsic and intrinsic drivers of vertebrate population density in ancient insular terrestrial landscapes (fragmented paleosurfaces) are essentially unknown. The overarching objective of this project (acronym EXILE for EXObIoLoGy on Earth) is to explore, document and understand how environmentally hostile naturally fragmented paleosurfaces may have driven/alterd peculiar behavioural, bio-physical and eco-physiological adaptations, and ultimately the evolutionary trajectories of vertebrates. EXILE focusses on the “Lost World” moonlike tabletop mountains of northern South America (tepui). We hypothesize that ancient endemic lineages of vertebrates thriving on these paleosurfaces, such as the toad genus *Oreophrynella* and the lizard genus *Riolama*, have developed unique behavioural, bio-physical and eco-

physiological traits/strategies to cope with the tepuis' highly contrasted environmental conditions. EXILE stems from our previous work in this unique system and was inspired by unconventional findings, testimony to the tremendous research discoveries yet to be made in this unusual ecosystem. It is well known that body temperature and water balance are jointly influenced by heat and water exchange within the organism and between the organism and its environment. This exchange is modulated by (i) the biophysical and physiological properties of the organism and by (ii) behavioural strategies. Biophysical properties include morphology, surface properties, and metabolic modes. For instance, skin colour, thickness, and ultrastructure in reptiles and amphibians determine heating capacity and resistance to water loss. EXILE will specifically focus on two main complementary research axes: (1) thermal biology, and (2) bio-physical adaptations to dehydration. We will use selected Pantepui amphibians and reptiles on a single tepui summit at ca. 2,800 m elevation. In order to situate these results in the appropriate ecological and evolutionary context, we will also investigate non-insular upland (ca. 1,000 m elevation) closely-related taxa in the surrounding Pantepui tropical rainforest, as well as the closest relatives of the tepui taxa living in a Neotropical post-Pleistocene landscape at similar elevation (ca. 2,800 m elevation in the sub-paramo in the Andes). Field expeditions coupled with the use of advanced techniques such as highly sensitive thermal imagery, including the use of drones to record thermal images of the landscapes from the air, will be carried out to complete our project. We will also run a variety of cutting-edge behavioural tests, either in the native environment of the animals or in our field laboratory, and use modern imagery techniques (such as high-resolution X-ray microcomputed tomography and electronic microscopy).

Summary for the public is available here:

<https://ncn.gov.pl/sites/default/files/listy-rankingu/2020-09-30apsv2/streszczenia/505651-en.pdf>

Requirements: We are looking for an out of the box thinker with strong motivation and positive energy, as well as an eye for the details and excellent organisational skills. The successful candidate will have a PhD in biological or closely related science and experience in field work, preferably under difficult conditions and during extended periods. The EXILE project involves heavy field work in different locations (such as tepui top, intervening forest at tepui foot, and one locality around 2,800m elevation in the Andes), for usually 6-8 weeks.

The ideal candidate will also have some of the following: Excellent publication record (according to ex-

perience); Excellent skills in statistics; Experience in behavioural tests; Experience in thermal imagery (a drone pilot license is a plus); Experience in $\hat{I}_{\frac{1}{4}}$ CT/SR- $\hat{I}_{\frac{1}{4}}$ CT/SEM/TEM/soft-tissue staining techniques; Experience in population estimates; Background in amphibians and/or reptiles eco-physiology Among other things the successful applicant will conduct field work with

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UmeaU ConiferGenomics

The Department of Ecology and Environmental Science at Umeå $\frac{1}{2}$ University, Sweden, invites applicants for a postdoctoral researcher position in conifer genomics with a focus on Scots pine genomic diversity and GWAS of fungal resistance and other breeding traits.

The position is fully funded for two years with a flexible starting date in the fall 2023. The application deadline is 2023-08-31. For detailed information about the project, desired qualification and terms of employment, see:

https://www.umu.se/en/work-with-us/open-positions/postdoctoral-position-2-years-in-conifer-genomics_637403/ Application is made through the above web link.

For any additional information about the position, please contact Professor Xiao-Ru Wang, xiao.ru.wang@umu.se

We are looking forward to your applications!

Xiao-Ru Wang

Dept. of Ecology & Environmental Science, Umeå $\frac{1}{2}$ University

S-901 87 Umeå $\frac{1}{2}$, Sweden

Xiao-Ru Wang <xiao.ru.wang@umu.se>

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UNAM Mexico BluePOP Project

Visiting Research Fellow (self-funded postdoc)

We seek an experienced demographer with interest in predator-prey relations to analyse impacts of offspring predation rates on viability of a highly philopatric population of blue-footed boobies, using a 33-year database. Monitoring of annual reproduction of more than 20,000 individuals marked at fledging and resighted as breeders on Isla Isabel, Mexico has been maintained over more than three decades, revealing a pattern of considerable interest to managers interested in preventing extinctions in insular ecosystems. Removal of invasive cats and black rats from Isla Isabel, as part of a program of restoration, produced effects opposite to expectations from classic mesopredator release theory and put an iconic marine bird population at risk. Predation on hatchling boobies by the Atlantic Central American milk snake diminished from 18% to 8% after removal of cats in 1996, then increased to 32% after subsequent removal of rats in 2009 (Ortega et al. 2021. How removal of cats and rats from an island allowed a native predator to threaten a native bird. *Biological Invasions*, <https://link.springer.com/content/pdf/10.1007/s1030-021-02533-4.pdf>). Annual monitoring continues into the present.

We are interested in understanding how the booby population has been affected by and responded to the three levels snake predation experienced, in particular parameters such as age and probability of recruitment, re-nesting probability, sabbaticals, annual breeding success, emigration and immigration rates, rate of population growth and life history adjustments. The prospective postdoctoral fellow will be expected to design, in interaction with us, a research proposal for submission to the Mexican Council for Science and Technology (~5,000 words, deadline: October 6th, 2023, starting date February 2024; more information available at https://conacyt.mx/wp-content/uploads/convocatorias/estancias_posdoctorales_nacionales/gestion_2023/Convocatoria_EPM-2023.pdf) to secure a postdoctoral research scholarship for at least two years, renewable for a second 2-year period. Applying for alternative or additional scholarships (e.g., DGAPA-UNAM, AXA, or any other funding scheme listed at <https://asntech.github.io/postdoc-funding-schemes/>) according to the candidate's interests, is also a possibility. The research will be carried out in the

Laboratorio de Conducta Animal at the Instituto de Ecología, on the UNAM's main campus in Mexico City, as well as through fieldwork on Isla Isabel, all in collaboration with Dr Sergio Ancona (associate researcher, UNAM), Prof Steve Beissinger (external co-supervisor; UC Berkeley) and Prof Hugh Drummond (UNAM).

Please send inquiries, CV, brief statement of experience, and names/email addresses of two references to Sergio Ancona at sergio.ancona@iecologia.unam.mx and Hugh Drummond at hugh@unam.mx

More information on the long-term booby project available at: <https://www.researchgate.net/lab/Laboratorio-de-Conducta-Animal-Drummond-Lab-Hugh-Drummond> *Sergio Ancona* Laboratorio de Conducta Animal Instituto de Ecología Universidad Nacional Autónoma de México Circuito Exterior S/N Ciudad Universitaria Ciudad de México 04510 México Tel: +52 55 5622 9007 Email: sergio.ancona@iecologia.unam.mx

iecologia.unam.sergio.ancona < <http://web2.ecologia.unam.mx/perfiles/perfil.php?ID=-3D1236324449441> >

sergio.ancona@iecologia.unam.mx

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UParis Saclay Experimental Evolution

A post-doctoral researcher position (12 month, renewable once) is available to work in collaboration with both of our groups from Sept 2023.

The objective of this post-doctoral project is to design, run, and analyze a series of experimental evolution studies in which different environmental factors (such as temperature, food, or chemicals) are manipulated to distinguish the roles of adaptation, plasticity, and genetic constraints on the evolution of the transcriptome.

We are looking for a motivated early career evolutionary biologist, with a PhD degree obtained after 2018. Previous experience with experimental evolution would be appreciated, including lab work with micro/macro-organisms, basic molecular biology (DNA and RNA extraction), and population genetics.

The position will be part of a 3-year project funded

by the French National Research Agency (ANR). The research consortium includes 2 PIs (Arnaud Le Rouzic and Anne Genissel), a PhD Student, an ANR-funded technician, and the current post-doc. This project aims at understanding and predicting the evolution of transcriptomes under stable and fluctuating selection combining both theoretical and empirical approaches. The post-doc will be co-advised by both PIs. He/she will be formally based at EGCE (Institute for Ecology and Evolution, IDEEV), and will perform the experimental work at BIOGER (Agro-Campus). Both institutes offer an exciting and active scientific life; they are located 3 km apart, on the new research campus of Paris-Saclay, 35 km south of Paris.

Application web site:

<https://emploi.cnrs.fr/Offres/CDD/UMR9191-ARNLER-003/Default.aspx?lang=EN> Informal inquiries to:

arnaud.le-rouzic@universite-paris-saclay.fr
anne.genissel@inrae.fr

Arnaud LE ROUZIC CNRS Researcher IDEEV - EGCE
12 Route 128 [<http://www.universite-paris-saclay.fr/>]
91190 Gif-sur-Yvette

Arnaud Le Rouzic <arnaud.le-rouzic@universite-paris-saclay.fr>

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Uppsala PDF PhD Plant Evolutionary Genetics

1.Postdoc_flower_microbes_evolution_Uppsala.Sweden

Postdoctoral position, Evolution of floral microbiomes
Position: A postdoctoral position is available at the Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden, to study the relevance of floral microbiome for plant reproduction. The project will use a combination of microbiomics and plant genetics to understand the contribution of the floral microbiome to plant reproduction and pollinator health. The position is funded by a project grant from FORMAS for an initial period of two years. The successful applicant will be hosted by the group of Adrien Sicard in the Department of Plant Biology at Swedish Agricultural University in the Ultuna Campus, Uppsala. The working atmosphere is highly international and offers exciting opportunities for

scientific exchange. Uppsala is a lively university city located close to Stockholm (40 minutes by train) and Stockholm's main international airport (20 minutes by train). The position's starting date is summer/fall 2023, according to agreement.

Qualifications: Candidates are required to: - hold a PhD degree in life science with relevant research experience in plant genetics, microbial ecology and/or bioinformatics. - have a strong background in genomics and molecular biology. - have prior experience with computational methods for the analyses of biological sequence data and preferably for microbiome analyses. - have basic molecular biology skills including nucleic acid isolation, library preparation, protocol optimization, bacterial growth assay and sterile techniques. - strong organization and record-keeping skills to store and analyze data - excellent English communication and writing skills to prevent results in groups meeting and conferences and publish results. - have demonstrated interpersonal skills to collaborate within a scientific interdisciplinary research team.

Candidates should also be highly motivated, creative and have the ability to take initiative. Prior practical experience in plant quantitative genetics, manipulating insect pollinators and/or field experiments are also assets.

Applications: Applications should be submitted through the SLU's application portal (<https://www.slu.se/en/-/about-slu/work-at-slu/jobs-vacancies/>) under the reference SLU.ua.2023.2.5.1-2052 portal by July 10, 2023. Applications must contain (1) a CV with a full list of publication, (2) a description of research experience, (3) a letter of motivation (4) contact information of two to three referees and (5) copies of the PhD diploma (in Swedish or English). For informal inquiries about the position, please contact adrien.sicard@slu.se

2.PhD_Plant_speciation_genetics_Uppsala_Sweden

PhD position in Plant speciation genetics.

Position: A PhD position is available at the Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden to study the mechanisms of reproductive isolation in plants. The project will use a combination of reverse genetics, transcriptomics, microscopy and population genetics approaches to understand the molecular processes preventing close relative species from hybridizing in sympatry. The position is funded by a project grant from the Swedish Research Council for four years. The successful applicant will be hosted by the group of Adrien Sicard in the Department of Plant Biology at Swedish Agricultural University in the Ultuna Campus, Uppsala. The working atmosphere is highly international and offers

exciting opportunities for scientific exchange. Uppsala is a lively university city located close to Stockholm (40 minutes by train) and Stockholm's main international airport (20 minutes by train). The position's starting date is summer/fall 2023 according to agreement.

Qualifications: Candidates are required to hold (at the starting date) an MSc degree or have completed four years of university-level education, including one year at the MSc level. Obtained degrees should be related to molecular biology, evolutionary genetics, cell biology or related topics. Candidates should be highly motivated, creative and have the ability to take initiative and interact well with other scientists. Excellent English communication and writing skills are necessary as it is the working language in the hosting group. Prior practical experience in plant genetics and bioinformatic skills are assets.

Applications: Applications should be submitted through the SLU's application portal (<https://www.slu.se/en/about-slu/work-at-slu/jobs-vacancies/>) under the reference SLU.ua.2023.2.5.1-2053 by July 10, 2023. Applications must contain (1) a CV, (2) a motivation letter, (3) contact information of two referees, (4) copies of previous degrees and transcripts records and (5) a copy of the master thesis.

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UppsalaU PopulationGenomics

Reminder, 10 days left to apply: Postdoctoral researcher/fellow in population genomics Uppsala University, Department of Ecology and Genetics

A position as a postdoctoral researcher/fellow in population genomics is available at the Department of Ecology and Genetics, Plant Ecology and Evolution, Uppsala University, Uppsala, Sweden. The Department of Ecology and Genetics is an international environment with staff and students from all over the world. Our research spans from evolutionary ecology and genetics to studies of ecosystems. For more information, see www.ieg.uu.se. Project description

How and why genetic diversity varies among species is a central and long-standing question in evolutionary

biology. In the 70's Richard Lewontin noted that the observed range of genetic diversity is much narrower than expected given the huge range of population sizes ("the Lewontin's paradox"). Despite recent progress, this puzzling observation remains unresolved, likely because the various hypotheses (role of demography, selection and recombination, and life-history traits) have been studied separately. In the project, the candidate will analyze all processes together, focusing on seed plants, which offer large variations in abundance, life history traits, and genomic attributes. We will ask i) How do demography, selection and recombination shape genetic diversity among species? ii) Does it depend on life history traits? iii) Is it enough to explain the Lewontin's paradox? We will build on a unique recombination dataset we have already gathered and on publicly available polymorphism data and life history and ecological traits for each species. The candidate will run a combination of population genomic analyses to infer past and recent demography, the intensity of selection modulated by recombination and how it depends on life history and ecological traits. Empirical results will be compared to extensive simulations.

Duties

Gathering of sequence data, population genetics analyses, computer simulations. The applicant will be responsible for gathering sequence data and analyzing them, and publishing articles.

Qualifications required

PhD degree or a foreign degree equivalent to a PhD degree in population genomics or more broadly in evolutionary biology. The degree needs to be obtained by the time of the decision of employment. Those who have obtained a PhD degree three years prior to the application deadline are primarily considered for the employment. The starting point of the three-year frame period is the application deadline. Due to special circumstances, the degree may have been obtained earlier. The three-year period can be extended due to circumstances such as sick leave, parental leave, duties in labour unions, etc. Candidates must be able to express themselves fluently in spoken as well as written English. We attach great importance to personal qualities such as ability to work in a group.

Qualifications desired

Good proficiency in programming (bash, Python, C++, R) and/or statistical and modelling skills will be highly valued.

About the employment

The employment is a temporary position for 24 months,

with a possibility to an extension up to a maximum of 36 months, according to central collective agreement. Scope of employment 100%. Starting date 2023-08-15, or as agreed. Placement: Uppsala

For further information about the position please contact: Professor Sylvain GléÅ, Sylvain.Glemin@ebc.uu.se

Application: The application should include 1) a letter of intent describing yourself, your research interests and motivation of why you want to work as a postdoctoral researcher/fellow and why you are suitable for the position, 2) a CV 3) a short description of your education, 4) a copy of your PhD degree, your grades and a copy of your thesis, 5) name and contact information to at least two reference persons (e-mail address and phone no.), 6) relevant publications. The application should be written in English.

Applications are done at the site: <https://www.jobb.uu.se/details/?positionId=626438> You are welcome to submit your application no later than June 15 2023.

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> Martin Lascoux <martin.lascoux@ebc.uu.se>

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UppsalaU PopulationGenomicsImmunogenetics

2-year post doc position in Population Genomics/ Immunogenetics at the Department of Ecology and Genetics, Uppsala University.

Background: Global climate change is predicted to increase temperatures worldwide and increase climatic instability. This will significantly impact infectious disease dynamics, altering pathogen distribution and disease intensity, as well as host immunocompetence. Ectotherms are particularly susceptible to thermal changes, as they are dependent on the ambient environment to regulate their physiological processes, including the immune

response. We are exploring the interactions between temperature and host immune response in the Swedish sand lizard (*Lacerta agilis*), using experimental studies, population genomics, expression analyses and epigenetics.

The selected candidate will take part in bioinformatic processing and analysis of whole genome sequencing data, RNAseq, and DNA methylation data for population genomics and comparative immunogenetic analyses. The candidate also has scope to explore endogenous retrovirus polymorphism in sand lizards (similar to recent studies in Darwin's finches: Hill et al 2022; and koala: Lillie et al 2022; see also <https://www.ieg.uu.se/animal-ecology/-Research+groups/lillie-lab/Publications/>). Additional duties include active participation in the research group activities, training of junior group members in relevant techniques and engagement in collaborative projects.

Job description: - 2-year post doc scholarship position at the Department of Ecology and Genetics, Uppsala University. We are looking for someone with a strong background in bioinformatics, with the following desired qualifications: - Good proficiency in programming (e.g.: bash, Python, R) - Background in population- and/or quantitative genetics - Background in ecology and evolution - Previous experience of analysing large sequencing datasets - 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 Mette Lillie and the research will involve collaboration with Mats Olsson at the Department of Biological and Environmental Sciences, Gothenburg, Sweden. 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 founda-

tion provides financial support directly to the successful applicant via a tax-free scholarship for two years (<https://www.carltryggersstiftelse.se/>).

Application: Please submit your application as a single pdf to mette.lillie@ebc.uu.se with email heading: "Application Carl Trygger".

The application should include: - Cover letter justifying how your background fits with the outlined project (maximum two pages) and why you have applied - A full CV with publication list, including submitted manuscripts and their status - Certificate of PhD degree (or a dissertation date if in the making) - Contact information for at least two referees most familiar with your work

Short-listed applicants will be called for interviews via Zoom.

Due Date: Please send your application by July 31st.

Starting date: Oct 1st 2023, or as otherwise agreed.

Further inquiries can be directed to Mette Lillie: mette.lillie@ebc.uu.se

I look forward to your application.

Mette Lillie Group Leader Department of Ecology and Genetics Uppsala University Sweden

När du har kontakt med oss på Uppsala universitet med e-post innebär det att vi behandlar dina personuppgifter. För att läsa mer om hur vi gör det kan du läsa här: <http://www.uu.se/om-uu/dataskydd-personuppgifter/> E-mailing Uppsala University means that we will process your personal

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UToronto GeneticConsequencesOfOutbreaks

The James Lab (www.jameslab.ca) at the University of Toronto is looking for a motivated, creative, and quantitatively-oriented researcher who is interested in studying the spatial ecology and population dynamics of outbreaking species through the lens of population genetics.

The goal of this project is to develop and test a con-

ceptual framework of how cyclic irruptive population dynamics influence spatial and temporal patterns in population genetic variation, and how these patterns influence eco-evolutionary inference. Applications of this research include a better understanding of the role of dispersal and other demographic processes on outbreak spread, as well as outbreak spatial synchrony.

The starting point for this work is the eastern spruce budworm (*Choristoneura fumiferana*), an outbreaking forest insect pest native to North America. The postdoc will have the opportunity to work with existing large scale spatial-temporal genetic (SNP) and demographic data, contribute to the development additional genetic and demographic resources, and generate synthetic data using individual-based simulation models.

The selected candidate will be expected to contribute to the functioning of the lab, identify new research opportunities, publish results in scientific journals, and participate in scientific conferences.

Applicants must have already completed their PhD by the start date (which is somewhat flexible), and should have a strong record of scholarly publication and scientific presentations. In terms of technical qualifications, I am looking for someone with experience and interest in population dynamics, population genetics, statistics, and modelling. Competencies in scientific programming (e.g., R, Python) and data wrangling are required, as are excellent oral and written communication skills.

The initial contract is for one year with the possibility of renewal for up to three years. Annual salary is \$55,000 plus benefits. Financial support will also be provided for conferences and professional development. More information about post-doctoral positions at the University of Toronto can be found here: <https://postdoc.sgs.utoronto.ca/> Review of applications will begin on July 31 and the position will remain open until a suitable candidate is found. Interested applicants should send a cover letter stating research interests, CV, and the names and contact information of three references as a single .pdf document to Patrick James (patrick.james@utoronto.ca).

Please refer to the following papers for further background and context:

Larroque J, Legault S, Johns R, Lumley L, Cusson M, Renaud S, James PMA. 2019. Temporal variation in spatial genetic structure during population outbreaks: distinguishing among different potential drivers of spatial synchrony. *Evolutionary Applications* 12(10): 1931-1945

James PMA, Cooke B, Brunet B, Lumley L, Sperling FAH, Fortin M-J, Quinn V, Sturtevant BR. 2015. Life-

stage differences in spatial genetic structure in an irruptive forest insect: Implications for dispersal and spatial synchrony. *Molecular Ecology*. 24(2): 296-309.

Patrick M. A. James, Ph.D. Associate Professor Institute of Forestry and Conservation John H. Daniels Faculty of Architecture, Landscape, and Design University of Toronto 33 Willcocks St. Toronto, ON. M5S 3E8 CANADA

e. patrick.james@utoronto.ca w. www.jameslab.ca
Patrick James <patrick.ma.james@gmail.com>

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UToulouse France SocialEvolutionAnts

Postdoc position Mechanisms of division of labor in social insects, Toulouse, France Deadline: June 30th, 2023

We are currently seeking a highly motivated and enthusiastic candidate who possesses a strong background in evolutionary biology, molecular biology, and bioinformatics to join our group at the Research Center on Animal Cognition (CRCA) in Toulouse, France.

Project description The project aims to investigate the mechanisms that drive individual variability and specialization in ant societies. Our objectives are to understand the formation of reproductive hierarchies and the emergence of division of labor within clonal ant colonies. The successful candidate will use behavioral and genomic approaches to gain insights into the mechanisms responsible for task allocation and the development of specialized roles within ant colonies.

The candidate will also have the opportunity to develop independent research topics that align with general research programs in the group.

Qualifications The ideal candidate should possess: A Ph.D. in Molecular Biology, Bioinformatics, or a related field Expertise in transcriptomics, genomics, and data analysis Excellent communication and collaboration skills A passion for social evolution, behavior, major evolutionary transitions and insects

Duration and place Position is funded for 2 years, depending on candidates start date and experience. Ideally, the candidate is expected to start in September 2023.

The successful candidate will join the CRCA (<http://crca.cbi-toulouse.fr>), a research institute dedicated to multidisciplinary and comparative studies of cognition in various animal models. The lab is located on the Campus of the University Paul Sabatier, in the delightful, historic city of Toulouse (southwest France). The CRCA is one of the three laboratories forming the Centre for Integrative Biology (CBI), which brings together more than 400 scientists in 40 teams whose work covers several fields (genetics, microbiology, cell biology, neurobiology, computational biology). The successful candidate will work in collaboration with Abel Bernadou and will be a member of the IVEP team (Interindividual Variability and Emergent Plasticity).

How to apply Applications must include: I. A letter of motivation (please explain the reasons to join the project). II. A statement about your previous work and scientific interests (max 1 page). III. CV + publication list (with your contribution). IV. Contact details of two referees.

Applications must be emailed as a single pdf file to Abel Bernadou (abel.bernadou@univ-tlse3.fr) and submitted at the same time to the following website <https://emploi.cnrs.fr/Offres/CDD/UMR5169-ABEBER-001/Default.aspx?lang=EN>. Further details of the position or the project can be obtained from Abel Bernadou.

Pre-selected applicants will be interviewed mid-July 2023 via Zoom.

abel.bernadou@univ-tlse3.fr

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UWinnipeg EvolutionaryGenetics

A postdoctoral position is available in Dr. Alberto Civetta's research group at the University of Winnipeg, Winnipeg, Canada. Our laboratory is interested in the genetic basis of reproductive incompatibilities. We are currently engaged in identifying and testing candidate genes in reproductive isolation, exploring commonalities in the genetic basis of sperm competition and conspecific sperm precedence and identifying selection at the molecular level.

Ideally, the candidate should have at least expertise in *Drosophila* biology or training in molecular biology and/or genomics and bioinformatics.

The work will require independence and initiative. There will be opportunities to interact with graduate students and particularly to get direct experience in helping supervise undergraduate students' research. The position is available for one year, but renewable for at least an additional year depending on budget and on performance.

The start date is flexible but ideally no sooner than January 1st, 2024 and no later than May 1 2024.

The University of Winnipeg, (<http://www.uwinnipeg.ca/>) is located in downtown Winnipeg. Winnipeg is home to about 700,000 people from around the world with a rich array of cultural, educational and recreational opportunities. Reasonable housing costs make Winnipeg an affordable place to live and work.

Informal enquiries are welcomed. Applicants should email a cover letter describing research interests and motivation to apply, a CV, and names and contact information for at least two referees to a.civetta@uwinnipeg.ca

Applications will be accepted until August 31st 2023, or until a suitable candidate is identified.

a.civetta@uwinnipeg.ca

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Vienna TheoPopGen

The mathematics and biosciences group led by Joachim Hermisson and Himani Sachdeva at the University of Vienna is looking for strong and highly motivated candidates for two postdoc positions in evolutionary modeling.

Project: * Genetics of Polygenic Adaptation *

In recent years, following the massive inflow of data from GWAS, the genetics of complex traits has become one of the main fields of study in evolutionary research. Of particular interest - but so far poorly understood - are the dynamics of such traits during adaptive evolution. How does phenotypic adaptation typically proceed? Under what conditions do we see classic signatures of selective sweeps due to large and rapid changes in allele frequencies in the underlying genes? When does adaptation occur through subtle shifts at many loci, and how could these be detected from footprints in genomic data? What is the role of linkage, and when does selection act on extended haplotypes rather than on individual loci?

In two projects, we want to develop models for the adaptation of complex traits. One project deals with the change in adaptive architectures depending on the number of alleles involved. A particular interest is "oligogenic adaptation", the poorly understood parameter range between "monogenic adaptation" (described by population genetics) and "highly polygenic adaptation" (captured by classical quantitative genetic approaches). The second project focuses on signatures of highly polygenic adaptation involving selection on haplotypes with many small-effect ("infinitesimal") variants, and how selection response is influenced by linkage disequilibrium in the initial population. Both projects aim to understand key phenomena through analytical theory and link to genomic data through computational and statistical modeling.

Research environment: Vienna is not only one of the world's most liveable cities, but also the home of one of the largest communities of evolutionary research in Europe (www.evolVienna.at). The positions are part of the Collaborative Research Center "Polygenic Adaptation" funded by the Austrian Science Fund (FWF). This center brings together 8 research groups at four institutions in/around Vienna with the common goal of elucidating the evolutionary genetics of adaptation of complex phenotypes: N. Barghi, R. Kofler, C. Schlitzterer (VetMed Uni); J. Hermisson, H. Sachdeva (Uni Vienna); M. Norborg, K. Swarts (GMI); N. Barton (IST Austria). For young scientists, this cluster offers a unique environment for interaction and personal growth.

Conditions: The positions are for 2 years (with potential extension), salary is according to FWF rates on the level of a postdoc. The starting date is January 2024 (with some flexibility).

Application: We are looking for candidates with a strong background in quantitative methods (analytical and computational modeling) in evolutionary research. Programming skills are highly appreciated. Applicants should have completed their PhD in a relevant field at the latest by the start of the position. The working language in the group is English. German skills are not essential.

Formal applications including CV, publication list, research statement and the names and addresses of 3 referees should be sent to Joachim Hermisson and Himani Sachdeva (joachim.hermisson@univie.ac.at, himani.sachdeva@univie.ac.at). For further information, interested candidates are encouraged to send an informal inquiry beforehand. In this case, please also include a brief statement of interest and a CV.

The selection process will start July 16th and continue until the positions are filled.

Joachim Hermisson <joachim.hermisson@univie.ac.at> (to subscribe/unsubscribe the EvoDir send mail to golding@mcmaster.ca<mailto:golding@mcmaster.ca>)

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Berlin PlantMorphologyAndSystematics Aug7-18

Dear all,

A reminder about an exciting workshop in Berlin this summer. This is an intensive two-week workshop providing a critical basis for diverse areas of research in botany

Please distribute widely.

Best wishes,

Louis Ronse De Craene and Julien Bachelier

Berlin Summer Course in Plant Morphology and Systematics

7-18 August 2023

This two-week short course (7th-18th August, 2023) will be based at the Biological Institute of the Freie Universität Berlin and the Berlin Botanical Garden, which offer extensive facilities, including functional microscopy laboratories and a huge plant collection of more than 20,000 species. The course is set up as lecture-based, laboratory taught, and interactive visits of the living

collections.

FORMAT: 2-week workshop, lectures and hands-on practical sessions.

INTENDED AUDIENCE: PhD students, post-doctoral and advanced researchers, professionals (but no formal restriction). A basic knowledge of botany is preferred but not essential.

The course will run with a minimum of 10 and a maximum of 20 participants.

REGISTRATION FEE:

early bird - before 1 July: 800 euro

after 1 July: 950 euro

(Registration includes coffee breaks, daily lunches with snacks, and an excursion, but does not include travel and lodging).

HOW TO APPLY AND SECURE A PLACE: Please contact Louis Ronse De Craene (l.ronsedecraene@gmail.com) to request an application form.

To secure a place on the course you will be asked to pay a deposit of euro 100.

COURSE INSTRUCTORS AND CONTACT:

Dr. Louis Ronse De Craene, Research Associate Royal Botanic Garden Edinburgh (l.ronsedecraene@gmail.com)

Prof. Julien Bachelier, Freie Universität Berlin
(julien.bachelier@fu-berlin.de)

PROGRAMME:

Course Description and outline:

This short course will introduce students to the structure and development of flowering plants, with a focus on floral diversity and the significance of flowers for systematics and evolution as a whole. Major plant families will be identified within the framework of the main lineages of seed plants to understand their evolution and diversification. Additionally, students will learn to analyse, describe, and study the structure of inflorescences, flowers, and fruits, and based on their observations, to identify the main evolutionary patterns underlying their tremendous morphological diversity, as well as their potential pollination and dispersal mechanisms.

Course objectives and learning outcomes:

Through this course students will acquire the following skills:

- a guide to identifying plants using morphological characters in the context of the molecular classification system.
- a better understanding of the origin and evolution of floral structures, including their importance for classification, and of the main developmental patterns and evolutionary trends which underlie the tremendous diversity of reproductive structures.
- an ability to observe and recognise key characters through the study of live floral material and the building up of floral diagrams.

Course outline:

Daily activities will be in the following format:

9-12 Lecture, seminar and discussion of paper.

12-13 Lunch break

13-18 Plant collecting and observation.

Monday 7 August: Student presentations - introduction to morphology of vegetative structures and flowers, inflorescence and flower structure (floral diagrams and formulas); overview of major groups of flowering plants.

Tuesday 8 August: Major characteristics of Flowers and special attributes (phyllotaxis, aestivation, merism, symmetry, floral tubes and hypanthia).

Wednesday 9 August: Floral evolution from the ANITA grade to Mesangiosperms

Thursday 10 August: Monocot evolution: variations on a theme

Friday 11 August: Basal eudicots and rise of the core eudicots

Saturday 12 August: excursion to Sans Souci (Potsdam)

Sunday 13 August: day off

Monday 14 August: Rosid diversification I

Tuesday 15 August: Rosid diversification II

Wednesday 16 August: Rosid-Asterid transition

Thursday 17 August: Asterid diversification I

Friday 18 August: Asterid diversification II - Conclusions and wrap-up followed by BBQ

RECOMMENDED TEXTBOOKS AND READING:

Please note that this list is not exhaustive, and that these books will be available in class:

Endress, P.K. 1996. Diversity and evolutionary biology of tropical flowers. Cambridge University Press, Cambridge. Leins, P. & Erbar, C. 2010. Flower and fruit: morphology, ontogeny, phylogeny, function and ecology. Schweizerbart Science Publishers, Stuttgart. Rouse DeCraene LP. 2022. Floral Diagrams: An Aid to Understanding Flower Morphology and Evolution. 2nd Edition. Cambridge University Press. Simpson MG. 2019. Plant systematics. 3th Edition. Elsevier. Soltis DE, PS Soltis, PK Endress, MW Chase, S Manchester, W Judd, L Majure, E Mavrodiev. 2018. Phylogeny and evolution of angiosperms. Revised and updated edition. Chicago: The University of Chicago Press.

DISABILITY ACCOMMODATION:

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Germany BasalMetazoan Sep18-21

Dear all,

We are excited to invite you to the Tutzing basal metazoan workshop (“Hydra meeting”): Evolution of resilience, regeneration, and animal complexity - insights from basal metazoans

The workshop will be held at the Evangelische Akademie Tutzing, Germany, 18-21 September, 2023

The goal of the workshop is to learn about cutting-edge research from international experts working on basal metazoans (eco-evo-devo, phylogenomics, stem cell biology, gene regulatory mechanisms, tissue formation & regeneration, nervous system evolution, symbiosis, microbiome, etc pp) and to provide a forum for future networks and collaborations.

As in previous years, the workshop will be quite intimate - with a maximum number of ca. 100 participants. Contributions to the meeting may be in the form of talks or posters with a focus on new or unpublished findings.

- Full room and board are 700 EUR for the 3.5-day meeting (Monday lunch - Thursday lunch), thanks to subsidy by the German Research Foundation (DFG)
- To register, please fill the following form: <https://forms.gle/UTiJPtKGwgzGPWY99> (where you can also indicate your interest to present a talk/poster and submit a title and abstract) - Registration deadline: June 15, 2023 - Decision on talk/poster acceptance: July 1, 2023 by the scientific committee (liana Baums, Noriko Funayama, Celina Juliano, Yehu Moran, Ulrich Technau)

The associated webpage can be found at <http://www.hydra-meeting.de/> and will be updated regularly!

We look forward to seeing you in Tutzing in September 2023.

Sincerely,

The Organizers & Scientific Committee: Christian R Voolstra, Uli Technau, Thomas W Holstein, Thomas CG Bosch, Iliana Baums, Noriko Funayama, Celina Juliano, Yehu Moran

Christian R Voolstra <chris.voolstra@gmail.com>

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HongKong EnvironmentalDNA Oct16-27

Dear all,

I am happy to announce that we will be hosting the first international workshop on environmental DNA (eDNA) in Hong Kong from 16-27 October 2023!

With a combination of fieldwork, laboratory practice and data analysis, this workshop aims to give all the

knowledge necessary for the participants to run their own eDNA project afterwards. The first week will focus on best practice and general knowledge on eDNA while the second week will focus on bioinformatics and statistical analysis. The participants will be given a dataset to play with the goal of putting together a manuscript.

Please find the detail of the program, instructor and registration link at <https://www.seymourlab.net/edna-workshop-2023> . Registration is now open and limited to 30 participants.

Any questions, please message Dr. Isis Guibert at iguibert@hu.hk

Isis Guibert, Ph.D. The University of Hong Kong Kadoorie Biological Sciences Building Pokfulam Road, Hong Kong, PRC

@GuibertIsis

Isis Aline Clemence Guibert <iguibert@hku.hk>

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Istanbul IntroMathCompModellingEvolBio Jul20-21

Join our 2-Day EEBST Workshop on Introduction to Mathematical and Computational Modelling in Evolutionary Biology, 20-21.07.2023, Istanbul University

Workshop Overview:

This interactive workshop provides an introduction to quantitative understanding in evolutionary biology using mathematical modelling techniques. Conducted in English, the workshop spans 2 full days and covers various topics, including an overview of modelling frameworks in evolutionary biology, mutation-selection dynamics in population genetics, fitness landscapes and models, and stochastic modelling in ageing and demography. In the afternoon sessions, participants will have the opportunity to gain hands-on experience in developing computational approaches using their preferred coding language (R, Matlab, Python, Mathematica, etc.) to study evolution.

Who Should Attend:

This workshop is suitable for

- students/postdocs already involved in evolutionary bi-

ology who wish to incorporate mathematical modelling into their studies - or individuals with strong quantitative backgrounds (physics, mathematics, engineering, etc.) who are interested in exploring evolutionary biology in the future.

No prior experience in modelling techniques in evolution is assumed, although familiarity with calculus, differential equations, and linear algebra is beneficial. In short, consider attending if you want to:

- Acquire a solid and quantitative understanding of evolutionary principles in biology - Learn to develop and implement mathematical models for studying evolution
- Gain hands-on skills in computational modelling and simulations

How to Apply:

To apply, please visit this link < <https://forms.gle/MhT9LeE2cveP5R246> >. There is no cost for the workshop and no application deadline, but please note that there is a space limit and a “first comes first served” principle for successful applications. The first notifications will start on June 29th and the application page will be closed after reaching the limit. While participation in the EEBST symposium is not mandatory, it is highly recommended to attend this EEBST workshop.

Lecturer:

Dr. Murat Tuğrul is currently a Marie-Curie Postdoctoral Fellow at Freie Universität Berlin, specializing in mathematical modelling, biophysics, population genetics, the evolution of gene regulation and bacterial ageing. For any questions or further information, don't hesitate to get in touch with the lecturer at murat....@fu-berlin.de < <https://groups.google.com/> >.

We look forward to welcoming you to this enlightening workshop! Best,

Dr. Murat Tuğrul

Marie-Curie Postdoc Fellow

Evolutionary Demography Group (AG Steiner) Institute of Biology, Freie Universität Berlin Königin-Luise-Str. 1-3, 14195 Berlin

Murat Tuğrul <muratugrul@gmail.com>

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OhioStateU ImageDatapalooza Aug14-17

Just as a reminder, applications for this event will close at the end of Monday, June 12. Due to the tight timelines until the event, we aren't able to extend the deadline.

The following workshop may be of particular interest to everyone working with large image or video datasets to answer biological questions using AI/ML methods, including questions in trait evolution, biodiversity science, and ecology.

Image Datapalooza 2023 - Call for Participation

The Imageomics Institute (<https://imageomics.org>) is hosting a 3.5-day workshop to address the scarcity of ML-ready image and video datasets focused on addressing scientific questions. The event will bring together an interdisciplinary group around a shared interest of using AI/ML to extract scientific knowledge from image and video data, including ML researchers, domain scientists, information scientists, tool developers, and data curators. Participants will work in small groups to collaboratively curate or develop FAIR datasets, best practices, tools, infrastructure, and other products targeting the motivating challenge.

A full Call for Participation, including motivation, goals, and who should attend, is posted here: <https://hackmd.io/J81QsMwvRmaCchAZsJux7g> The event will take place August 14-17 at The Ohio State University in Columbus, OH. Funds to assist with travel expenses are available but limited, as is space. To apply to participate, please fill out the Image Datapalooza 2023 Application for Participation by the end of June 12, 2023: <https://forms.gle/TJ5LtVzWWS4qKLTh8> On behalf of the organizing committee:

Hilmar Lapp (Duke University & Imageomics Institut

Hilmar.Lapp@duke.edu

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Online Adaptation Genomics Jun26-30

Dear all,

We are excited to announce our upcoming course on Adaptation Genomics, taking place from 26th to 30th June 2023. To foster international participation, this course will be conducted online, allowing you to join us from anywhere in the world.

Course website: (<https://www.physalia-courses.org/courses-workshops/courseadaptationgenomics/>)

Course Overview: Explore the fascinating realm of the genomic basis of adaptation through population genomics approaches. Our instructors will guide you from raw genomic data handling and exploration to advanced methods, including genotype-environment associations based on both sequence and structural variants. Through hands-on exercises, you will gain bioinformatics skills, learn to manipulate, visualize, and interpret genomic data and patterns.

Target Audience and Assumed Background: This course is designed for graduate students and researchers interested in utilizing genomic tools to investigate adaptation. Participants should have a basic background in evolution and population genetics. Prior experience in UNIX-based command line and R is advantageous, but don't worry if you lack it - a short tutorial can be provided. The course will run in a Linux environment on remote servers, and data analysis and visualization will be performed using R and RStudio.

Learning Outcomes: Master the handling of genomic data from raw reads to genetic variants. Calculate fundamental population genetic statistics. Visualize genetic population structure. Identify signatures of selection in the genome. Account for putative structural variants. Understand the potential and limitations of different methods in studying the genomic basis of adaptation. Don't miss this invaluable opportunity to expand your expertise in adaptation genomics and gain confidence in applying these methods to your own research. Join us for an engaging and informative course that will equip you with the necessary skills to unlock the secrets of adaptation.

For more details and registration, visit our website: (<https://www.physalia-courses.org/courses-workshops/courseadaptationgenomics/>)

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>)

"info@physalia-courses.org" <info@physalia-courses.org>

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Online Advanced Programming In R Sep18-21

Dear all, We are excited to announce our upcoming course on "Programming in R: Moving from Beginner to Advanced" scheduled for September 18th-21st, 2023. To ensure international participation, this course will be held online, allowing you to join us from anywhere in the world.

Overview: This course is tailored for individuals with basic knowledge of R who are eager to enhance their programming skills and take their abilities to the next level. Through hands-on sessions, you will work on practical examples and gain the confidence to tackle complex programming problems, create high-quality reports, figures, and dashboards.

Program: Day 1 - 2-8 pm Berlin time Session 1: Foundations of programming in R Covering object classes, good coding practice, control flow, and functions.

Day 2 - 2-8 pm Berlin time Session 2: Functional programming in R Exploring efficient coding using for-loops, apply and map functions, and other functional programming concepts.

Session 3: Getting the most out of tidyverse Mastering tips and tricks for working with multiple files, improving dataframes, and writing functions in tidyverse.

Day 3 - 2-8 pm Berlin time Session 4: Figures and Tables Creating high-quality visualizations and tables, focusing on data visualization and graphic design principles.

Session 5: Working with Shiny Building and customiz-

ing simple Shiny Dashboards, enabling interactive data visualizations and web applications.

Day 4 - 2-8 pm Berlin time Session 6: Reports Generating professional and customized reports using various reporting packages in R.

Session 7: Github Learning the basics of using Github for version control and collaboration, including repository management, branching, merging, and collaboration.

By the end of this course, you will have the skills and confidence to tackle complex programming challenges in R, create visually appealing reports and figures, and effectively collaborate using Github.

For more details and to secure your spot, please visit our course website: (<https://www.physalia-courses.org/-courses-workshops/course47/>) Don't miss out on this opportunity to advance your R programming skills and boost your data analysis capabilities. Register now to secure one of the last remaining seats! If you have any questions or need further information, please feel free to reach out to us at (info@physalia-courses.org).

Best regards,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
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Online Data Visualisation With Python Oct16-19

Dear all, Registrations are now open for the 2nd edition of the course on “Data Manipulation and Visualization in Python.”. This course aims to enhance participants' skills in data visualization for science-oriented applications using Python.

- Dates: 16th-19th October 2023

- Format: Online to facilitate international participation

- Course website: (<https://www.physalia-courses.org/-courses-workshops/course38/>)

Course Overview: In this course, we will guide partic-

ipants through the process of organizing a data visualization project, from initial data cleanup to creating impactful visualizations. We will cover best practices and explore various plot types, including line and bar charts, maps, networks, and subplots, through practical exercises.

Intended Audience: This course is designed for students, researchers, and professionals who wish to enhance their data visualization skills. While the focus is on science-oriented applications, individuals from any field working with data can benefit from this course. Some familiarity with Python is required, but participants are not expected to be experts.

Learning Outcomes:

By the end of the course, participants will have gained:
 - An understanding of best practices for organizing data visualization projects
 - Knowledge of common pitfalls to avoid when presenting data
 - Proficiency in data manipulation using popular libraries such as NumPy and Pandas
 - Skills to implement a wide range of chart types, including both common and more specialized ones
 - Ability to create simple interactive charts
 - Familiarity with the Seaborn library
 - Adaptation of course examples to real-world applications

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 at info@physalia-courses.org.

Best regards,

Carlo

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Online Ecological Time Series In R Sep4-8

Dear all, We are excited to announce our upcoming online course on Ecological Time Series Analysis and Forecasting in R, taking place from 4th to 8th September 2023. This course aims to equip participants with

the necessary skills to effectively analyze and forecast ecological time series data, using advanced Bayesian modeling techniques implemented in R.

Course website: (<https://www.physalia-courses.org/courses-workshops/time-series-in-r/>)

Course Overview: Traditional forecasting models often fall short when dealing with complex ecological data, which includes overdispersion, clustering, missingness, discreteness, and nonlinear effects. In this course, we will explore how to overcome these challenges by leveraging the flexibility and power of Bayesian modeling software, Stan. Through the use of R packages such as {mvgam} and {brms}, participants will learn to build ecologically appropriate models that incorporate nonlinear effects, random effects, and dynamic processes. The course will cover data wrangling, visualization, exploration, and analysis of ecological time series, leading to valuable insights and accurate forecasts. All course materials, including presentations, practical exercises, data files, and commented R scripts, will be provided electronically to participants.

Target Audience and Prerequisites: This course is designed for higher degree research students and early career researchers working with time series data in the natural sciences, with a specific focus on ecology. Participants should have a basic understanding of regression concepts, including linear models, generalized linear models, and hierarchical (random) effects. Familiarity with RStudio and proficiency in programming R code, such as data importation, manipulation, and visualization, are required. The course will include a mix of lectures and hands-on practical exercises, ensuring a comprehensive learning experience.

Learning Outcomes: By the end of the course, participants will:

- Understand dynamic GLMs and GAMs to capture nonlinear covariate effects and temporal dependence.
- Be able to fit dynamic GLMs and GAMs using the {mvgam} and {brms} packages in R.
- Critique, visualize, and compare fitted dynamic models effectively.
- Produce accurate forecasts from dynamic models and evaluate their accuracies using probabilistic scoring rules.

We look forward to welcoming you to this enriching learning experience and equipping you with the skills to unlock the potential of ecological time series analysis and forecasting in R.

Best regards,

Carlo

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Online InteractiveMapsInR Jun22-23

Dear all, We are excited to announce our upcoming course on Interactive Maps with R, and we wanted to reach out to inform you that we have the last seats available!

Course Details:

Title: Interactive Maps with R

Dates: 22-23 June 2023

Format: Online (to foster international participation)

Course website: (<https://www.physalia-courses.org/courses-workshops/interactive-maps-with-r/>)

Instructor: Dr. A. Marcia Barbosa (Biogeography Consulting & Training)

Course Overview: Our course focuses on teaching participants how to create and customize interactive maps using free and open-source R software, leveraging packages like 'leaflet' and 'mapview'. Through a combination of theoretical lectures and practical exercises, you will learn how to utilize external or personal spatial data to develop interactive maps that can be shared with collaborators or the public.

Target Audience and Assumed Background: This course is designed for students, researchers, and practitioners at any career stage who are interested in representing spatial information through interactive maps and making them accessible to others. Basic experience with R and spatial data is recommended, but we will provide fully annotated R scripts and offer guidance throughout the course. Package installation instructions will be shared with participants a few days before the course begins.

Program Highlights: Daily schedule: 15:00 - 19:00 (Berlin time): live lectures and practicals Support avail-

able through Slack until the end of the next day (Berlin time) During the course, you will cover topics such as spatial data sources, importing and preparing data, creating basic and multi-layer interactive maps, customizing symbols and decorations, representing flows, sharing maps with collaborators, and publishing them on the web.

Don't miss out on this opportunity to enhance your skills in interactive map creation! For more information, including registration details and fees, please visit our course webpage at (<https://www.physalia-courses.org/courses-workshops/interactive-maps-with-r/>). If you have any specific inquiries or require further assistance, feel free to reach out to us.

Full list of our courses and Workshops: (<https://www.physalia-courses.org/courses-workshops>)

We look forward to having you join us for this engaging and practical course on interactive maps! Best regards, Carlo

Carlo Pecoraro, Ph.D

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Online IntroDeepLearning Oct2-6

Dear all, We are delighted to announce our upcoming training course: “Introduction to Deep Learning for Biologists.” This comprehensive programme will equip participants with the essential knowledge and skills to leverage deep learning algorithms for regression and classification tasks in biological research. The course will be held online from 2nd to 6th October 2023.

Course website: (<https://www.physalia-courses.org/courses-workshops/course67/>) Course Overview: In this course, we will provide a solid theoretical foundation and practical guidance for developing deep learning models specifically tailored to biological data. With a particular emphasis on Convolutional Neural Network (CNN) architectures, we will address real-world challenges in

data classification, regression, and image segmentation. Additionally, we will cover statistical learning concepts, including performance evaluation, cross-validation, overfitting prevention, and model generalisation.

Format: The course will be delivered through a combination of interactive lectures, class discussions, and hands-on practical exercises. Participants will have the opportunity to collaborate with both instructors and fellow attendees, applying their newly acquired skills to solve real-world problems. The course will primarily utilise Python, Jupyter Notebooks, and the Linux command line.

Target Audience and Prerequisites: This course is designed for advanced students, researchers, and professionals with an interest in deep learning and its applications in biology. Whether you are a beginner or an experienced user, this course caters to diverse skill levels. A background in biology and familiarity with research problems involving prediction, inference, and pattern discovery is recommended. Basic knowledge of Python programming and the Linux environment will be advantageous but not mandatory.

Learning Outcomes: By the end of this course, participants will: Gain a solid understanding of the theoretical foundations and commonly used architectures in deep learning.

Differentiate between classification, regression, and segmentation tasks and effectively frame real-world biological problems.

Acquire the necessary skills to build and evaluate deep learning models for prediction problems in biology.

Learn how to work with real-world data, including data preparation and augmentation techniques.

Registration: Limited seats are available for this exclusive course. To secure your spot, please visit (<https://www.physalia-courses.org/courses-workshops>) Should you have any questions, please feel free to contact us at (info@physalia-courses.org).

Best regards, Carlo

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Online ModernStatsForBiol PreSeminar Jun30

Dear all,

This autumn (31 Aug - 14 Dec), Mondego Science is offering a new kind of introductory statistics course, entitled Modern Statistical Thinking for Biologists. We will turn the usual logic of introductory statistics teaching on its head, both in terms of the topics we introduce and the order in which we introduce them. The aim is to make learning easier by more closely following how researchers intuitively think about their scientific questions. In the process, you will end up with a more advanced toolkit than after a typical intro course. However, we will start from scratch and go very slowly - there are no pre-requisite maths or stats skills. We will focus on hands-on analysis of real data.

If you're intrigued but not quite sure if you want to sign up, come join the free pre-course seminar on June 30th (1pm Portuguese time). We will talk about why learning and teaching statistics is so hard, and about what will be different about this course. Sign up here to receive the Zoom link: <https://forms.gle/bm3DyyRKRuFXv6Bs7> To register on the course, and to see the syllabus, check out the course website:

<https://www.mondegoscience.com/courses/statistical-thinking> Hope to see you soon,

Rosina.

Rosina Savisaar <rosinasavisaar@gmail.com>

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Online ReproducibilityWithR Oct9-12

Dear all,

We are excited to announce our upcoming course on Reproducibility with R, designed to empower researchers, data scientists, and R users like you to enhance collaboration and maximize reproducibility in your projects. This course will provide you with essential skills and

tools to overcome common challenges faced when sharing and working on R-based projects.

Course Details: Online, 9-12 October 2023

Course website: (<https://www.physalia-courses.org/courses-workshops/r-reproducibility/>)

Our Reproducibility with R course addresses these issues head-on. By leveraging existing tools within the R ecosystem, such as RMarkdown/Quarto, renv, version control, and working environments, you will learn how to organize your projects for efficient collaboration and maximum reproducibility.

Course Highlights: Organizing an R project to facilitate collaboration
Creating reproducible documents with RMarkdown/Quarto
Managing a reproducible environment with package specifications
Tracking changes with Git version control
Collaborating effectively using GitHub
Creating and publishing containers

Full list of our courses and Workshops: (<https://www.physalia-courses.org/courses-workshops>)

Best regards, Carlo

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Online WaterfowlManagement Aug28-Dec7

Online Waterfowl Ecology & Management Course: Certificate & Credit Options

Instructor(s): Dr. Philip Lavretsky and Dr. Richard Kaminski

Start date: August 28, 2023 End date: December 7, 2023

Students will - study waterfowl evolutionary and annual ecology of North American waterfowl, waterfowl and plant identification, waterfowl harvest management, waterfowl diseases, and conservation of ducks, geese and swans. - learn about evolutionary histories, population ecology and management of this dynamic and diverse group. - understand waterfowl and wetlands

of North America, and discuss current waterfowl and wetland issues. - be exposed to best conservation and management practices of populations and their habitats, including how NGOs, state and federal agencies partner to conserve populations and their habitats. - review contemporary and classic literature.

Note: It is advised that students have prior course work in basic ecology

About the course - For-credit and noncredit options available - Offered online with asynchronous sessions - Tailored to junior/senior standing undergraduates, graduate students and working professionals; graduate students and professionals will complete undergraduate requirements and write an "in my opinion" essay to earn graduate credit - Dual language course; material will be presented in English and Spanish

Noncredit option (Offered by the College of Science in partnership with Professional and Public Programs) Tuition: \$1,800 A Certificate of Completion will be awarded at the end of course. Contact: p3cbt@utep.edu Website: <https://pace.utep.edu/wconnect/CourseStatus.awp?&course=23SPWECS101>

For-credit option (Available from the College of Science) Credits earned: 3 semester credit hours Tuition: \$600 per credit hour* for a total cost of approximately \$1,800 (*Subject to in-state and out-of-state fees) Contact: plavretsky@utep.edu Undergraduates apply here: <https://www.applytexas.org/> Graduate Students apply here: <https://www.utep.edu/graduate/apply-now/apply-now.html> Philip Lavretsky <plavretsky@gmail.com>

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Stromstad Sweden Genomics Oct29-Nov4

PhD-student course Land- and Seascape Genomics, Sweden, October-November 2023

Please spread the word about our exciting course this fall:

Course: Land, River, and Seascape Genomics

Course content - How spatial data on properties of terrestrial and marine environments can be combined with genomic data to gain an understanding of population structure, dispersal routes and patterns. And how

such can facilitate appropriate and sustainable land and seabottom use and management.

Teachers - Cynthia Riginos (University of Queensland, guest professor at University of Gothenburg), Anna Runemark (Lund University), Mark Ravinet (University of Nottingham), Kerstin Johannesson (University of Gothenburg, coordinator) and others.

Dates - 29th October to 4 November, 2023 Venue - Tjärnö Marine Laboratory, Strömstad, Sweden <https://www.gu.se/en/tjarno> Credits - 2.5 hp Preliminary schedule is attached:

There is no course fee, and the lodging is free, but travels and food are to be paid by the participants. Course information and application (now open) on the web at: <https://fubasextern.gu.se/fubasextern/info?kurs=NMAR311> Please note that we expect students to have familiarity with genetics and ideally some experience in working with population genetic/genomic data.

Anna, Cynthia and Kerstin,

Questions about the course can be directed to Kerstin J (Kerstin.Johannesson@gu.se)

Anna Runemark <anna.runemark@biol.lu.se>

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SummerInstStatGenetics EarlybirdDeadlineExt Jun15

The early bird deadline for the Summer Institute in Statistical Genetics at the University of Washington in Seattle, July 10-28, has been extended to June 15. Details are available at <https://si.biostat.washington.edu/institutes/sig> The complete program for the Statistical and Quantitative Genetics Symposium at the University of Washington, July 14-16, is online at <https://www.biostat.washington.edu/events/statgensymposium2023> Bruce Weir bsweir@uw.edu

bsweir@uw.edu

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Vienna Experimental Evolution Nov27-Dec1

The Vienna Graduate School of Population Genetics is now accepting applications for the course “Experimental Evolution: Exploring Evolutionary Forces in Controlled Environments” at the University of Veterinary Medicine in Vienna, November 27 - December 1, 2023.

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

The course is targeted toward researchers interested in experimental evolution combined with NGS. It will cover the design of experimental evolution studies as well as the analysis of Pool-Seq time series data. The course aims to introduce participants to:

- State-of-the-art software packages
- Modelling of neutral data
- Identifying selected regions
- Haplotypes reconstruction from time-series data
- Estimating selection coefficients
- Calling transposable elements in time series data
- Inferring selection in transcriptomics data

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

Key-note speakers:

Adam Chippindale (Queens University, CA)

Michael Desai (Harvard University, US)

Elina Immonen (Uppsala University, SE)

Christian Schlötterer (Vetmeduni Vienna, AT)

Henrique Teotónio (IBENS, FR)

Call for participants: applications are open until the 1st of September 2023.

The course is free but will be number-restricted for the practical sessions (hands-on computer lab). Additional seats will be available for attending the lectures, only. Students and researchers are invited to apply by completing the application form linked below. A single PDF containing the following must be submitted: - A short CV (maximum 2 pages).

- A motivation letter (maximum 500 words, explaining why this course would be beneficial for you to attend).

- A statement of computer skills (couple sentences describing your experience). Confidence with Unix command line as well as R, is strongly recommended for the practicals.

Access to the application form <

<https://forms.gle/8bKMtTXF4uGxyBtGA>

>:

https://docs.google.com/forms/d/e/1FAIpQLSeR67iwY45m7z4ZzJlJvUeRHdQ_UeBJzMwRGNMmwtHlcX/viewform Please complete by September 1st, 2023.

Participants are expected to arrange their own accommodation. Further information and updates available at: <https://www.popgen-vienna.at/training/-experimental-evolution-course/> If you wish to only attend the lectures, a link to the registration form will be released in due time. Lectures are open to everyone, however registration is required as space is limited!

LinkedIn event: <https://www.linkedin.com/events/-experimentalevolutioncourse20237074024281642274816/>

Duarri Redondo Sara <Sara.Duarri@vetmeduni.ac.at>

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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.