

# Foreword

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

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

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

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## Conferences

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### AthensGA SSB-SymposWorkProposals Nov15

Call for SSB Symposia and Workshops for the 2025 Evolution Meeting!

The 2025 joint meeting of the Society of Systematic Biologists (SSB) with the Society for the Study of Evolution (SSE) and the American Society of Naturalists (ASN) will be held in Athens, GA, USA from June 20, 2025 to June 24, 2025.

If you are interested in organizing either a symposium or workshop supported by SSB, please submit a brief proposal to the SSB Program Director - information below!

Symposia are half-day events. They often consist of halfhour talks. The talks should be related to a common theme, which can be any research area in systematics. SSB can cover up to \$10,000 of expenses per symposium.

Workshops usually take place on the first day of the joint meeting. They can be half-day or full-day. Workshop organizers can decide on the format that best suits the needs of their workshop. Funding for workshops is also available; a proposed budget should be included in the proposal based on the number of presenters and other needs of the workshop.

It is crucial that symposium and workshop organizers ensure that the events include a diverse group of scientists.

To submit a proposal, send the following information to programdirector@systematicbiologists.org (questions about symposia can also be sent to that address) by November 15th, 2025. PDF format is preferred.

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Symposium proposals should include: 1. Names and affiliations for the organizers and planned speakers 2. A title for the symposium 3. A brief summary of the theme of the symposium and justification that the theme should be hosted at the Evolution meeting. 4. Preliminary titles or topics for the invited speakers. 5. Indication of which speakers have committed to participating vs those who are considering participating. 6. A Diversity, Equity, and Inclusion statement explaining how the organizers have made (and will continue to make) participation in the symposium inclusive.

Workshop proposals should include: 1. Names and affiliations for the organizers and planned speakers 2. A title for the workshop 3. A brief summary of the theme of the workshop and justification that the theme should be hosted at the Evolution meeting. 4. Brief description of the proposed structure of the workshop. 5. A Diversity, Equity, and Inclusion statement explaining how the organizers have made (and will continue to make) participation in the workshop inclusive. 6. An estimate of the financial support from SSB that the workshop would need.

Alison Davis Rabosky (SSB Program Director) programdirector@systematicbiologists.org

Associate Professor and Curator of Herpetology Department of Ecology and Evolutionary Biology & Museum of Zoology (UMMZ) University of Michigan ardr@umich.edu

SSB Program Director <programdirector@systematicbiologists.org>

### DTU Denmark GenomicsInnovations Sep12-13

We are excited to share our upcoming conference, Genomics Innovations, scheduled for September 12-13th!

Tackle the century's biggest challenges in global sustainability and human health with cutting-edge genomic solutions.

Discover the latest breakthroughs in: - Sustainable biomanufacturing: Harness the power of engineered microorganisms for large-scale production of vital secondary metabolites. - Clinical genomics: Dive deep into the mutational landscapes of cancer, infectious diseases, and obesity, revolutionizing personalized diagnostics.

Don't miss this opportunity to explore the future of genomics!

Location: Technical University of Denmark, Center for Biosustainability, room R213. We will offer a hybrid experience, allowing you to join us either in person or virtually.

More details can be found at the conference website: https://sites.google.com/view/genomic-innovations/. The registration form can be found here: https:/-/forms.gle/LjpyDVd259dfmDW9A. Be part of the change. Register now!

If you have any questions, feel free to email us at: Shilpa Garg (sgarg@biosustain.dtu.dk)

See you there!

Minji Kim <minjkim@dtu.dk>

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### Linkoping Sweden Evolution Jan13-15

It is our pleasure to share the news of our upcoming conference in Linköping, Sweden on the 13th-15th January 2025. Evolution in Sweden is a biannual meeting, which broadly gathers evolutionary biologists working in Sweden. The meeting is aimed to be a broad meeting on every aspect of evolutionary biology both in animals and plants. However, please note that the meeting is primarily (though not exclusively) for scientists active in Swedish academic departments. The Evolution in Sweden conference is organized together with the DDLS Evolution and Biodiversity research area, within the Data-driven Life Science (DDLS) program, part of a 12-year SEK 3.1 billion initiative from the Knut and Alice Wallenberg Foundation. We encourage researchers working with analysis of large data sets in the fields of evolution and biodiversity to attend.

Abstract submission: You are welcome to submit your abstract either for a poster or an oral presentation (12 minutes + 3 minutes of questions). The deadline is noon on October 28. Please register at the following address: https://www.lyyti.fi/reg/Evolution\_in\_Sweden\_2025\_8555 Venue: Room C4, C building < https://use.mazemap.com/#v=-1&config=liu&campusid=742&zlevel=2&center=-15.579510,58.401466&zoom=18&sharepoitype=poi&sharepoi=1000930017 >, Campus Valla, Linköping University, Hans Meijers väg 12, Linköping.

Lunches: The lunches will be self-catered and at one's own expense. Please state your intention to eat lunch in the registration form so we can inform the Campus Restaurant about the number of lunch guests.

The pub and dinner are at one's own expense.

Confirmed speakers

\* Tom Gilbert \* Kees Van Oers \* Susan Johnston

More details can be found at the conference website: https://www.scilifelab.se/event/evolution-insweden-2025/ If you have questions, feel free to contact the organizer, Dominic Wright (dominic.wright@liu.se), Professor in Genetics, IFM Biology, Linköping University. Regarding DDLS-related issues, you can ask Matthews Webster (matthew.webster@uu.se) or events@scilifelab.se.

Dominic Wright <dominic.wright@liu.se>

### Lucca Italy QuantitativeGenomics Feb16-21

The next Gordon Research Conference in Quantitative Genetics and Genomics will be held on February 16th - 21st 2025 at Renaissance Tuscany Il Ciocco, Lucca (Barga), Lucca, Italy.

The theme of the meeting is 'The Interactive Effects of Genetics, Environment and Ontogeny on Quantitative Traits. Organized by Na Cai (Helmholtz Munich) and Josephine Pemberton (University of Edinburgh)

Sessions and Discussion Leaders:

Developmental and Disease Trajectories (D: Loic Yengo) Environmental Change (D: Julien Ayroles) Selection and Response (D: Gregor Gorjanc)

Gene Environment Interaction (D: Sriram Sankararaman) Precision Medicine (D: Naomi Wray)

Host Pathogen Interactions and Infectious Disease management (D: Tzachi Hagai)

Breeding for Economic, Environmental and Social Sustainability (D: Roel Veerkamp)

Mechanistic Understanding of Identified Variants (D: Michel Georges)

Apply to attend now at https://www.grc.org/quantitative-genetics-and-genomics-conference/2025/ Prof JM Pemberton Institute of Ecology and Evolution School of Biological Sciences University of Edinburgh EH9 3FL

#### 0131 650 5505

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336. Is e buidheann carthannais a th' ann an Oilthigh  $Dh\tilde{A}^{1}n$  $\tilde{A}$ ideann, clàraichte an Alba, àireamh clàraidh SC005336.

Josephine Pemberton <J.Pemberton@ed.ac.uk>

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### **Online AnimalBehaviourl Nov4-5**

Dear Colleagues

Our annual online conference is back for the fifth year in a row on 4-5 November 2024!

It will be a fantastic platform for animal behaviour researchers from around the world to virtually meet, share their research and insights to make our community sustainable and inclusive.

As always, this conference will be FREE to attend but we ask you to register by visiting our website: https://animalbehaviour.live/conference ABSTRACT SUBMISSIONS are also open now to present at the conference (deadline: 31 August 2024) and you can submit one by clicking here: https://forms.gle/-Eyq2JoSRMjTTbjQj7 This year, we are being supported by the Company of Biologists Sustainability Grant to organise the conference.

Our organisation is small (we are a few early career researchers working on a voluntary basis) and the success of this event is based on the support of our community. For this reason, we would be particularly grateful if you could spread the word about this event to your colleagues and collaborators who you think may benefit from participating in the conference. To do so, you can forward this email to anyone you think would be interested in attending the event, or use the flyer of the event that you can find on our website (https://animalbehaviour.live/conference). In addition, you can also follow us on our different social media (https://linktr.ee/animalbehaviourlive) and forward our announcements about the conference.

We would like to thank you for your help, and hope to see you at the Animal Behaviour Live: Annual Online Conference 2024.

Kind regards, The ABL Organising Committee

Animal Behaviour <animalbehaviourlive@gmail.com>

### SorbonneU AgingEvolution Oct14

#### Dear all,

Please find below an advertisement and invitation to attend the 3rd edition of the colloquium "\*Expanding evolutionary theories of ageing to take into account symbioses and interactions throughout the Web of Life\*".

Feel very free to advertise by forwarding this email to anyone you may think would be interested.

The event is free, hybrid (attendees can join either in person or virtually) but upon registration by email before September 14th to : epbapteste@gmail.com. When emailing, please let me know whether you would prefer to attend virtually or in person (40 seats, on a first serve, first come basis).

It will take place within the University Jussieu, Jussieu Campus, on October 14th, 2024.

Kind regards,

Eric Bapteste

Program:

This colloquium will seek to explore traditional limits to the main evolutionary theories of ageing and to propose novel findings to improve our understanding of how, why and when organisms age in the Web of Life. It will question the explanatory scope and the phylogenetic scope of at least three leading, stimulating evolutionary theories of ageing, namely the Mutation Accumulation theory, the Antagonistic pleiotropy theory and the Disposable Some theory. Indeed, these theories share a common blindspot. The first two have been developed under the traditional framework of population genetics, and therefore are logically centered on the ageing of individuals within a population or within a species. The third one is usually applied to explain ageing within a species. Consequently, these theories do not explicitly model the countless interspecific and ecological interactions, such as symbioses and host-microbiomes associations, however well-known to affect many organismal traits as well as organismal evolution. Moreover, these theories have been mostly developed with animal models in mind, mainly those with a neat germen/soma distinction, such as mice and humans, and for this reason all these theories may benefit from novel conceptual developments to further justify and possibly expand their application scope towards other taxa, such as unicellular organisms (protists, bacteria and archaea), which have long been considered, by default and probably erroneously, as non-senescent, and such as extremely long lived taxa, which owing to their unusual biology may still have some lessons to contribute to these theories.

\*Scientific program for the day:\*

\*Provisional program (the speaker order is not truly in order yet)\*

\*The current theoretical framework and some of its limits \*

\*Pr. Suresh Rattan\* (Department of Molecular Biology and Genetics, Aarhus University, DENMARK)  $\ll$  \*Deepest open issues in the theories of ageing and its evolution\* $\gg$ 

\*Pr. Annette Baudisch\* (University of Southern Denmark, DK)  $\ll$  \*Why do we need inclusive definitions of ageing?\* $\gg$ 

\*Microbiome and Ageing \*

\*Pr. Paul O'Toole \*(School of Microbiology & APC Microbiome Institute Room 447 Food Science Building, University College Cork, T12 Y337 Cork, Ireland.)  $\ll$  \*Contribution of the gut microbiome to human ageing at different ages\*  $\gg$ 

\*Pr. Dario Valenzano\* (Leibniz Institute on Ageing, Beutenbergstraße 11

07745 Jena, Germany)  $\ll$  \*Evolution of the microbiome during host ageing and rejuvenation\* $\gg$ 

\*Alternative models to study ageing\*

\*Pr. Ulrich Karl Steiner \*(Institute of Biology, FU-Berlin, Germany)  $\ll$  \*Latest discoveries about bacterial ageing.\*  $\gg$ 

\*Dr. Mart Krupovic \*(Pasteur Institute, Paris, France)  $\ll$  \*First evidence of ageing in Archaea.\*  $\gg$ 

\*Pr. Emma Teeling \* (University College Dublin, Ireland)  $\ll$  \*New lessons about ageing from non-model organisms \*  $\gg$ 

\*Dr. Jean-François Le Galliard\* (CNRS - UMS 3194, CEREEP-Ecotron IleDeFrance, Département de biologie, Ecole Normale Supérieure - PSL Research University, St-Pierre-lès-Nemours, France) "\*Ecology and ageing: lizard senescence as a case study\*"

\*Organisational complexity and ageing\*

\*Mr. Thomas Duffield\* (Institute of Inflammation and Ageing ; University of Birmingham ; Queen Elizabeth Hospital ; Mindelsohn Way Birmingham, B15 2WB United Kingdom)  $\ll$  \*Epigenetics failure and ageing \* $\gg$ 

\*Pr. Claudio Franceschi\* (U. Bologna, Italy) "\*Hetero- It will take place within the University Jussieu, Jussieu geneity in individual ageing\*"

\*Dr. Eric Chenin \*(IRD / UMMISCO, MNHN / GBIF France) "\*Three stages of\* \*system aging: malleability, elasticity and rigidity\*"

\*Evolution of ageing and ageing related diseases \*

\*Dr. Samuel Pavard\* (MNHN, Paris, France) « \*Joint evolution of cancer and ageing related diseases in mammals  $*\gg$ 

\*Mr. Hugo Bonnefous\* (SU, ISYEB, Paris, France)  $\ll$ \*Evolutionary history of Ageing-Related Disease genes\* ≫.

\*Conclusion\*

\*Dr. Jessica Lombard \*(ETHICS - EA 7446, Université Catholique de Lille)  $\ll$  \*Transhumanist movements and Evolutionary theories of aging: Uses and Misuses  $*\gg$ 

\*Dr. Maël Lemoine \*(Université de Bordeaux, France)  $\ll$  \*What are the deepest

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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

### SorbonneU MicrobiomeEvolution Oct7

Dear all,

Please find below a description of the interdisciplinary colloquium  $\ll$  New Challenges Induced by Microbiomes  $\gg$  (REVMICNAT5) (funded by the French National Center for Scientific Research (CNRS) via the GDR REVMICNAT : https://www.sb-roscoff.fr/fr/revmicnat and https://www.sb-roscoff.fr/en/revmicnat).

Anyone is invited to attend. Feel very free to advertise by forwarding this email to anyone you may think would be interested.

The event is free, hybrid (attendees can join either in person or virtually) but upon registration by email before September 8th to : epbapteste@gmail.com. When emailing, please let me know whether you would prefer to attend virtually or in person (40 seats, on a first serve, first come basis).

Campus, on October 7th 2024.

Kind regards,

Eric Bapteste

Provisional program (the speaker order is not truly in any order yet)

\*Provisional program 'REVMICNAT 5th edition':\*

9:00-9:05: \*A few welcome words. Dr. E. Bapteste\* (CNRS, ISYEB, Paris, France)

9:06-9:26: \*Today's Biology: The microbiome within the microbiome. Dr. Eduardo Rocha (Pasteur, France)\*

9:27-9:47: \*Today's Biology: Lessons from microbiomes from the past. Dr. Catherine Larose \*(CNRS-Université Grenoble Alpes, France)

9:48-10:08: \*Today's Biology: Biodeterioration and microbiomes. Dr. Yvan Moënne-Loccoz\* (UMR CNRS 5557 Ecologie Microbienne, UMR INRAe 1418 - VetAgro Sup, Université Lyon 1, Villeurbanne, France)

10:09-10:29: \*Today's Biology: Holobionts and macroalgae.\* \*Dr. François Thomas (CNRS, Roscoff, France)

10:30-10:50: \*Today's Biology: Addressing the role of perturbations in microbiome dynamics. Dr. Marco Fondi<sup>\*</sup> (Biology Dep., University of Florence, Italy)

5 minutes break

10:55-11:15: \*Politics : The geopolitics of microbes. Dr. Gitte du Plessis\* (Academy of Finland Research Fellow, Politics, Tampere University)

11:16-11:36: \*Religion : Religion, Animals, and the Theological Anthropology of Microbes in the Pandemicene. Dr. Aminah Al-Attas Bradford\* (Department of Applied Ecology, NC State University, USA)

11:37-11:57: \*Design:\* \*Fashion, bioactive textiles and microbiomes\*\*.\*\* Dr. Cláudia Suellen Ferro de Oliveira \*(CBQF - Centre for Biotechnology and Fine Chemistry, Universidade Católica Portuguesa, Porto, Portugal)

LUNCH BREAK (1h30 for all speakers)

13:30-13:50: \*Art\*: \*Doing art with microbiomes.\* \*Lise Leloutre\* (Beaux-Arts de Paris, Paris, France)

13:51-14:11: \*Art: Microbes, viruses and sciencefiction. Marie Truffié \*(Graduated from L'Ecole des Arts Décoratifs de Paris, France)

14:12-14:32: \*Architecture: Microbiomes and the History of Architecture. Pr. Mark Wigley\* (Graduate School of Architecture, Planning, and Preservation, Columbia University, New York, USA)

14:33-14:53: \*Law sciences: Microbiomes and the evolution of laws. Dr. Laure Thomasset\* (Institut Catholique de Paris, Faculté de Sciences Sociales, d'Economie et de Droit (FASSED), France)

14:54-15:14: \*Today's Biology: Person-to-personmicrobiome transmission. Dr. Mireia Valles-Colomer\* (distancial) (Department of Medicine and Life Sciences UPF (MELIS-UPF), Barcelona, Spain)

15:15-15:35: \*Tomorrow's Biology: Microbiomes and the plastisphere. Dr. Méril Massot\* (Centre d'Ecologie Fonctionnelle et Evolutive, CNRS-UMR 5175, Montpellier, France)

5 minutes break

15:40-16:00\*: Philosophy: Responsibility and the Microbiome. Dr. Kristien Hens\* (University of Antwerp, Department of philosophy, Antwerpen. Belgium)

16:01-16:21: \*Tomorrow's Biology: The impact of microbiome studies on astrobiology as a field. Dr. Michael Macey\* (School of Environment, Earth and Ecosystem Sciences, Faculty of Science, Technology, Engineering and Mathematics, The Open University, Milton Keynes, UK)

16:22-16:39: One spot to be funded by the GDR - for you, maybe? You can apply at epbapteste@gmail.com; your application will be evaluated by the Scientific Committee of Revmicnat

Dr. Eric Bapteste 7, quai Saint-Bernard, Université Pierre et Marie Curie, UMR 7205 ISYEB, Bâtiment A, 4eme et. pièce 427, Paris 75005 France -

Livre pour enfants et curieux: "Le monde surprenant des microbes: virus, bactéries, archées,..." (Editions Circonflexe) "Tout se transforme! Comment marche l'évolution" (Editions Circonflexe)

Livres pour adultes: "Tous entrelacés! Des gènes aux super-organismes, les réseaux de l'évolution" (Belin) "Les gènes voyageurs: l'odyssée de l'évolution" (Belin) "Conflits intérieurs: fable scientifique" (Editions Matériologiques) Bapteste Eric <epbapteste@gmail.com>

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### SouthCarolina EcologyEvolution Oct11-13

Please join us for the 51st annual SouthEastern Population Ecology and Evolutionary Genetics (SEPEEG) meeting at The Outdoor Lab < https://www.clemson.edu/cbshs/centers-institutes/outdoor-lab/index.html > located in Clemson, South Carolina. SEPEEG brings together scientists from institutions in the Southeast to discuss their research on ecology, population biology, evolution, and genetics. SEPEEG first organized in 1973 as SEEGG, the Southeastern Ecological Genetics Group, and is meant to be a casual and collaborative meeting bringing together postdocs, students and faculty from colleges and universities primarily in the southeastern United States. SEPEEG is a single-session meeting that provides a comfortable, engaging environment for formal and informal interactions between attendees. The meeting generally attracts over 100 participants from all career stages.

Registration deadline is September 1 but may be extended until we reach capacity.

For more details and information on registration and abstract submission please go to the full conference website:

https://scienceweb.clemson.edu/sepeeg/ -Matt Koski & The SEPEEG '24 Team

Matthew Harold Koski <mkoski@clemson.edu>

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# **GradStudentPositions**

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### AuburnU ConservationGenomics

The Whelan Lab at Auburn University and the U.S. Fish and Wildlife Service Southeast Conservation Genetics Lab (SECGL) are seeking graduate student applications for the MSc or PhD degree. At least one MSc and one PhD position will be available to start in August 2025. Potential masters and PhD projects include conservation genetics and molecular ecology of freshwater mollusks, phylogenetics and systematics of freshwater gastropods, and environmental DNA (eDNA) related research like assay design and applied distributional studies. Students interested in eDNA research are particularly encouraged to apply. Students will work in museum, lab, and field environments.

SECGL is a joint U.S. Fish and Wildlife Service and Auburn University research lab. We are located in Swingle Hall on Auburn University's main campus. Our research includes both basic and applied science, and students work in an academic research environment while collaborating with government researchers and onthe-ground conservation scientists. Students will have the opportunity to work directly with conservation practitioners and perform cutting-edge research. Current research projects in the lab include (1) phylogenomics of freshwater gastropods, with an emphasis on Pleuroceridae, (2) conservation genomics and molecular ecology of freshwater mollusks, including threatened and endangered mussels and snails, (3) taxonomy of terrestrial

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snails, freshwater mussels, and freshwater snails, (4) freshwater gastropod life history evolution, (5) conservation genomics of threatened and endangered freshwater fishes, and (5) black bass genetics management. The lab's research has recently expanded to include eDNA work. We also work with the National Fish Hatchery program and use genetic data to evaluate and improve hatchery efforts.

SECGL has outstanding facilities, equipment, and capacity for lab- and field-based research. Current eDNA lab space includes modular clean rooms and separate rooms for different steps of eDNA data generation. We are in the process of constructing new lab and office space that will include purpose-built eDNA and traditional conservation genetics lab space. We have all the equipment needed for next-generation library prep and other molecular data generation, including an Agilent Fragment Analyzer, Blue Pippen, Quibit, and Opentrons OT-2 liquid handling robot. We also have multiple computers for bioinformatics (e.g., an 80-core, 512GB RAM machine) and access to additional computing resources through Auburn University and the Alabama Supercomputer Authority. The lab has a 4WD SUV and other equipment for fieldwork.

Auburn University is a public land-, sea-, and spacegrant institution with internationally recognized research and academics. Auburn and nearby Opelika, Alabama are vibrant towns with excellent quality of life and a relatively low cost of living.

GRA Stipends and Start Dates: Students will receive a stipend of at least \$2,500/month (\$30,000/year) and a tuition waiver. Available start dates are August 2025.

More information about the lab: www.nathanwhelan.com; https://www.fws.gov/office/warm-springs-fish-technology-center To apply: Send a letter of interest, current CV, contact information for 2-3 references, and unofficial transcripts to: Dr. Nathan Whelan, nathan\_whelan@fws.gov. Members of historically underrepresented groups are particularly encouraged to apply.

"Whelan, Nathan V" <nathan\_whelan@fws.gov>

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### AuburnU EcoEvoModelingTrout

We are seeking a self-driven and highly motivated PhD student to join the Willoughby lab in the College of Forestry, Wildlife, and Environment at Auburn University. This NSF funded assistantship (starting August 2025) offers a unique opportunity to contribute to a cutting-edge research project focused on the evolutionary dynamics of trout, exploring the impacts of climate change and interspecies competition on population stability and adaptability. The successful candidate will work on a project specifically addressing the predicted range shifts of rainbow and cutthroat trout, using advanced agent-based modeling techniques to assess habitat conflicts, resource competition, introgression, and evolutionary responses. By targeting these components, this research will provide insights into how aquatic ecosystems adapt to environmental stressors, which is crucial for informing global conservation strategies and sustaining biodiversity in the face of a rapidly changing climate.

This project is part of a larger, interdisciplinary collaboration involving the National Center for Atmospheric Research (NCAR) and the University of Wyoming. The research is highly transdisciplinary, combining human dimensions and climate modeling with evolutionary modeling in our lab, offering a holistic approach to understanding and addressing the challenges posed by climate change on freshwater ecosystems. Models and data generated across these institutions will be integrated to provide comprehensive insights.

Key Responsibilities: - Develop and implement an agentbased model to simulate the evolutionary and ecological dynamics of trout species under changing environmental conditions. - Analyze ecological and climate data to understand the impact of introgression, competition, and environmental changes on population stability. -Collaborate with a diverse team of PhD students and scientists, including experts in climate modeling, human dimensions, and evolutionary biology from NCAR, the University of Wyoming, and Auburn University. -Communicate research findings through presentations at national and international conferences and publications in high-impact journals. - Participate in outreach and science communication efforts aligned with Auburn UniversityÂs land-grant mission.

Qualifications: - A MasterÂÂs degree in biology, ecology, genetics, or a related field (exceptional candidates with a BachelorÂÂs degree may also be considered). - A strong interest in evolutionary biology, conservation genetics, climate modeling, and interdisciplinary research.- Experience with programming (e.g., Python, R) and/or modeling software (e.g., NetLogo) is highly desirable. - Excellent communication skills and the ability to work effectively in an interdisciplinary and collaborative team. - A commitment to inclusion in the scientific community.- Highly interested in the fate and evolution of threatened and endangered species, and in particular how evolution and genetic data inform our ability to conserve and manage these species. - Ability and desire to learn modeling without launching your computer out the window (thinking this occasionally is ok and expected)

Auburn University is a top-tier research institution located in a vibrant, mid-sized city in the foothills of the Appalachian Mountains. With its rich academic environment and a strong commitment to research excellence, Auburn provides a supportive and dynamic setting for graduate education. The university offers many resources for students, including a new game room, a recreational center with indoor climbing towers, a AA mile track, leisure, and swimming pools, as well as other fitness equipment and facilities. Local attractions include farmers markets, Auburn City Fest, and the newly constructed Gouge Performing Arts Center. The nearby Kreher Forest Ecology Preserve and Tuskegee National Forest offer additional recreational opportunities yearround. Graduate students in the College of Forestry, Wildlife, and Environment receive a competitive stipend and tuition remission, along with opportunities for professional development and career advancement. Diverse viewpoints that incorporate knowledge and experiences historically and systematically underrepresented are highly valued in our lab for the direct enhancement of research and outputs and for the betterment of society. We strongly encourage applications from individuals with diverse backgrounds and perspectives.

We will be interviewing interested candidates prior to

any official application to the College or University. Therefore, all candidates in the trout evolution portion of this multidisciplinary project should send an email to Dr. Janna WIlloughby at jwilloughy@auburn.edu with your background, research interests, and a PDF of your CV. (Students interested in human dimensions aspects of this project should reach out to Dr. Kelly Dunning at the University of Wyoming, at

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### Barcelona CoralSymbiontEvolution

The Institute of Evolutionary Biology seeks a PhD student

The Institute of Evolutionary Biology (IBE) is a joint Institute of the Spanish National Research Council (CSIC) and Pompeu Fabra University (UPF), located in Barcelona. IBE's research is focused on the processes and mechanisms that generate biodiversity and on understanding the genetic basis of evolution. The IBE is part of the Barcelona Biomedical Research Park (PRBB), a stimulating international research environment with state-of-the-art facilities

The Microbial Ecology and Evolution Lab: Our research at the Microbial Ecology and Evolution Lab (delcampolab.com) focuses on animal symbionts and the impact of global warming on the microbiomes of benthic marine animals. We employ wet and dry lab techniques, including experiments and bioinformatics analysis, to achieve broad research goals. We have developed methods to study the protists communities of animals, overcoming previous limitations for the incorporation of protists into microbiome studies. Also, we use single-cell approaches to explore the ecological interactions and evolutionary histories of hosts and their microbial symbionts. Our work also investigates the effects of ocean warming on the microbiomes of benthic marine animals, focusing on corals, to understand how environmental changes impact the composition and function of this symbiosis.

Project Description: Corals face threats from ocean acidification and heat waves due to the climate crisis. Coral reefs and coralligenous habitats are biodiversity hotspots that provide ecosystem services and coastal protection. Losing corals would severely impact biodiversity and coastal communities' livelihoods. The coral holobiont, consisting of corals and their microbiome, influences the host's evolution, physiology, and ecological functions. While zooxanthellae (Symbiodiniaceae) are well-studied, the role of other protists has been neglected. Protists contribute significant hidden genomic diversity in microbial habitats, including coral holobionts. Ignoring this diversity limits our understanding of protists' functions in corals and their impact on resilience to climate change. Our preliminary data reveal three times more coral protist symbiont diversity than previously reported, and that their community composition can predict coral responses to heat stress. The CORALPROS project aims to describe the morphological and genomic diversity of protists in the coral holobiont and map their distribution using advanced techniques. Including protists in coral holobiont studies will transform our understanding of host-microbe interactions, impacting our knowledge of coral responses to climate change.

### Specific Tasks

- Collection of coral samples - Microbiome sequencing and analysis - Fluorescence In Situ Hybridization of coral samples - Transcriptome/genome sequencing, assembly and analysis - Isolation and characterization of protists using microscopy and genomics.

#### Requirements

- Master's degree in biology or related field - Experience with light microscopy and standard molecular biology techniques (microbial culture using sterile technique, PCR, cloning, DNA and RNA isolation, sequencing, etc.) - Curious, self-motivated, organized, and highly team-oriented

#### What do we offer?

A fully-funded four-year PhD position.

Starting date: between 1 January 2025 and 1 March 2025 Salary: first year: around 19.000 euro gross salary; second, third and fourth years: around 23.500 euro gross salary Location: Mediterranean Marine and Environmental Research Center (CMIMA), Passeig Marítim de la Barceloneta 37-49, Barcelona, Spain

#### Application process

Application deadline: 10 September, 2024

Interested candidates should e-mail Javier del Campo (jdelcampo@ibe.upf-csic.es) with the subject line "PhD student position" and (1) their CV, (2) a motivation letter describing their interest in the project, and (3) contact information from two potential references.

We are committed to promoting equity in academia. Per-

sons from groups that have been historically excluded from academia are strongly encouraged to apply.

Javier del Campo <jdelcampo@ibe.upf-csic.es>

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### BinghamtonU GallParasiteInteractions

BinghatonUniv.EvolEco.GallerParastieInteractions

The Prior Lab in the Biological Sciences Department at Binghamton University (BU) (priorecologylab.com) seeks a Ph.D. student to join the lab in the Fall (or Spring) of 2025 to work on a project examining how evolutionary history and ecological dimensions influence oak gall wasp-parasite interactions. This project is funded by the National Science Foundation, and the student will be responsible for contributing to the larger collaborative aims of the project to create cophylogenies and document trait space of oak gall wasps and parasite associates throughout North America. The PhD student in the Prior lab will contribute to concentrated collections in the northeast and northwest of North America, along with measuring gall traits and assessing how dimensions of gall trait space influence parasite diversity. There will also be flexibility to form their ideas within the project's scope. This project collaborates with the Forbes (forbes.lab.uiowa.edu) and Hood (sites.google.com/view/hood-lab) labs and the founders of gallformers.org.

Requirements: We seek a candidate with an undergraduate degree (or MS) in ecology, evolution, entomology, or a related field and experience with DNA-based laboratory research. We prefer candidates with fieldwork experience, some experience in R or a similar statistical program, strong verbal and written communication skills, and the ability to work independently and as a research team member.

Funding: The student will be funded during semesters by a Teaching Assistantship at BU, with two semesters of Graduate Assistantship funding to aid in field collections. Summer funding will also be provided.

To apply, please email Prof. Kirsten Prior, kprior@binghamton.edu, and include "oak gall waspparasite Ph.D. position" in the subject line. Please include (1) a cover letter detailing how you meet the required and preferred qualifications, outlining your existing research interests, personal background, and career goals;(2) a CV; (3) an unofficial copy of all transcripts from completed or ongoing degrees; (4) contact information for three references. Please send materials by October 15th, and if you are invited to apply to the program, materials will be due on Dec. 15th. GRE scores are not required to apply to Binghamton University.

Kirsten M. Prior, Ph.D. (she/her) Associate Professor Binghamton University, SUNY Department of Biological Sciences Co-Director, NAT-CHANGE priorecologylab.com

Sci. 4, Rm. 210

I don't expect replies outside of working hours.

"Kirsten M. Prior" <kprior@binghamton.edu>

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### DTU-Aqua Denmark PopulationGenomics

PhD scholarship: "Integrating ecological and genomic diversity for climate resilient marine spatial planning"

Are you interested in the development and use of DNA analysis to support spatial planning in marine biodiversity conservation?

Marine ecosystems are under threat from environmental change and rapidly increasing human activity on the sea. In response to this, the EU has proposed a Biodiversity Strategy to protect marine areas. However, prioritising which areas to protect is not straight forward, as optimal solutions need to be based on scientific knowledge of the processes that underlie biodiverse and resilient ecosystems.

To support this process we advertise for a PhD student with interest in the development and implementation of DNA based methods in aquatic biodiversity conservation. The PhD student will study the integrated application of genomic and ecological diversity data for climate resilient marine spatial planning at the National Institute of Aquatic Resources (DTU Aqua), Denmark, with starting date November 2024.

The project: The PhD project is part of the Danish Aage V Jensen foundation funded project "Integrated ecological, genomic and oceanographic analysis for planning marine habitat protection". The project is a col- - Master of Science (M.Sc.) degree in Biology, Comlaboration between three Danish Universities: Aarhus University, the Technical University of Denmark and Aalborg University. In the project, we will explore marine diversity and habitat connectivity from a number of angles (species, genetic and functional), which will allow us to generalise tools for use beyond target species to other species of interest, including invasive species. We collaborate closely with stakeholders from citizen and municipality groups engaging in practical conservation of marine habitats, as well as with international partners from the Institute of Marine Research in Norway.

The PhD project will primarily be carried out at the Section for Marine Living Resources' population genetics group situated in Silkeborg, Denmark. DTU Aqua is an institute at the Technical University of Denmark. The group works broadly on genetic and genomic analyses aimed at conservation and management of aquatic species.

The PhD project will focus on multiple metrics of biodiversity to support ecosystem-based approaches to biodiversity conservation and management under climate change. Work will focus on species, genetic and functional diversity and on how this can be maintained in a changing climate using spatial planning informed by ecological, genomic and oceanographic analyses.

Using sugar kelp (Saccharina latissima) as a model of an ecosystem foundation species, genomic data will be used to identify climate associated diversity, predict climate change vulnerability and estimate gene flow of relevance to future climate adaptation in the foundation species itself. In addition, the successful candidate will use ecosystem species diversity data from environmental DNA in combination with habitat connectivity data, obtained in collaboration with project partners, to provide a holistic understanding of ecosystem response to future climate scenarios.

The successful candidate will: 1) Generate and analyse population genome-wide data from sugar kelp with the aim to make predictions of species and population vulnerability to future climate change, 2) Apply eDNA data from a range of marine habitats and locations, to evaluate associated species diversity and its potential for biomonitoring of select species.

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

A background in population genetics is preferred and experience with bioinformatic analyses of large genomic data sets is an asset.

In addition, we are looking for candidates who have:

puter Science or Engineering - Keen interest in research and the field of marine and aquatic sciences - Good collaborative skills - Proficiency in written and spoken English

Salary and appointment terms: The appointment will be based on the collective agreement with the Danish Confederation of Professional Associations. The allowance will be agreed upon with the relevant union. The period of employment is 3 years. The starting date is November 2024.

https:/-Application: Apply online at /efzu.fa.em2.oraclecloud.com/hcmUI/-

CandidateExperience/da/sites/CX\_1/job/3805/-

?utm\_medium=jobshare no later than 1 September 2024.

Further information may be obtained from Senior Researchers Dorte Bekkevold, db@aqua.dtu.dk, and Jakob Hemmer-Hansen, jhh@agua.dtu.dk.

You can read more about DTU Aqua atwww.aqua.dtu.dk and about the population genetics group at



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> Geneva MyxomycetesSystematicsEvol

The Conservatory and Botanical Garden of Geneva (CJBG) and Geneva University (UniGE) seek a PhD student

Title of the project: A biosystematic revision of the family Cribrariaceae Function: Doctoral candidate and university assistant, 70% Contract starting date: 1 February 2025 (4 years)

Job description: The present project is focused on the systematics and evolution of one of the most neglected groups of \*Myxomycetes\* (\*Amoebozoa\*), the family \*Cribrariaceae\* (ca. 50 accepted species). The generic and species boundaries, as well as the evolution of phenotypic traits, have never been analysed in detail, and especially not in a phylogenetic context and with modern techniques. We will assess the phylogenetic relationships of the species using a fair taxonomic and molecular sampling, including NGS techniques and phylogenomic analyses. Next, we will explore the evolution of some phenotypic traits (notably, the sporophore macromorphology and the spore ornamentation, but also other characters) and the ecology of the species, to assess its relevance for the taxonomy and diversification of the group. Finally, we will address the species-level taxonomy, identify new species and cryptic taxa, and evaluate synonymies. With all this information, we expect to propose a revised classification and an updated monograph of the family. Most of the skills and data analyses learned by the candidate upon completion of the project will also be applicable to the systematics, taxonomy, and evolutionary biology of other groups of organisms.

Within the research project, the candidate will profit from aid, guidance, and supervision in the different steps of the project, from specimen handling, data gathering and analyses, to presentation of the results, and scientific writing. In addition, the candidate is expected to build up a network of national and international collaborations, perform short stays abroad, and become used to the dynamic of scientific research to become an independent researcher. The assistant position is under the direction of Dr. Juan Carlos Zamora (CJBG) and Dr. Carlos Lado (RJB-CSIC), and Yamama Naciri (CJBG, UniGE) as responsible professor.

Required degrees and skills: - Master's degree in biology or in a Biosystematics-related topic in Environmental/Chemistry/Health Sciences. - Motivation to engage in the research project and in scientific research, including: (i) field work and in vitro cultures, (ii) data gathering and analyses, (iii) writing of a doctoral thesis, (iv) presentation and dissemination of the project results (scientific journal publication, congresses, and others). -Skills in Fungal/Botanical Systematics and Taxonomy, especially microscopy. - Skills in molecular lab and phylogenetic analyses. - Interest for the morphological, evolutionary, and taxonomic study of Myxomycetes. Good disposition to work in a team and to participate in the scientific life of the host institute. - Proficiency in written and spoken French (mother tongue or a minimum of level B2 in CEFR scale) to ensure an adequate flow of the practical classes of the Systematics and Biodiversity course, given in Biology to 2 year students, which she/he would be responsible for. - The working language of the project being English, the candidate must also be particularly comfortable in this language (written and spoken)

Application process: Application deadline: 31 August 2024 The application file (in English), including (1) a motivation letter and (2) a detailed CV, should be

sent exclusively by e-mail to \*jcsenoret@gmail.com\* (Juan Carlos Zamora), cc. \*lado@rjb.csic.es\*, \*yamama.naciri@geneve.ch\*

Juan Carlos Zamora Señoret <jcsenoret@gmail.com>

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### GeorgeMasonU TropicalAvianTraitEvolution

The Lim Lab (sites.google.com/view/gmuevogen) at George Mason University, Biology Department, is recruiting 1 PhD student for the 2025/26 academic year. Using tropical birds as the study system, student research will focus on understanding how trait evolution is driven by genomic divergence and demographic histories such as secondary contacts. The student is expected to conduct integrative research that combines field/museum work, genomic work and bioinformatic analyses.

Funding for the accepted student includes at least 2 years of GRAship (including tuition credits) and additional GTAships. I am also happy to work with the applicant to develop a strong NSF GRFP (Graduate Research Fellowship Program) proposal. The student will join GMU's Biosciences - Biocomplexity and Evolutionary Biology PhD program (https://catalog.gmu.edu/colleges-schools/-science/systems-biology/biosciences-phd/). This is a vibrant program with many opportunities to interact with professors and peers interested in fundamental evolution and ecology questions, as well as applied topics such as conservation.

Required skills and expectations: \* B.S. or M.S. in Evolution or Biology or a related field (e.g. Ecology) \* Background and interest in ornithology and molecular genetics/phylogenetics/population genetics \* Demonstrated writing skill \* Committed to a collaborative and inclusive lab environment \* Prior research experience \* Interest in bioinformatics \* Ability to conduct fieldwork independently

Preferred skills and experiences: \* Experience with NGS \* Experience with the command-line interface and coding in R, Python, etc \* Experience with handling birds and museum specimens

Interested individuals are encouraged to contact me via

email to explore how your interests intersect with the proposed research, and to read about research in the lab. Please also send me your CV and a cover letter stating your background and interests.

GMU has three main campuses in the greater Washington, DC area (Fairfax, Prince William and Arlington counties). The Lim Lab is located in the Science and Technology campus (Manassas, Virginia) and collaborates with GMU and outside researchers from NMNH, NZP, SCBI, USGS and other institutions. Mason is a highly diverse university with 49% of students from underrepresented groups and 37% considered first generation.

Haw Chuan (HC) Lim, Ph.D. Associate Professor Biology Department George Mason University Manassas, VA 20110 hlim22@gmu.edu

"hlim22@gmu.edu" <hlim22@gmu.edu>

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### IOCB Prague EvoInsectTerpenoidBiosynthesis

PhD position: Evolution of terpenoid biosynthesis in insects

Funding for a PhD position is available at the Institute of Organic Chemistry and Biochemistry, Prague, Czech Republic, in the Chemistry of Social Insects Lab led by Dr. Robert Hanus. IOCB Prague is one of the leading research institutions in the country, offering cuttingedge equipment and fostering a dynamic environment for interdisciplinary research and global collaboration. About a third of 200+ PhD students come from abroad.

Our research group focuses among others on the chemical diversity, biological significance, and biosynthesis of terpenoids produced by insects. Terpenoid secondary metabolites are used by organisms for communication and defense, and the multitude of their biological activities is exploited by industries such as pharmaceuticals, cosmetics, or food and flavour.

In this project, we address the question of evolutionary origin and functional properties of insect terpene synthases, the key enzymes responsible for the conversion of prenyl pyrophosphates into terpenes. Insect terpene synthases are unrelated to their plant or microbial counterparts and have evolved multiple times independently in different insect lineages. Our understanding remains limited in terms of their reaction mechanisms and structure-activity relationships. Within the PhD project, the candidate will functionally characterize a set of insect terpene synthases from unrelated insect clades and define their common and idiosyncratic structural features acquired during their multiple independent origins.

The PhD project is funded by the European MSCA Doctoral Network 'ModBioTerp' and the grant support for the broader research project is funded by the Ministry of Education, Youth, and Sports (2024-2027). The main supervisor is Dr. Robert Hanus and a part of the project will be carried out in a partner laboratory within the ModBioTerp network. The monthly stipend includes 2690 EUR living allowance, 600 EUR mobility allowance, and 660 EUR family allowance (if applicable). The ideal candidate would be available early in 2025. The candidate must conform to the MSCA Mobility Rule: cannot have resided or carried out his/her main activity (work, studies, etc.) in the Czech Republic for more than 12 months in the 3 years immediately before their recruitment date.

Interested candidates should contact the main supervisor Robert Hanus (robert.hanus@uochb.cas.cz) and/or Jitka Stafkova (jitka.stafkova@uochb.cas.cz).

### https://www.uochb.cz/en/open-positions/303/evolution-of-terpenoid-biosynthesis-in-insects

Jitka Stafkova Chemistry of Social Insects jitka.stafkova@uochb.cas.cz http://hanus.group.uochb.cz/en jitka.stafkova@uochb.cas.cz

### MaxPlanck ToxinResistanceEvolution

Applications are invited for a PhD position on molecular and cellular effects of toxin resistance mutations

Supervisor: Shabnam Mohammadi, Max Planck Research Group Leader

Group: Evolutionary and Integrative Physiology

Salary level:  $65\% \to 13$ 

Start date: 1st Nov 2024 is preferred but this can be flexible

End of employment period: The initial fixed term is three years.

Scope of work: full-time (39 hours per week)

Job Description

The group"; $\frac{1}{2}$ "; $\frac{1}{2}$ "; $\frac{1}{2}$ s current work is focused on understanding how novel protein functions (e.g., resistance to toxins) evolve. We investigate broad-scale patterns of evolution as well as mechanisms of adaptation at different hierarchical levels of biological organization. Consequently, our work covers genomic evolution (in silico), molecular function (in vitro), and whole organism physiology (in vivo). We are currently applying this interdisciplinary approach to elucidate the evolution of cardiotonic steroid resistance in vertebrates. For more information about our work, please visit https://www.mohammadi-lab.com/. The project aims to elucidate the effects that resistance-producing mutations have on protein function and cell physiology. You will address this goal by combining the functional characterization of recombinant proteins with assays of transgenic cells in an experimentally defined framework. You will have the option to apply this approach to examine the evolution of cardiotonic steroid resistance in several predator species, including snakes, frogs, birds, and mammals. You will measure the effects that mutations have on protein function, cell signaling, and cellular homeostasis. The data obtained will allow you to correlate the gene-, protein, and cell-level consequences and benefits of cardiotonic steroid resistance. Depending on your interests, this project can develop to address more detailed questions about the evolution cardiotonic steroid resistance and/or be developed into a comparative study involving multiple species.

The Max Planck Institute for Chemical Ecology pro-

vides a thriving, international, and multidisciplinary research environment. The project can benefit from state-of-the-art facilities and equipment, access to expert service groups for mass spectrometry (with MALDI-MS imaging, untargeted metabolomics, and sensitive targeted metabolite quantification platforms) and NMR, as well as world-class researchers in chemical ecology and evolutionary biology. The working language of the institute is English. For more information, please visit www.ice.mpg.de. We offer a competitive salary, generous holiday entitlement, and pension scheme, as well as career development training. The Max Planck Society is committed to equal opportunities and diversity (www.mpg.de/equal\_opportunities). We welcome qualified applicants from all backgrounds.

Candidate Requirements - Proactive, dynamic, and curious - Excellent communication and organizational skills - Proficiency in written and spoken English - University degree in a relevant field - Experience with bioinformatics, biochemical analysis, and cell culture is preferred

To Apply Please send a cover letter ( $i_{\dot{c}}\frac{1}{2}$  2 pages) stating why you are applying for this position, what your proposed research goals are, and why you would be a good fit, along with your CV, copies of degree certificate(s), and the names and contacts of 2-3 references as a single PDF to here (https://jobs.ice.mpg.de/en/jobposting/-2f627053ea0a39c91d5b679ea22c59de756eadff0/apply). Informal inquiries about the position can be addressed to Dr. Mohammadi (smohammadi@ice.mpg.de).

Review of applications will start on Sep 7, 2024 and will continue until the position is filled.

The Max Planck Society is one of Europe's leading research organizations and conducts basic research in the natural sciences, life sciences, and humanities. The Max Planck Institute for Chemical Ecology in Jena carries out fundamental research on how organisms communicate with each other via chemical signals. We analyze ecological interactions with molecular, chemical and neurobiological techniques. In the Institute, organic chemists, biochemists, ecologists, entomologists, behavioral scientists, insect geneticists and physiologists work in collaboration to unravel the complexity of chemical communication that occurs in nature.

The Max Planck Society is committed to gender equality and diversity and actively supports the reconciliation of work and family life. We want to increase the proportion of women in areas where they are underrepresented. The Max Planck Society has also set itself the goal of employing more persons with severe disabilities. We therefore encourage



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### MaxPlanck Two EvolutionAvianBehaviour

2 open PhD positions to study the neural mechanisms of alarm calling behavior in birds

Alarm calling is considered an evolutionary paradox. Although alarm calls can increase the survival rate of the calls' recipients, alarm calls can also harm the sender by revealing the sender's position to the predator. While the function, ecology and evolution of alarm calling behavior is well-studied, we know comparatively little about how the brain controls alarm call production, processes alarm calls and enables animals to generate an appropriate reaction to alarm calls.

We are seeking two outstanding, highly motivated and talented PhD candidates to work on an international and multidisciplinary research project that was recently funded by the European Research Council. The aim of this novel and exciting project is to understand how the avian brain controls the production of alarm calls, processes alarm calls emitted by conspecifics and generates an adequate response to these important anti-predator signals. Cutting-edge, wireless recording techniques will be used to simultaneously monitor the vocal behavior and the brain activity at the cellular level in groups of wild birds that encounter threats within their natural habitat (see Hoffmann et al. 2019 Nat Commun 10(1):2577 for reference). The PhD work will include in-vivo neurophysiology, behavioral observation, neuroanatomy, analysis of behavioral (audio & video) and neuronal data sets, as well as the dissemination of the research results. The positions will be based in Seewiesen (Southern Bavaria, Germany), but all experimental work will be done during extended periods of field work will in South Africa and in Australia. Therefore, we are looking for candidates with experience in avian field research (incl. capturing, banding and observing birds).

Who we are: The project team consists of three outstanding scientist affiliated with the Max Planck Institute for Biological Intelligence in Germany (Dr. Susanne Hoffmann, primary PhD supervisor), with the University of Pretoria in South Africa (Dr. Cornelia Voigt) and with the Deakin University in Australia (Prof. Kate Buchanan). Who you are: The position would suit a student with strong interests in animal behavior and neuroscience. Essential requirements include MSc degree in Biology, Neuroscience, Cognition, Ecology and/or Evolution (or equivalent); high proficiency in the use of the English language; excellent written communication skills; high levels of enthusiasm and motivation and an ability to work independently and as part of an international team. After training, you need to be able to perform invasive animal experiments, and to collect and analyze brain tissue. Willingness to travel internationally for extended time periods and to work in field based settings is an absolute must. Experience in field work with birds and/or in bioacoustics and/or in neurophysiology are desirable.

What we offer: - full time position as PhD student fully funded for 4 years in a stimulating and supportive international research environment with English as the main language - attractive remuneration based on the collective agreement for the public service of the federal states of Germany (E 13 TV L, 65%) - excellent training in academic, technical and career skills via the International Max Planck Research School Biological Intelligence (https://imprs-bi.mpg.de/) - possibility to participate in international conferences - access to state of the art tools and exceptional research infrastructure

How to apply: Motivated candidates are asked to send their applications directly to Dr. Susanne Hoffmann (Susanne.hoffmann@bi.mpg.de). Applications (in English) should contain a cover/motivation letter stating career goals, professional experience, and how these relate to the advertised position; a CV including a detailed description of study trajectory, grades and positioning and contact information of at least 2 referees. Application deadline: 15th September 2024

"Hoffmann, Susanne" <Susanne.Hoffmann@bi.mpg.de>

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### MNCN Madrid FishComparativeGenomics

4-year PhD contract on fish comparative genomics. Thegenomic basis of replicated water-to-land transitions in amphibious fish

The Museo Nacional de Ciencias Naturales The MNCN belongs to the Spanish National Research Council (CSIC), the largest and most important research agency in Spain. The MNCN is a diverse and scientifically stimulating environment and a reference center for biodiversity. The PhD will be associated with the Department of Biodiversity and Evolutionary Biology, with strength in genomics.

The Working Group We use major evolutionary transitions as study systems to understand the patterns and processes underlying biodiversity. Specifically, we are interested in understanding the genomic basis of adaptations associated with one of the most drastic and physiologically challenging habitat transitions: from water to land. We have a strong focus on phylogenomics and comparative genomics and strive to use integrative approaches. The project will be developed with international and multidisciplinary collaborators.

The Project Blennies are an extraordinary family of fish which have made multiple independent conquests of the terrestrial environment. This project aims to understand the evolutionary innovations underlying the origin of amphibious and terrestrial lifestyles. The core work uses comparative genomics to identify genomeand transcriptome-level innovations. We will also study the microbiome, morphology, and explore evo-devo approaches. The PhD has a strong bioinformatic focus, but will also include field and molecular lab work.

What do we offer? §4-year fully-funded PhD contract (project PID2023-152168NB-I00 by the Spanish Ministry). §Well-structured PhD study plan, including hands-on training and specialized courses, international conferences and research stays. §Gross salary of ca. 19.000 euro (1st year) and ca. 23.500 euro (years 2-4). §We are committed to promoting your career development and maintaining an inclusive and friendly working atmosphere. §Working language will be English and/or Spanish.

Eligibility §MSc. in Biology, Bioinformatics, or a related field. §Interest in Bioinformatics. Previous knowledge is desirable but not required. §Curiosity, self-motivation, & organizational skills are a must. §Working language will be English and/or Spanish.

Application Procedure §Tentative deadline: September 29th. §Review of applications will start immediately and interviews will be held in October. §Starting date early (January-March) 2025. §Submit a single pdf to Iker Irisarri (irisarri.iker@gmail.com) with a motivation letter describing your interests, a short description of past and present work, CV, and contact information for two referees. §Informal emails for further information are welcome.

We are committed to promoting equity. Persons from groups that have been historically excluded from academia are strongly encouraged to apply.

Iker <irisarri.iker@gmail.com>

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### NewZealand InvasiveSpeciesGenomics

We seek a PhD applicant (start date prior to 30 June 2025; fully funded PhD position - \$NZD35,000 p/a stipend plus tuition fees) to explore the factors that determine species invasiveness in a robust blow fly system. A major focus is determining whether individuals exhibit competitive superiority across multiple invasion-related traits to enable their invasion success, and whether such factors can be manipulated to influence invasion outcomes.

The successful applicant will have: - Knowledge of at least one of: invasion biology, genomics, ecology; - Experience or interest in developing skills in the phenotyping and analysis of life history traits (particularly in insects); - Interest/experience in fieldwork; - An ability to work well alongside a fantastic team towards common objectives.

The candidate will be based at the University of Waikato under the Chief Supervision of Dr. Ang McGaughran and be co-supervised and/or mentored by Dr. Chrissie Painting (University of Waikato), Prof. Ruth Hufbauer (Colorado State University, USA), and Dr. Nathan Butterworth (Monash University, Australia).

Hamilton is an inland city in the North Island of Aotearoa New Zealand. It is bisected by the Waikato River and is the country's fourth-most populous city. Within close proximity are some of the best surf and swimming beaches in the country, as well as beautiful cultural areas and walking tracks. The University of Waikato is a leading New Zealand university, with the Hamilton campus offering modern facilities, vibrant student life, and easy access to nature and recreation. Our landmark new building - the Pâ - is a special feature of campus life that reinforces our distinctiveness and the interconnectedness of our campus community. For more information about Te Aka Mâtuatua School of Science, please visit our website:

https://www.waikato.ac.nz/int/research/find-a-phd-opportunity/how-do-traits-determine-invasiveness-

among-populations-and-species/ <Ruth.Hufbauer@colostate.edu> "Hufbauer,Ruth"

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### NIOO KNAW Netherlands AvianReproductiveMicrobiomes

PhD position on avian reproductive microbiomes

A fully funded PhD position is available at the Department of Animal Ecology, Netherlands Institute of Ecology, in the group of Dr. Melissah Rowe. The PhD candidate will work on an ERC-funded project where the overarching aim is to determine whether reproductive microbiomes impact host fitness and evolution in wild animals and reveal the role of host genetics and immune functioning in shaping reproductive microbiome variability.

Application deadline September 15th, initial (online) interviews September 23rd /24th, and starting date in November 2024 (but can be flexible).

In this project, the student will use quantitative genetics to test the hypotheses that (a) variation in the microbiome is linked to individual fitness in a wild population, and (b) microbiome diversity and/or composition is heritable. The successful candidate will make use of a wild house sparrow population residing on a remote island in the Atlantic (Lundy Island), where the genetic pedigree is of high density, allowing the estimation of quantitative genetic parameters from data of a few generations.

The PhD position will involve fieldwork on wild birds to collect samples for microbiome analysis and quantify reproductive success of males and females, laboratory analysis, bioinformatic and statistical analysis of data, manuscript preparation, and supervision of students. There is scope for the candidate to develop complementary avenues of research that may involve additional tasks.

We are looking for a highly motivated, independent, and productive person, who thrives in a collaborative and international environment and is willing to work in the field and the lab and contribute intellectually to the project. The candidate should hold a MSc degree in ecology/evolution, molecular biology, microbial ecology, or a related discipline by the time of starting the position. The candidate must have excellent communication skills, including writing and presentation of research, and must be fluent in English, as this is the working language of the group. Experience with bird field work is highly preferred; The candidate will be expected to, after initial training, conduct fieldwork on Lundy Island for a few months every year

Informal inquires can be made to: Melissah Rowe, m.rowe@nioo.knaw.nl Information on the Netherlands Institute of Ecology (NIOO-KNAW) and the Department of Animal Ecology can be found at the website: http://www.nioo.knaw.nl/ . For further information and to apply please see: https://vacatures.knaw.nl/job/Wageningen-PhD-position-on-avian-reproductivemicrobiomes-NIOO-KNAW-Wageningen/988207555/ "Rowe, Melissah" <M.Rowe@nioo.knaw.nl>

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### TempleU Philadelphia EvolBiol

The Liberles Research Group is seeking to recruit a new Ph.D. student.

I am looking for someone who is primarily an evolutionary biologist, who has coding skills and a strong math background. There are several open projects to choose between, including simulations and theory to address questions in the evolution of genome organization and content, as well as some phylogenetic pipelines on comparative genomic data to test hypotheses generated by computational studies.

The student can ultimately choose between the Biology and Bioinformatics Ph.D. programs at Temple University in Philadelphia, depending upon background, fit, and interests.

Please contact me directly with a CV and unofficial transcript (daliberles@temple.edu).

Thank you for your interest.

David Liberles

David A Liberles <daliberles@temple.edu>

### **TexasTechU EvolutionaryGenomics**

The Manthey research group in the Department of Biological Sciences at Texas Tech University is recruiting 1-2 PhD students to work on funded genomics projects beginning Fall 2025. Funding for accepted students includes tuition sponsorship and an ~\$30k annual stipend through combined grant and departmental funding.

We currently have openings for funded projects in two categories: (1) population and landscape genomics in carpenter ants, and (2) genome evolution (birds, ants, etc.). Graduate students would be encouraged to develop their own projects under these broad themes. For more information about these lines of research and our lab more generally, please visit: mantheylab.org.

Interested individuals should email a CV/resume to Dr. Joseph Manthey (jdmanthey@gmail.com or joseph.manthey@ttu.edu), as well as an informal statement of how your interests overlap with the research projects in the lab.

The Department of Biological Sciences has a strong and dynamic group of scientists with a focus in ecology and evolutionary biology. The department has strengths in multiple areas of genomics, bioinformatics, and specialized disciplines of ecology and evolutionary biology. The departmental website can be found here: http://www.depts.ttu.edu/biology/-

<sup>~</sup>Deadline for applications<sup>~</sup> Our department has a deadline of January 1 for applicants applying to start the following fall. Please find all application details here: http://www.depts.ttu.edu/biology/academics/-graduate/prospective-students/ All qualified applicants are encouraged to contact me with their statement of interest. While academic scores have a role in admissions, motivation and enthusiasm for genomics and research experience are highly valued.

Joseph D. Manthey, Ph.D. Associate Professor, Biological Sciences Texas Tech University Email: jdmanthey@gmail.com | joseph.manthey@ttu.edu https://mantheylab.org/ Joseph Manthey <jdmanthey@gmail.com>

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### TrentU LithopsEcoEvoGenomics

PhD project - Eco-evolutionary and conservation dynamics of desert succulents (Lithops spp.) from southern Africa

The Integrative Wildlife Conservation lab at Trent University, in collaboration with the Lithops Research and Conservation Foundation, is offering a unique PhD project on the eco-evolutionary and conservation dynamics of Lithops spp., a genus of small succulent plants occurring in isolated colonies across desert landscapes in southern Africa. In the wild, Lithops are susceptible to human collection, habitat loss, and climate change, with many populations and species currently subject to high extinction risk. There are important knowledge gaps related to Lithops phylogeny and ecology that are currently impacting rigorous conservation status assessment and protection. Trent University is among only a handful of facilities worldwide housing Lithops plants and seeds originating from wild colonies, providing a truly unique opportunity to address integrative questions related to evolution, population genetics, and conservation biology in a controlled, rigorous and impactful context. The PhD project may include investigations related to genome sequencing, phylogenetics, conservation genetics, evolutionary divergence and linkage analysis, and adaptation to harsh environmental conditions, and the candidate will have the opportunity to develop specific research questions based on their interest and expertise.

Successful candidates MUST have an MSc in Biology, Genetics, Conservation, or related field, demonstrated evidence of peer-reviewed publications, strong lab and field skills, and an interest in working collaboratively within a large and diverse research group. Additional desirable qualifications include DNA extraction and library preparation, bioinformatics and GIS skills.

To apply, send a cover letter, curriculum vitae, unofficial academic transcript, and contact information for 3 references to: Dennis Murray (dennismurray@trentu.ca).

For additional details, see www.dennismurray.ca and www.lithopsfoundation.com . The position will be filled as soon as a suitable candidate is found.

Tucker Cambridge <tuckercambridge@trentu.ca>

### TulaneU ButterflyEvolutionaryGenomics

Graduate positions: Tulane University Butterfly Evolutionary Genomics

The Chaturvedi Lab at Tulane University, New Orleans, LA is seeking PhD and Masters students to start in Fall 2025.

The lab is seeking students with an interest in evolutionary genomics, plant-insect interactions, climate adaptation, and molecular evolution. Students will have the opportunity to participate in research which can be related to evolution of plant-insect interactions, co-evolution, spatial population genetics, and ecological adaptation. Students will apply cutting edge 'omics' approach to study evolution in natural organisms. Students will be expected to develop their own dissertation project that reflects their own interests under these themes. All these projects are highly integrative and involve understanding of various topics in evolutionary biology, population genetics, inter-specific interactions, chemical ecology, and global climate change biology. Through this position, students will have the opportunity to conduct field work, develop skills in high-throughput genomic and transcriptomic sequencing, advanced statistical analysis, computational biology, and bioinformatics. Study systems in the lab include several butterfly species and their host plants but this is not restrictive, and students will be encouraged to develop their own projects in study systems of their interest.

Experience in field work, data analysis, molecular biology skills (DNA-based lab work), and quantitative analysis are preferred. Students will have the opportunity to develop these skills as required by the proposed Ph.D. projects.

Students will be supported through a mix of graduate research assistantships and teaching assistantships. Students are also welcome to apply for graduate fellowships through NSF Graduate Research Fellowships.

Tulane University offers a vibrant scientific community with a strong PhD program in Ecology and Evolutionary Biology. New Orleans is a vibrant town with an amazing cultural history and a vibrant atmosphere for graduate school experiences.

The deadline for applications is December 1st, 2024. The successful applicant is expected to start in Fall 2025. To apply please send a CV, contact details for three references, and a cover letter stating qualifications, previous work, and motivation to Dr. Samridhi Chaturvedi at schaturvedi@tulane.edu where you can also send any queries.

Samridhi Chaturvedi Assistant Professor Department of Ecology and Evolutionary Biology Tulane University New Orleans, LA

"Chaturvedi, Samridhi" <schaturvedi@tulane.edu>

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### UAlabama EcoEvoAlaskanRiparianInsects

PhD Position at Univ. Alabama to Study Evolving MetaEcosystems in Alaskan Riparian Insect Communities

Funding for a PhD position is available at the University of Alabama Dept. Biological Sciences in the laboratories of Dr. Carla Atkinson and Dr. Jeff Lozier. The position is part of a recently awarded NSF Institute, The Evolving Meta-Ecosystems (EvoME; woodwellclimate.org/evome) Institute, to investigate the resilience of Arctic organisms and ecosystems to rapid environmental change. We are seeking a student interested in studying terrestrial and stream invertebrates (ground beetles, mayflies, stoneflies) to investigate links between community ecology, trait variation, ecological stoichiometry, thermal biology, and genomics across a broad latitudinal gradient in Alaska. The EvoME Institute is a 6-year project that will involve a large collaborative team, and the student's research will help address major questions about adaptability to a warming arctic in diverse terrestrial and aquatic species, including fish, willows, sparrows, beetles, and mayflies.

The student will get to work with a diverse and highly dynamic group of collaborators and will have the unique experience of spending their summers conducting field work at Toolik Field Station (www.uaf.edu/toolik/) in the Alaskan tundra. Field work will include quantitative sampling of terrestrial beetles and stream invertebrates at project sites for studying taxonomic composition and for genome sequencing, as well as collecting live specimens to conduct experimental work in the field and lab. The ideal student will thus have experience or interest in working with insects from different taxonomic groups and be comfortable with extended field work in a remote field station setting.

The Atkinson and Lozier labs have a history of successful collaboration, and the applicant would become part of friendly and interactive lab groups in the Department of Biological Sciences at UA. Funds are available for stipend and research support, and the position will be available starting in the Spring 2025 semester. The ideal candidate would be available in Summer 2025, but there is flexibility in the start date for qualified applicants so please apply if interested.

Interested applicants should contact Carla Atkinson (clatkinson@ua.edu) or Jeff Lozier (jlozier@ua.edu) for more information.

Atkinson Lab: atkinsonlab.ua.edu Lozier Lab: lozierlab.ua.edu U Alabama Biological Sciences: bsc.ua.edu EVOME: woodwellclimate.org/evome

Jeffrey Lozier <jlozier@ua.edu>

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### UArizona HostParasiteEvolution

The McNew Lab at the University of Arizona is recruiting PhD students in disease ecology to start in Fall of 2025. We seek prospective students with experience working with birds, parasites, or Neotropical biology. We particularly encourage candidates who speak Spanish and/or who are from backgrounds poorly represented in Biology to apply. We will evaluate candidates based on overlap in research interests, shared values, and readiness to carry out a long-term, independent research project. Students will develop projects on host-parasite interactions in either our Galapagos Island or Sonoran Desert systems. The McNew Lab is in the Department of Ecology and Evolutionary Biology located in Tucson, AZ. Students in EEB have 5 years of guaranteed support through TAships and opportunities to apply for independent fellowships. Tucson is a multicultural, livable city with excellent opportunities for outdoor recreation, birding, and plenty of sunshine. For more information please visit mcnewlab.com/contact.

"McNew, Sabrina - (mcnew)" <mcnew@arizona.edu>

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### UAuckland NewZealand ReproductiveDivisionOfLabour

Two fully-funded PhD positions in bacterial experimental evolution and computational modelling at the University of Auckland, New Zealand

We are seeking applicants for two fully-funded PhD positions as part of an exciting research project in evolutionary biology in the School of Biological Sciences at the University of Auckland. The project is supported by a prestigious Marsden Fund grant from the Royal Society of New Zealand (Royal Society Te Aparangi) to Drs. Nobuto Takeuchi, Austen Ganley, and Profs. Anthony Poole & Timothy Cooper.

One PhD position is in computational modelling (Takeuchi lab), and the other is in laboratory-based experimental bacterial evolution (Poole lab). Each position provides a stipend of NZD 33,825 per annum (tax exempt) for the full three-year PhD program as well as full university fees (for both national and international candidates).

The overall goal of the project is to understand what drives the evolution of reproductive divisions of labour (RDL), where sterile 'helpers' assist specialised 'reproducers' in transmitting genetic information. RDL has evolved repeatedly at vastly different biological scales. Examples include eusocial insects with queens and workers, multicellular organisms with germline and soma cells, and cells with genomes and enzymes (enzymes provide catalysis, 'helping' genomes transmit genetic information). What drives the repeated evolution of RDL across different scales? Traditionally, it has been hypothesised that RDL increases group-level production efficiency because investment in a particular task brings accelerating returns - we call this the 'efficiency' hypothesis. However, our recent modelling work suggests that efficiency gains are not necessary for RDL to evolve [1]. Based on this, we propose an alternative hypothesis: that RDL evolves because of its ability to inhibit the evolution of 'cheaters' - individuals that avoid cooperation and replicate uncontrollably. We call this the cheater hypothesis. While the traditional efficiency hypothesis relies on system-specific explanations for how RDL increases production efficiency, the new cheater hypothesis is simple: it predicts RDL is beneficial under any conditions where cheaters can prosper and is, thus, independent of idiosyncrasies in different systems because cheating is known to occur across many systems and biological scales.

The goal of the two PhD projects is to test both efficiency and cheater hypotheses using complementary computational modelling and lab-based experimental evolution approaches. Specifically, the computational PhD student will use individual-based modelling to determine general conditions under which queen-worker RDL evolves to inhibit cheater evolution. The experimental PhD student will undertake experimental evolution using E. coli to test both the cheater and efficiency hypotheses by quantitatively assessing the effects of RDL in a molecular-level system involving helper and reproducer plasmids.

Your role:

PhD position 1 (computational modelling):

Your role will be to implement individual-based models using a fast programming language, such as C++ and Java, run the models using Linux clusters, and analyse data generated by the models, with the goal of determining the general conditions under which queen-worker RDL evolves. You will also collaborate with experimental team members to identify parameters relevant to their experiments. You will obtain world-class training in modelling, designing research, writing papers, presenting your research at scientific conferences, and collaborating with team members. You will have ample opportunities to interact with multiple academics, including your main supervisor, Nobuto Takeuchi, and your co-supervisor, Austen Ganley, and other PhD students through regular meetings and retreats.

Post-graduate research experience in one of evolutionary theory, theoretical ecology, theoretical/mathematical biology, statistical physics, mathematical modelling, and/or any relevant fields is necessary, but projectspecific training will be provided. Programming skills, a keen interest in quantitative and abstract thinking, and excellent academic communication skills are essential.

#### PhD position 2 (laboratory evolution):

Your role will be to first use molecular and synthetic biology approaches to build a plasmid-based RDL system and then use laboratory evolution approaches to examine whether the evolutionary dynamics of these systems are consistent with the efficiency hypothesis or the cheater hypothesis. You will obtain world-class training in synthetic biology, performing experimental tests of theoretical predictions, designing research, performing laboratory evolution experiments, writing papers, presenting your research at international scientific conferences, and collaborating with team members. You will have ample opportunities to interact with multiple academics, including your main

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### **UBasel NatureConservation**

Open PhD position in nature conservation 100% / starting in autumn 2024

Applications are invited for a PhD position at the Department of Environmental Sciences, University of Basel, Switzerland, and in the French nature reserve Petite Camargue Alsacienne, 6 km north of Basel.

#### Your position

At the research station Petite Camargue Alsacienne, we work on a variety of topics from different scientific fields. The topic of your PhD project will largely depend on your own interests; it could, for example, have a focus on zoology, botany, geography, or conservation psychology. The project will have a clear link to the nature reserve Petite Camargue Alsacienne and a strong theoretical background. Past projects can be found on our website; a possible future topic in which we are particularly interested is the application of statistical decision analysis in the context of applied nature conservation.

#### Your profile

You should have a Master's degree in a field related to nature conservation in the broadest sense, e.g. biology, geography, sustainability, or psychology. We expect scientific curiosity and a strong interest in quantitative research methods; basic knowledge of R would be helpful. We expect you to live in one of the houses of the research station and to participate in the maintenance of the research station. You should therefore have a strong commitment to living and working in a nature reserve and an interest in communicating with our colleagues both in the nature reserve and at the University of Basel. In addition to English, you will thus also need some knowledge of French.

#### We offer you

The position is funded for up to 4 years. You will be guided through the process of developing and implementing your PhD project by the main supervisors Dr. Fri;  $\frac{1}{2}$ nzi Korner-Nievergelt and Prof. Dr. Valentin Amrhein; depending on the topic of your project, we will work together with other experts, for example from the Department of Environmental Sciences at the University of Basel. You will be able to rent one of the cozy houses in the nature reserve (see the homepage of our website). At and around the research station, you can enjoy the French livestyle; only 6 km to the south is Basel, a medium-sized Swiss city that is well connected and offers a wide range of cultural and leisure activities.

Application / Contact

Motivated applicants should submit (1) a letter summarizing research interests and relevant experience, (2) their CV, and (3) contact information of two references. We accept only online applications (https://jobs.unibas.ch/offene-stellen/open-phdposition-in-nature-conservation/1ed258d0-fad8-42feaf6f-9514be3a4a56). Applications are welcome until the position is filled and will be reviewed starting September 9, 2024. For more information, see https:// camargue.unibas.ch or contact Prof. Dr. Valentin Amrhein (v.amrhein@unibas.ch).

Valentin Amrhein <v.amrhein@unibas.ch>

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### UCologne Germany BiologyGeologyEvolution

CRC 1211 Earth - Evolution at the Dry Limit Faculty of Mathematics and Natural Sciences, University of Cologne, Germany

PhD position (f/m/x) on riverine species and landscape evolution in hyperarid regions

Application deadline 15.9.2024

PhD position (f/m/x) on riverine species and landscape evolution in hyperarid regions

The speciation of aquatic insects is likely to be closely linked to the development of the rivers they inhabit, so the genetic record of riverine species can help us understand fluvial histories and impactful tectonic and environmental changes. This PhD project aims to better understand and develop this concept in arid regions, focusing on the Atacama Desert in South America and the Namib Desert in Southern Africa. The topic is part of a larger research consortium Earth - Evolution at the Dry Limit (CRC 1211 - https://sfb1211.uni-koeln.de/), which includes several interconnected projects hosted across several German universities, which focus on the links between biological and geoscientific disciplines in arid environments. The successful applicant will be hosted at the University of Cologne and supervised by Kathrin Lampert and Steven Binnie in either the Institutes of Biology or Geology. They will also work closely with researchers in the group of Jean Braun at the GFZ German Research Centre for Geosciences in Potsdam to integrate findings from field studies into a modelling framework.

YOUR TASKS Combine geomorphological and biological research Analyse the connection of river drainage reorganization and biodiversity Modelling using AdaScape/FastScape Molecular (DNA) laboratory work Data analyses and integration Fieldwork in Namibia Present and disseminate research results in scientific conferences and publications

YOUR PROFILE Excellent academic record MSc Geology/Geomorphology or MSc Biology Background in landscape evolution studies and/or phylogenetic analyses and willingness to conduct interdisciplinary research Comfortable doing field work in remote areas Experience with basic programming is an asset Fluent in English (spoken, reading and writing) High motivation, commitment, good communication skills, ability to work in a team and independently Drivers license

WE OFFER An exciting research project at the cutting edge of interdisciplinary research in an international working group A diverse working environment with equal opportunities Support in balancing work and family life Extensive advanced training opportunities Occupational health management offers Flexible working time models

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 1 November 2024 on a part-time basis (29,87 hours per week). The position is to be filled for a fixed term until 30 June 2028. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications without a photo under: https://jobportal.uni-

In

koeln.de. The reference number is Wiss2408-13. The application deadline is 15 September 2024. For further inquiries, please contact Kathrin Lampert (klampert@uni-koeln.de) or Steve Binnie (sbinnie@uni-koeln.de).

Kathrin Lampert <klampert@uni-koeln.de>

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### **UGothenburg Biodiversity**

PhD position in Biological Sciences, with a focus on Plant Evolutionary Biology. Based in the Department of Biology and Environmental Sciences at the University of Gothenburg, Sweden. Starting date 13 January 2025; closing date for applications 20 September 2024.

The overall objective of this PhD is to test the hypothesis that long-distance stimulates diversification at global and regional scales, producing a pattern of nested radiation. It also seeks to evaluate the factors that modulate the effect of LDD on diversification.

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### UHamburg Germany EvolutionaryGeneticsImmunity

We invite applications for a PhD position to study the evolution, genetics and genomics of the adaptive immune system (especially MHC/HLA), using humans and/or fish as a model system. The specific topic is open and will be matched with the candidate's interests and skills. We use both computational and molecular approaches in our lab.

The position is a full-time PhD position funded for ini-

tially 3 years. In Germany, PhD students are expected to complete their PhD work within three years, as they don't have to collect course credits. However, extensions are possible depending on funding availability. A Masters degree in a relevant field is required to apply.

\*The application deadline is August 25\*

Please follow this link to apply online through the university system:

#### https://www.uni-hamburg.de/en/stellenangebote/ausschreibung.html?jobID=-5445f16b8f0ddb0284c276538fc7b6787c4d8650

our group we are studying the genetic basis for variation in immunocompetence and disease susceptibility in vertebrates, with a particular focus on the adaptive immune system and specifically the process of antigen presentation (MHC/HLA) and recognition (TCR/T cell repertoires). Our main model systems are humans and three-spined sticklebacks (a small, but cool fish). We usually take an evolutionary perspective and aim to understand the factors and mechanisms that maintain genetic diversity in the context of host-pathogen coevolution (in both humans and fish), but we are also interested in the consequences of this diversity for the individual's health and have several ongoing collaborations with clinical groups on specific complex diseases in humans (e.g. HIV, Tuberculosis, autoimmunity, cancer). Several project ideas are available in this context and can be tailored to the candidate's interest and experience.

We expect the successful candidate to have a decent background in molecular and evolutionary biology. Some knowledge of immunology and bioinformatics would be a plus. For more specific requirements and duties, including a minor level of teaching, please see the advert link above. We offer an inspiring research environment with expertise in molecular, evolutionary, and computational biology, immunology and population genetics/genomics. Our group has state-of-the art molecular labs, including NGS sequencing capacity, and has priority access to the university's HPC cluster.

Our newly renovated labs and offices in the Institute for Animal Cell and Systems Biology at the University of Hamburg are situated in the middle of Hamburg, the second largest city in Germany. The institute is neighboring the main university campus with its bustling student life and cafes, and is easy to reach by bike or any public transport (and car, if you must).

Please see also our lab website for more info: http://www.biologie.uni-hamburg.de/evolutionaryimmunogenomics Please do not hesitate to contact me for informal inquiries, Tobias Lenz Prof. Dr. Tobias Lenz, Heisenberg-Professor Research Unit for Evolutionary Immunogenomics University of Hamburg Department of Biology Institute of Animal Cell and Systems Biology Martin-Luther-King-Platz 3 20146 Hamburg, Germany

Email: tobias.lenz@uni-hamburg.de

http://www.biologie.uni-hamburg.de/evolutionaryimmunogenomics tobias.lenz@unihamburg.de

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### **UIllinois FishEvolutionGenomics**

The Biodiversity Genomics Lab of the Illinois Natural History Survey (Tan Lab) at the University of Illinois at Urbana-Champaign is seeking to recruit a Ph.D. graduate student interested in fish evolution and genomics to start in Fall semester of 2025. The lab's theme is in studying evolution and diversification in fishes by applying phylogenetic, genomic, and comparative methods. Funding is available to work on a project focusing on the North American minnows of the family Leuciscidae, including genomics, phylogenomics, biogeography, and/or comparative phylogenetic methods for studying diversification. Desirable experience (although not required) include familiarity with planning fieldwork, collecting, preserving, and identifying North American freshwater fish species particularly minnows, DNA extraction, bioinformatics, and comparative phylogenetics analysis in R. For more information on the research occurring in the lab, see this page: https://miltontan.github.io/research/ The University of Illinois has a strong collection of faculty in the Department of Evolution, Ecology, and Behavior and the School of Integrative Biology. The student can apply through the interdisciplinary Program in Ecology, Evolution, and Conservation Biology (http://peec.illinois.edu/prospective/pre\_application). Champaign-Urbana has a diverse, affordable, micro-urban community, are great college towns, and are close to three major cities including Chicago. Learn more about Champaign-Urbana here: http://www.yourewelcomecu.com/cu-community/ The Illinois Natural History Survey is a part of the Prairie Research Institute (PRI) at the University of Illinois at Urbana-Champaign. Since 1858, the INHS has been the guardian and recorder of the biological resources of Illinois the state's biological memory. With a staff

of over 200 scientists and technicians, it is recognized as the premier natural history survey in the nation. The INHS Biological Collections include more than 9.5 million specimens housed in eleven separate collections, including the most complete record of Illinois biota anywhere, as well as having global geographic coverage for many groups. The fish collection alone houses over 1 million specimens and ranks within the top 15 largest in North America, providing an excellent resource for research into fish biodiversity.

Interested students are encouraged to contact Dr. Milton Tan <miltont@illinois.edu> prior to application with a brief statement of their research interests, experience, and accomplishments and a CV to express their interest and communicate about the opportunity. Application deadlines for the PEEC program is December 1st 2024, applications will be reviewed after that date.

Milton Tan, Ph.D. (He/Him) Assistant Research Scientist in Biodiversity Genomics Illinois Natural History Survey Prairie Research Institute University of Illinois at Urbana-Champaign

"Tan, Milton" <miltont@illinois.edu>

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### UMontreal EvolutionaryTheory

I have open graduate student positions at the MSc and PhD level in mathematical biology and evolutionary theory in my research group based at the Department of Mathematics and Statistics at the Universit?? de Montr??al. My research focuses primarily on questions in evolutionary biology, ranging from general evolutionary theory (e.g., evolutionary conflict, cooperation) to evolutionary epidemiology (see https:/-/davidvmcleod.github.io/for more details). For students more interested in within-host evolution or evolutionary immunology, there are also opportunities to be cosupervised by Morgan Craig, a computational immunologist in the department.

David McLeod

Professeur adjoint

D??partement de Math??matiques et Statistique

Universit?? de Montr??al

Important dates:

September 1, 2025.

#### Requirements

The ideal candidates will have strong academic and/or publication records (depending on career stage) in mathematical/computational modelling. Experience in evolutionary biology is an asset but is not necessary.

Speaking/understanding French is not a requirement for graduate studies at Universit?? de Montr??al. Most people in Montr??al speak both English and French. However, it is an asset as French speakers may also take on teaching assistantships.

Funding

MSc: Fully funded (minimum \$22,000/year) for two years. Scholarship recipients receive top up bonuses.

PhD: Fully funded (minimum \$26,500/year) for four years. Scholarship recipients receive top up bonuses.

Application procedure:

Applicants should contact me by email atdavid.mcleod@umontreal.ca by October 1, 2024.Please indicate the position you are applying for, describe your research interests and fit for the position, and include as attachments:

1. your CV

2. the names of 2-3 references

Location:

The Universit?? de Montr??al is a large, researchintensive university ranked as the 6thbest university in Canada, and 111st in the world according to Times Higher Education.

The Department of Mathematics and Statistics (DMS) offers a wide selection of specialized and multidisciplinary programs, at the bachelor???s, master???s and doctoral levels. Research holds a key place in the Department. Its close contacts with the Centre de recherches math??matiques(CRM) and the Institut des sciences math??matiques(ISM) make the DMS an internationally renowned research hub.

The Department of Mathematics and Statistics consists of:

- 35 full-time professors and researchers - Over 500 undergraduate students and some 100 graduate students -10 laboratories affiliated with the CRM, housing more than 200 researchers - Over 100 courses annually at the bachelor's, master's and doctoral levels - Upwards of 125 graduates every year

David McLeod <david.mcleod@umontreal.ca>

Grad students can begin study January 1, May 1, or (to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

### UNebraska-Lincoln Two **PrairieChickenGenomics**

Ph.D. Assistantships (2): Conservation Genomics and Habitat Selection of Greater Prairie Chickens

We are seeking candidates (2) for Doctor of Philosophy assistantships at the University of Nebraska-Lincoln and Kansas State University. The students will develop large multi-locus genomic and collect telemetry and vegetation datasets to conduct analyses to evaluate the influence of Conservation Reserve Program (CRP) grasslands on greater prairie-chicken populations in Kansas and Nebraska. The project will produce actionable science with the results of this multi-faceted study informing management actions on habitat and CRP as well as Greater Prairie Chickens in the region. The successful candidate will be involved in intensive field (capture, monitoring of transmittered individuals and nests, and vegetation surveys) and laboratory work (genomic data collection). This is a collaborative project, as such, the successful candidate will work with a team of students, technicians, private landowners, university faculty, and state biologists.

Start Date: Oct 1, 2024 - Jan 2, 2025 (flexible)

Salary: Research assistantship for 4 years. Tuition and health insurance will be covered by the project. Students are responsible for student fees outside of tuition.

Qualifications: Master of Science in biology, ecology, evolution, wildlife, spatial science, or other relevant discipline. Experience with molecular biology techniques, avian capture methods, and coding in R or python is desirable. A willingness to learn, attention to detail, and a strong work ethic are essential.

How to Apply: Please e-mail a cover letter, CV, unofficial transcripts, and names and contact information of three references (preferably as a single PDF) to Sarah Sonsthagen (ssonsthagen2@unl.edu) and Dan Sullins (sullins@ksu.edu) with the subject line as "Prairiechicken GRA last name". If possible, please include a writing example (published manuscript, official report, etc). Review of applications will begin late August, 2024 and continue until a suitable candidate is identified.

Kansas State University is an Equal Opportunity Employer of individuals with disabilities, protected veterans

and actively seeks diversity among its employees. Background check is required. UNL and NECFWRU values equity, diversity, and inclusion.

Sarah Sonsthagen <ssonsthagen2@unl.edu>

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### UppsalaU BuzzPollination

Graduate position: Buzz pollination, Uppsala U

We are looking for a PhD student in plant evolution to join us at the Plant Ecology and Evolution program, Department of Ecology and Genetics, Uppsala University, Sweden.

This is a fully-funded 4-year studentship open to all nationalities.

Project title: Why does buzz pollination evolve?

Bees and flowering plants share an ancient evolutionary history that has given rise to striking adaptations in both flowers and their pollinators. Among them, is the evolution of buzz-pollinated flowers, i.e., flowers that depend on vibration-producing bees to reproduce. Buzzpollinated flowers have repeatedly evolved across many independent plant lineages, yet we know little about why buzz pollination evolves.

In this project, the PhD student will compare species from four different origins of buzz-pollinated flowers to test several general hypotheses of why buzz pollination evolves. Specific tests will include glasshouse and common garden experiments at Uppsala University but may also be extended to field localities in Sweden and abroad. The PhD student will have access to excellent plant growth facilities, flight arenas to study bee behavior, particle counters, as well as specialized equipment to study the effects of bee vibrations on flowers (e.g., accelerometers, shakers, lasers, micro-robots). The planned tests represent an ambitious and unprecedented evaluation of the evolutionary reasons for buzz pollination and will provide crucial insights into the mechanisms driving the convergent evolution of buzzpollinated flowers.

For further information about the position, please contact Professor, Mario Vallejo-Marin, mario.vallejomarin@ebc.uu.se

To apply for this position please follow this link:

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https://uu.varbi.com/en/what:job/jobID:746609/ Application instructions The application should include 1) your research interests, and a motivation of why you want to pursue a Ph.D., your interest in this specific project, and your suitability for the position, 2) your CV including your education, research experience, and references to publications, if applicable, 3) names and contact details of two referees (email addresses, institution, and phone numbers). The application should be written in English.

You are welcome to submit your application no later than 18 September, 2024.

N?r du har kontakt med oss p? Uppsala universitet med e-post s? inneb?r det att vi behandlar dina personuppgifter. F?r att l?sa mer om hur vi g?r det kan du l?sa h?r: http://www.uu.se/om-uu/dataskyddpersonuppgifter/ 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-protectionpolicy mario.vallejo-marin@ebc.uu.se

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### USouthBohemia TawnyOwlEvolution

We are looking for an enthusiastic bachelor's or master's student to be a part of our field project investigating the role of territory quality on aggression in Tawny owls in Southern Bohemian forests in the Czech Republic. As we have only a small amount of funds to support the student through the project grant, the student will be ideally someone who is studying at a European university and hence, will be able to avail the Erasmus+ traineeship programme.

The project is supervised by S. Sangeeth Sailas, Ph.D. student, University of South Bohemia, and Dr. Martin ????lek, Institute of Vertebrate Biology, Czech Academy of Sciences. Through the project, we hope to understand how territory quality and resource availability can alter intra- and inter-specific interactions in a guild of avian predators.

Field work will involve: i. Acoustic surveys to locate owl territories in Southern Bohemian forests in Czechia. ii. Behavioural experiments by presenting owl dummies (of Tawny and smaller forest owl sp.) to resident Tawny owls and recording their responses with a thermal camera and microphone. iii. Small mammal trapping in territories to measure prey abundance.

The traineeship should be for 4-6 months starting in February 2025.

During the traineeship, the student will work closely with the Ph.D. student (Sangeeth Sailas). We offer training in field methods, processing and analyses of audio and video data. Co-authorship will be provided in all publications that arise from the data collected, and (co-)supervision of your bachelor/master thesis if desired.

We expect that the student will be ready for a lot of fieldwork, especially during nights. Additionally, we hope that you will be adjustable, honest and have a passion for birds and ecology ! :)

Contact Sangeeth Sailas atssangeethspeaks@gmail.comby August 31st, 2024 if you are interested.

Sangeeth Sailas <ssangeethspeaks@gmail.com>

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> USouthCarolina PlantEvolutionaryGenetics

The Toll and Wessinger research groups in the Department of Biological Sciences at the University of South Carolina are enthusiastically recruiting PhD students to start in Fall of 2025 to join our research community studying plant evolutionary and ecological genetics.

The Toll lab studies ecological genetics in monkeyflowers. We are interested in understanding how plants adapt to different environments, how these adaptations contribute to the origin and maintenance of new species, and how they influence species interactions and distributions. For more information, see our website: https://sites.google.com/view/katherinetoll/home. Interested students should email Dr. Katherine Toll (ktoll@sc.edu) with a brief description of your research interests and CV.

The Wessinger lab studies plant evolutionary genetics (of penstemons). Broadly, we are interested in the genetics of parallel/convergent evolution, speciation genetics, population genomics, and the maintenance of complex trait variation. For more information about our lab's research areas, see our website: https://-wessingerlab.github.io. Interested potential students should email a CV and informal statement describing your interests in these research topics to Dr. Carrie Wessinger (wessinc@mailbox.sc.edu).

The EEB group at USC is an interactive, supportive, and collaborative community with several new and growing labs with strengths in evolutionary genetics, evolutionary ecology, and comparative biology. The Toll and Wessinger research groups regularly interact with each other and with other active research groups in the department, including those of Eric Lopresti, Dan Speiser, Brian Hollis, Carol Boggs, Jeff Dudycha, Tim Mousseau, Tad Dallas, and Josh Stone, among others. Our departmental strengths are described here: https:/-/sc.edu/study/colleges\_schools/artsandsciences/-

biological\_sciences/research/index.php USC is located in beautiful Columbia, SC. Columbia is a diverse and affordable small city with a vibrant and walkable downtown, wonderful climate, and easy access to outdoor activities. Graduate students in our program are guaranteed support through RA and/or TA-ships, including tuition and stipend.

The application deadline for applicants starting next fall is December 1. Please contact us directly by email before then so we can look out for your application. The application process is described here: https://sc.edu/study/colleges\_schools/artsandsciences/biological\_sciences/apply/index.php Carrie Wessinger: wessinc@mailbox.sc.edu Kathy Toll: ktoll@sc.edu

"Wessinger, Carrie" <WESSINC@mailbox.sc.edu>

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### UTexasElPaso WildlifeConservation

The Lavretsky Population and Evolutionary Genetics Lab at the University of Texas at El Paso (UTEP) is seeking highly motivated 2 graduate students at the PhD or MS levels start in the Winter or Fall of 2025. The student will join a vibrant and growing group in the lab and research body in the Department of Biological Sciences, Ecology and Evolutionary Biology Program at UTEP, more generally.

The Lavretsky lab is recruiting students broadly interested in population genetics, evolutionary genetics, and/or conservation & wildlife genetics. Our lab works from the field to the gene, and with a variety of taxa (i.e., birds, mammals, and plants); although, our primary study system of the lab has been the mallard duck complex. Our teams are currently working in the southwest (Texas, Arizona, and New Mexico), as well as Hawaii, and with opportunities for international-based scientific collection. In short, students will have opportunities for field work, molecular work, and to contribute to UTEP's Biodiversity Collections. Graduate students are covered by a mix of RAs and TAs.

Please visit the Lab website for more information: http://science.utep.edu/lavretskylab and follow @lavretskylab on Instagram and X.

MINIMUM QUALIFICATIONS: - B.S. Degree in evolutionary biology, molecular biology, conservation genetics, bioinformatics or a related field - Highly self-motivated, independent, and creative thinkers that are enthusiastic about pursuing a career in population, conservation, and evolutionary genetics.

DESIRED QUALIFICATIONS: - Knowledge of (and experience with) wild waterfowl systems - Field Experience in capturing, banding, and auxiliary marker deployment among waterfowl or other birds. - Experience in population genetics, evolutionary genetics, or molecular evolution and with molecular data

APPLICATION PROCESS: To apply, please submit: a cover letter describing research interests, career goals, and experience related to, or interest in, a current CV; unofficial academic transcript; and, the name and full contact information for three references to Dr. Philip Lavretsky (plavretsky@utep.edu). Review of applications will begin as October 1, 2024 and continue until positions are filled.

Philip Lavretsky, PhD Associate Professor Department of Biological Sciences Birds Curator of UTEP's Biodiversity Collections University of Texas El Paso Office Phone: (915)747-6424 Cell Phone: (310)770-1758

#### plavretsky@utep.edu

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### UWaikato NewZealand InsectEvolution

Graduate position

About this opportunity:

To cope with ever-changing environmental conditions, insects produce cuticular hydrocarbons (CHCs), waxy lipids secreted onto their cuticle that prevent desiccation. However, these CHCs also act as pheromones crucial for communication during mating and contests. Given that CHCs function both as a barrier between an insect and its environment and to convey messages during sexual interactions, they provide an ideal trait to investigate the interaction between natural and sexual selection. How these selective forces interact to shape the evolution of CHCs is poorly known, especially under climate change.

Using an endemic beetle, pepeke nguturoa (the New Zealand giraffe weevil), found across most of Aotearoa New Zealand, this PhD project will investigate the role of CHCs in sexual signalling and the trade-off between desiccation resistance and communication using behavioural experiments in the lab and field in combination with the use of analytical chemistry techniques.

We are looking for a candidate that has:

- A strong background in at least one of: behavioural ecology, evolutionary ecology, chemical ecology. - Experience or an interest in ecological field work and/or laboratory based experimentation - Experience or an interest in learning GC-MS analytical techniques - Strong statistical analytical skills (preferably in R) - Excellent communication skills in English (written and spoken) - An open mind and willingness to learn and work in a team - A full drivers license

#### Location:

The candidate will be based at the University of Waikato in Kirikiriroa/Hamilton under the Chief Supervision of Dr Chrissie Painting, and co-supervised by Dr Megan Grainger (University of Waikato), PD Dr Florian Menzel (Johannes Gutenberg University of Mainz, Germany) and Professor Leigh Simmons (University of Western Australia, Australia).

#### Scholarship Value:

This is a fully funded University of Waikato Seeker Scholarship PhD position for 3 years (an annual stipend of NZD\$30,000, plus tuition fees).

We encourage both international and domestic students to apply for this position, which will be based in the Invertebrate Behavioural Ecology lab at the University of Waikato in Kirikiriroa/Hamilton, Aotearoa New Zealand. Kirikiriroa is a relatively small but vibrant town to live and work, offering a fantastic mix of rural and city life. It is also centrally located in the North Island of New Zealand, making it a great base from which to travel the North Island.

The successful student would start by June 2025.

Interested candidates should send applications as a single PDF document comprising 1) a letter of motivation that clearly outlines your interest in the advertised project, 2) a curriculum vitae, including scientific publications if applicable, 3) academic transcripts, and 4) contact details for two academic references to Dr Chrissie Painting (chrissie.painting@waikato.ac.nz). The advert will remain open until the position is filled, with applications reviewed from end of September 2024. Feel free to contact Chrissie with any inquiries about the project.

Dr Chrissie Painting (she/her) Senior Lecturer Te Aka Màtuatua - School of Science Environmental Research Institute Principal Investigator at Te  $P\tilde{A}_{4}^{3}$ naha Matatini (Centre of Research Excellence) Senior Editor of the New Zealand Journal of Zoology Associate Editor at Insect Conservation & Diversity Ph: +64 7 837 9639

chrissie.painting@waikato.ac.nz Painting Lab website| University web profile

Chrissie Painting <chrissie.painting@waikato.ac.nz>

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### UWisconsin OwlPopulationGenomics

Ph.D. position - University of Wisconsin, Madison -Owl Population Genomics

About this opportunity: We are seeking an outstanding student to pursue a Ph.D. in Conservation Genetics and Wildlife Ecology in the Department of Forest and Wildlife Ecology (FWE) at the University of Wisconsin-Madison. The student's thesis will focus on the population genomics of the invasive barred owl and its prey communities in California. The student is expected to conduct metabarcoding, whole genome sequencing, and bioinformatic analyses.

This position is part of a cluster of 4 Ph.D. positions available within our laboratory which involve conservation research on birds and amphibians in California. For this specific Ph.D. the student will be based full-time in Madison, Wisconsin, USA. Students would enroll in the Wildlife Ecology Ph.D. program and be advised by Dr. Zach Peery (https://peery.russell.wisc.edu/) and collaborators in FWE.

Qualifications: A MS degree in wildlife ecology, genetics, or related discipline is preferred. Exceptional applicants with a BS degree will be considered if they have proven relevant experience. A solid working knowledge of molecular ecology and population genetics is required as well as experience working in a genetics laboratory. Prior publication experience is preferred. Excellent English writing and verbal communication skills are essential.

Salary: This position includes three guaranteed years of stipend (ca 40,000 USD, annually) via research assistantships, plus tuition remission and healthcare benefits. Additional funding is likely available through a combination of teaching and research assistantships.

Start Date: Spring or Fall Semester 2025

Applying: Review of applicants will begin on Sept 15th, 2024, but the position will remain open until a suitable candidate is found. To apply, please submit your application here: https://uwmadison.col.qualtrics.com/jfe/form/SV\_0eb3EM90PO5zxOe Please note that applying includes filling out a short survey, uploading a cover letter (specifying which positions you are interested in), curriculum vitae, and unofficial transcripts (both undergraduate and graduate, compiled into one file). In your cover letter, please outline your research interests and academic/professional background. After reviewing all applicants, we will ask for reference letters from top candidates. Finalists will be notified and instructed to submit a formal application, including reference letters, to the UW-Madison Graduate School.

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation or identity, national origin, disability status, or protected veteran status. Our laboratory is committed to building a diverse staff and strongly encourage applications from historically under-represented groups including but not limited to race, ethnicity, gender, gender identity, sexual orientation, age, disability, and socio-economic status. The Peery Lab believes that a diverse team will enable a broader perspective and enhance creativity.

UW-Madison: UW-Madison has a long history of excellence in ecology and conservation biology. The university

#### September 1, 2024 EvolDir

ranks consistently among the top research universities in the United States. Total student enrollment is over 43,000 of which approximately 12,000 are graduate and professional students, and there are over 2,000 faculty. UW-Madison is an exciting place to learn and conduct research! The city of Madison ranks as one of the most attractive places in the U.S. to live and work.

For any questions regarding this position please contact me (details below). All applications must be submitted through the link provided above.

Emily Fountain Scientist II Department of Forest and Wildlife Ecology University of Wisconsin, Madison Madison, WI 53706 efountain@wisc.edu

Emily Fountain <efountain@wisc.edu>

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### **VetMedU Vienna PopGenetics**

PhD positions in Population Genetics

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

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

#### Topics include:

\* The role of deleterious mutations for adaptation and maintenance of variation. \* Long-term adaptation of local Drosophila populations. \* Inference of selection signatures from time-series data. \* Making sense of wholegenome polymorphism data. \* Studying the genotypephenotype map. \* Stabilising selection during polygenic adaptation. \* Evolution of regulatory networks.

Only complete applications (application form, CV, motivation letter, university certificates, indication of the two preferred topics in a single pdf) received by September 18, 2024 will be considered. Two letters of recommendation need to be sent directly by the referees.

PhD students will receive a monthly salary based on

currently euro 2.464,80 before tax according to the regulations of the Austrian Science Fund (FWF).

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

Coordinator, Joint Research Program (SFB)– Polygenic Adaptation Coordinator, Vienna Graduate School of Population Genetics she/her/hers carina.baskett@vetmeduni.ac.at

Baskett Carina <Carina.Baskett@vetmeduni.ac.at>

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### WageningenU Netherlands BacteriophageDiversity

Do you want to pursue a PhD in computational biology? Are you interested in the genome diversity of bacteriophages across space and time? And do you want to combine bioinformatics and mathematical modelling to study the evolutionary factors that impact bacteriophage diversity? Then we are looking for you!

#### Job description

Viruses that infect bacteria - bacteriophages - are the most abundant biological entities on Earth. They contribute significantly to bacterial ecology and evolution and hence impact the function of all ecosystems. Due to their parasitic lifestyle, phages are constantly under selection, resulting in an enormous phage genome diversity. Metagenomics, i.e., bulk sequencing the genetic content of environmental samples, has recently revealed a surprising amount of phage diversity. Particularly, the within-species diversity of phages varies to a large extent in natural populations, and little is known about the distribution of phage diversity across space and time, and which factors drive this diversity.

In this project, you will combine bioinformatics and modelling to untangle the drivers of phage diversity across space and time. Potential factors influencing phage diversity are host diversity, presence of other phages, and environmental factors like spatial structure. You will compare phage diversity in different types of environments, such as marine and soil environments. Particularly, you will develop bioinformatics pipelines to analyze public phage genome and metagenome data with the aim to estimate phage diversity. Additionally, you will formulate mathematical and computational models of phage evolution to explain observed patterns of diversity. You will refine these models based on the observations from the genomic data.

Beyond the scientific and potential application merits, you will build a network for your future career both within and outside Wageningen University.

Your qualities

You have:

\* a successfully completed MSc degree in bioinformatics, evolutionary biology, applied mathematics, or another related field;

\* proficiency in programming (e.g., python);

\* experience in high-throughput sequencing data analysis and comparative genomics or strong interest to develop it;

\* strong affinity with the development of mathematical models and their application to genomic data;

\* fascination for the evolution of microbes and their viruses and a quantitative mindset;

\* a proactive attitude and teamwork skills and you are committed to obtaining a PhD ;

\* a very good level of oral and written English.

A PhD is a learning trajectory. If you do not yet have a track-record showing all the requirements but do have a strong motivation to acquire the skills necessary to make this project a success, we would like to encourage you to apply.

Supervision and Training

The research is embedded in two chair groups at Wa-

geningen University: the Bioinformatics group led by prof. Dick de Ridder and the Laboratory of Genetics led by prof. Bas Zwaan. Your daily supervisors will be dr. Hilje Doekes and dr. Anne Kupczok, with complementary expertise: mathematical biology and evolutionary modelling (Hilje Doekes) and bioinformatics and comparative genomics (Anne Kupczok). The position is for four years, and you will join the Dutch graduate school PE&RC, which offers PhD training and other activities.

Offer

The gross salary for the first year is euro 2.770 - per month rising to euro 3.539,- in the fourth year. This is based on a full-time working week of 38 hours. We offer a temporary contract for 18 months which will be extended to a total of four years if you perform well.

Employee benefits include

\* a fixed holiday bonus of 8% and December bonus of 8.3%;

\* working hours that can be discussed and arranged so that they allow for the best possible work-life balance;

\* reduced fees for the use of on-campus sports facilities;

\* partially paid parental leave;

\* excellent pension scheme.

More information

If you have questions about this position, please contact Hilje Doekes: hilje.doekes@wur.nl.

To apply (deadline: Aug 26): https://www.wur.nl/en/vacancy/phd-position-in-spatiotemporal-diversity-ofphages.htm "Doekes, Hilje" <hilje.doekes@wur.nl>

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# Jobs

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### California ForestGrasslandConservation

MUST APPLY VIA ZINTELLECT: https://www.zintellect.com/Opportunity/Details/USDA-FS-PSWRS-2024-0274 \*Applications will be reviewed on a rolling-basis.

USDA Forest Service Office/Lab and Location: A fellowship opportunity is available with the US Department of Agriculture (USDA) Forest Service (FS) within the Pacific Southwest Research Station (PSWRS) located in Placerville, California, but may be placed on a number of field sites.

At the heart of the USDA Forest Service's mission is their purpose. Everything they do is intended to help sustain forests and grasslands for present and future generations. Why? Because their stewardship work supports nature in sustaining life. This is the purpose that drives the agency's mission and motivates their work across the agency. It's been there from the agency's very beginning, and it still drives them. To advance the mission and serve their purpose, the USDA Forest Service balances the short and long-term needs of people and nature by: working in collaboration with communities and our partners; providing access to resources and experiences that promote economic, ecological, and social vitality; connecting people to the land and one another; and delivering world-class science, technology and land management.

Research Project: The ORISE fellow will be engaged with the ENAMES project (Experimental Network for Assisted Migration and Establishment Silviculture) at the Post-Baccalaureate level.

As a member of the ENAMES project, the ORISE fellow will have the opportunity to participate in the following activities:

Initiate a new experimental network focused on assessing the effect of assisted population migration and silvicul-

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tural practices on the short- and long-term success of reforestation activities. Develop a system of readily accessible data sharing and data visualization tools to promote continued exchange and use of information related to postfire reforestation among managers, scientists, and policy makers. The increasing severity and frequency of wildfire in Western U.S. forests, combined with changes in climate, has created an urgent need to develop effective reforestation strategies for these lands that increase short-term establishment success and longterm resilience to changing conditions. The decision on where to plant, what to plant, and how to plant is becoming increasingly challenging, underlying a need for information to determine where we need to prioritize activities or adjust management objectives, the species and genotypes most adapted to a future climate, and the silvicultural practices that will facilitate forest establishment and provide resilience into the future. This project addresses the above information need with a multidisciplinary approach that was directly informed by scientist-manager discussions that identified the most relevant and impactful research questions. To address the questions of what and how to plant, we are establishing a new network of experimental sites that test the effect of assisted population migration (movement of seed sources outside their existing climate) to determine the species and genotypes best suited for future climate and evaluate a series of silvicultural strategies designed to increase establishment success and long-term forest resilience. Twenty sites will be established across CA, OR, and WA in partnership with forest managers across all land ownerships (federal, state, private, etc). Assisted migration treatments installed at each site will include the planting of four genotypes of a given species that represent

Current seed zone associated with the site, The current climate of the site, The mid-century climate, and End of century climate. Each AM treatment will be crossed with silvicultural treatments that represent adaptation strategies analogous to the Resist-Accept-Direct framework. The silvicultural adaptation treatments installed at a given site will be developed cooperatively between manager partners and the research team to ensure that tested practices are relevant to operational practice and align with management objectives and the resources available to achieve them. Over time, the network will provide information to managers on climate transfer distances for genotypes within a species, and the practices best suited for reforestation under changing conditions. The network will also serve as a nexus that will bring together managers and scientists to exchange ideas and information that will guide adaptive management and related research into the future.

The Fellow will have access to a well-equipped Molecular Genetic laboratory, a greenhouse, and multiple field sites. They will interact with both Genetics and Silviculture researchers in California, Oregon and Washington.

#### Learning Objectives:

To better understand how genetics and silvicultural management can be

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# TERRESTRIAL ARTHROPOD BIOLOGY AND/OR ECOLOGY

Assistant Professor, California State University Fullerton

The Department of Biological Science at California State University Fullerton (CSUF) invites applications for a full-time, tenure-track Assistant Professor in Terrestrial Arthropod Biology and/or Ecology to begin Fall 2025. CSUF is an R2 public University and a federally designated Hispanic-Serving Institution situated in Orange County, which serves primarily undergraduate and master's students. We seek a candidate with a strong research record and commitment to excellence in teaching and mentoring a diverse student population. The successful candidate will be expected to maintain an active research program that leads to peer-reviewed publications and external funding. Research may be related to any area of terrestrial arthropod biology/ecology and will involve undergraduate and Master's students. They will teach lecture and laboratory-supervision of Principles of Ecology or Evolution and Organismal Biology and possibly courses in entomology, plant-animal interactions, animal behavior, disease ecology, including upper-division and graduate-level courses in the candidate's area of expertise. The successful applicant will have a Ph.D., postdoctoral experience, and potential for excellence in teaching and research.

To apply, please visit http://hr.fullerton.edu/careers/-Faculty.php, choose full-time faculty, search for the position # 541175, and provide the following required materials (in pdf format): (1) Cover letter (up to 2) pages); (2) CV (including grant activity); (3) teaching and mentoring philosophy and experience (up to 3 pages); (4) research plans (up to 3 pages); (5) one file containing a sample course syllabus and two representative peer-reviewed publications; (6) candidate Statement on Commitment to Inclusive Excellence (describe past efforts or future aspirations to address diversity, inclusion, equity, and excellence in teaching, research, and/or service; up to 2 pages), and (7) contact information for three references who will submit recommendation letters. For full consideration please apply by September 15, 2024.

Review of applications will begin on September 16, 2024 and continue until the position is filled. Position #541175.

See full job announcement at https://careers.pageuppeople.com/873/fl/en-us/job/541175/assistant-professor-of-terrestrial-arthropod-biologyandor-ecology .Cal State Fullerton is an Equal Opportunity/Title IX/503/504/VEVRA/ADA Employer.

Any questions from candidates can be directed to: ArthropodBiolSrch@fullerton.edu

"Walter, Ryan" <rwalter@Fullerton.edu>

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### CentreC Kentucky Two EvolutionaryBiol

Two Tenure-track Biologists

Centre College seeks a diverse pool of candidates for two tenure-track positions as Assistant or Associate Professor of Biology, beginning August 2025. A successful candidate will have the expertise to teach at least one of the two following courses: Microbiology and Introduction to Genetics. A successful candidate will also have the opportunity to contribute to Centre's innovative general education curriculum, study abroad, and interdisciplinary programs. Collaborative research with undergraduates is expected and supported. Competitive startup funds are included.

We are committed to fostering an inclusive environment that celebrates diversity in all its forms. We strongly encourage applications from candidates who will contribute to the diversity of our faculty, support our diverse student body, and utilize inclusive pedagogical practices. The successful candidate will join a community of compassionate teacher-scholars dedicated to excellent teaching and student mentorship, equity and inclusion, shared governance, interdisciplinary collaboration, global study and citizenship, scholarly achievement, and service to the college and broader society. We offer a supportive community for faculty from all backgrounds, mentoring for early-career faculty, and ongoing professional development.

Centre College boasts small classes and high academic standards, a leading study abroad program, a worldclass performing arts center, and competitive NCAA Division III athletics.

Qualified candidates will hold a PhD or terminal degree in biology or a related field by the time of appointment, demonstrate their commitment to excellence in inclusive teaching and mentoring, and show potential for their own scholarly achievement and mentoring student research. Biologists with interests across multiple subdisciplines of Biology or related fields are welcome to apply.

The College is located in historic Danville, Kentucky, offering a high quality of life and easy access to Lexington, Louisville, and Cincinnati.

To apply, please submit the following at http://apply.interfolio.com/151597: 1. Cover letter describing your interest in and qualifications for this position 2. Curriculum vitae 3. Statement of teaching philosophy, experience, and effectiveness 4. Statement of research interests 5. Diversity statement that explains your lived experiences of the importance of diversity and inclusion, and how these experiences have helped you address issues relating to these topics 6. Letters from three professional references

All written statements should highlight your own experiences of learning, teaching, researching, and/or mentoring. Review of applications will begin on September 15, 2024. Centre College is an equal opportunity employer and is committed to recruiting a diverse workforce. We encourage applications from members of underrepresented groups, including but not limited to racial and ethnic minorities, women, LGBTQ+ individuals, and persons with disabilities. Candidates with questions about access or requiring reasonable accommodations for any part of the application or interview process should contact the search committee chair Amanda Falk at amanda.falk@centre.edu.

For more information about Centre College, visit www.centre.edu . Centre College is a proud member of the Greater Kentucky Higher Education Recruitment Consortium: www.greaterkyherc.org . "Megan B. Mazurek" <megan.mazurek@centre.edu>

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### CSIRO MolecularBiolBioinformatician

Location: Hobart, TAS, AU Company: CSIRO Acknowledgement of Country CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the area that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present.

View our vision towards reconciliation Child safety CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View ourChild Safe Policy.

The opportunity

- Apply your Molecular Biologist/Bioinformatician skills across multiple research projects - Great on-going position in the Sustainable Marine Futures Program - Grow your research career with CSIRO - Australia's National Science Agency!

CSIRO Environment, through the Sustainable Marine Futures Program, is recognised internationally for its strategic and applied science in the sustainable use and management of fishery resources and conservation of threatened and endangered species.

Sustainable Marine Futures (SMF) is seeking to employ a Research Scientist/Engineer to design and develop tools to estimate animal age and other life-history traits from patterns of DNA methylation (epigenetics).The position will work closely with project leaders and staff within SMF, the Environomics FSP and Data 61 to develop and deliver collaborative research projects that deliver strong future science.

As part of a highly innovative research team, the successful applicant will have strong collaboration skills and an excellent publication record, in a relevant field, demonstrating the development and application of novel approaches to address critical research challenges in marine resource management.

Your duties will include:

- Contribute to the development and application of epigenetic ageing to a variety of harvested and conservation listed marine vertebrate species. - Develop research into epigenetic markers for additional life-history traits and population differentiation relevant to species management. - Work with senior scientists to integrate epigenetic ageing into the laboratory and analytical workflows of close-kin mark recapture and other natural resource and conservation management applications. -Under the supervision of more senior researchers, assist in the planning and preparation of research proposals and carry out research investigations, requiring originality, creativity and innovation. - Work collaboratively as part of a multi-disciplinary, regionally dispersed research team to carry out tasks in support of CSIRO's scientific objectives. - Other duties as directed.

Location:Hobart, TAS Salary:AU\$110K - AU\$119K per annum, plus up to 15.4% superannuation Tenure: Indefinite / Full-time Reference:97235 To be considered you will need: Essential

Under CSIRO policy only those who meet all essential criteria can be appointed.

- A PhD (or an equivalent combination of qualifications and research experience) in a relevant field such as Genomics, Bioinformatics or Statistics. - Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems. - A demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports or grant applications. - Demonstrated experience in high-level scientific computing. - Demonstrated experience in handling large genomic datasets and carry out complex analyses with particular focus on epigenetics and/or population genetics. - Demonstrated ability to communicate to a wide variety of audiences. - Demonstrated ability to work collaboratively and effectively in a multidisciplinary team.

Desirable

- Demonstrated skills in molecular laboratory including

NGS library preparation. - The ability and willingness to undertake remote/at sea fieldwork to collect tissue samples. - Capability to apply genomic approaches to teleost and elasmobranch fish species for conservation and management. - Demonstrated experience working with software packages for analysis of SNP datasets (e.g.DArTR, Radiator, Geneious, Kinference).

For full details about this role please review the

Position Description. Eligibility - Applications for this position are open to all candidates. - Appointment to this role is subject to provision of a national police check and may be subject to other security/medical/character requirements. - Flexible working arrangements - We work flexibly at CSIRO, offering a range of options for how, when and where you work.

Diversity and inclusion We are working hard to recruit people representing the diversity across our society, and ensure that all our people feel supported to do their best work and feel empowered to let their ideas flourish.

About CSIRO At CSIRO Australia's national science agency, we solve the greatest

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### DalhousieU BioinformaticsRegionalCoordinator

Regional Coordinator, CB2 Platform Dalhousie University, Halifax, Nova Scotia, Canada Computer Science Robert Beiko \$65,000 year, inclusive of benefits 35 hours/week Full-time

Regional Coordinator

Position: Site: Department: Reports To: Salary: Hours: Status: The Canadian Bioinformatics and Computational Biology (CB2) Platform is a CIHR-funded initiative designed to establish a pan-Canadian network of training and community sites in six provincial regions with the aim to increase bioinformatics, computational biology, and data science capacity among researchers.Led by Bioinformatics.ca which is currently hosted by the Ontario Institute for Cancer Research (OICR), the CB2 Platform will consist of a centralized platform for the management of bioinformatics, computational biology and health data science training opportunities. The platform will also coordinate the management of CB2 career supporting activities including mentorship, professional skill development, awards, and community-building activities. The CB2 Platform aims to grow CB2 capacity among all health and lifescience researchers, especially Early Career Researchers and equity-deserving professionals.

Dalhousie University is seeking a Regional Coordinator to take on coordination of the CB2Platform's bioinformatics, computational biology and data science training and community building activities across the Atlantic Provinces. As a national initiative, this high-profile position will help realize the CB2 Platform's goals to create an innovative training platform and thriving bioinformatics, computational biology and data-science community. The role involves identifying and championing the training needs of the Atlantic region, and bringing innovative training programs to your entire region and its diversity of audiences, as well as coordinating these offerings with the platform's other regions. Training offerings may be from the Canadian Bioinformatics Workshops, Carpentries or other providers who meet the core requirements of the CB2 Platform. The role also involves developing and promoting career and community building activities that extend and support the learning experience beyond the classroom and engages diverse and underrepresented audiences.

Primary Responsibilities include: Training Program Management: - Actively participate in the national coordination of training activities and progress with the platform's Training Program Manager and other Regional Training Coordinators to harmonize activities and strengthen impact; - Identify training communities within the region, and identify / co- develop programs that support the educational needs of these communities; - Support the integration of CB2 with academic programs within the region;

Manage the regional logistics (e.g. advertising, faculty identification & coordination, cloud compute, manage participants, prepare prework & logistics) and facilitate the delivery (e.g. prepare GitHub for materials, secure venue & setup, catering, arrange AV & IT, badges, certificates, survey, post materials) of the CB2 Platform training offerings across training sites in your region, whether in-person or virtual, coordinating with other regional coordinators for distributed events;

Community Program Management: - Actively participate in the national coordination of career- and community- building activities and progress with the platform's Community Program Coordinator and other Regional Training Coordinators to harmonize activities and strengthen impact; - Build relationships with existing community groups across your region including underrepresented audiences to identify their career and community building needs; - Work with existing community-building programs to enhance and promote their career and community-building programming. Create new local communities and programming where there is none using CB2 Platform templates and success models; - Develop and deliver innovative career and community building programming that elevates the participation of underrepresented and equity- deserving communities in bioinformatics, computational biology and data science.

Operational Management: - Act as the key liaison for regional communication of CB2 Platform training and community events; - Manage the regional budget for individual training and community events in the context of the overall regional budget in keeping with CB2 Platform, stakeholder and institutional fiscal requirements; - Seek, author, and submit funding applications to enhance the activities the CB2 Platform can offer. Seek and establish agreements with sponsors of CB2 Platform training or community building activities; - Maintain records of regional training and community-building activities, performance and impact metrics. Provide comprehensive reports to host institution, funding organizations,governing bodies, and stakeholders at regular intervals.

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# DartmouthC Technician BehaviorEvolution

We are seeking an enthusiastic and highly motivated research technician to join our team (https://sites.dartmouth.edu/behrmanlab/) studying behavior evolution in Drosophila. The team integrates molecular genetics, neuroscience, and evolutionary ecology techniques to study mechanisms underlying behavior evolution and how behavior affects evolution in natural populations.

The technician will primarily assist in Drosophila stock maintenance, behavior experiments and CRISPR transgenics. Additional opportunities for molecular biology and field work are possible depending on experience and interest. This position is ideal for a candidate looking to gain more research experience and possibly publications before applying to a graduate program. The position will require full-time work on campus at Dartmouth and it has the possibility to be renewed.

The ideal candidate will have excellent organizational skills with attention to detail, ability maintain detailed records of experiments and capacity to accurately complete work independently with good judgment and time management. Previous educational and work experience should illustrate a good work ethic and interest in scientific research. Competitive candidates will have strong scientific reasoning, excellent communication skills, and enthusiasm for working with a diverse team. Previous experience with Drosophila husbandry and genetic crosses and with basic molecular biology techniques (e.g., DNA extractions, PCR, RNA) is favorable but not a requirement.

Both the Behrman Lab and Department of Biological Sciences value diversity and inclusivity. We encourage applications from those who identify with groups historically underrepresented in STEM.

Please apply here: https://searchjobs.dartmouth.edu/postings/75085 Applications will be reviewed until filled.

Emily L. Behrman (she/her) Assistant Professor Department of Biological Sciences Dartmouth College Hanover, NH 03755

email: Emily.L.Behrman@Dartmouth.edu lab website: https://sites.dartmouth.edu/behrmanlab/ "Emily L. Behrman" <Emily.L.Behrman@dartmouth.edu>

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to graduate and undergraduate teaching and research mentoring. We offer undergraduate biology majors and non-majors courses, connection with the Environmental Science program, MS and PhD graduate programs in Biology, and a graduate Conservation Certificate. We have research facilities at the Rose Hill campus and at the Louis Calder Center Biological Field Station, and we especially seek scientists who can develop a research program that will support and strengthen activities at this field station. There are opportunities to collaborate with scientists at a number of local institutions with connections to Fordham, including the New York Botanical Garden, the American Museum of Natural History and the Wildlife Conservation Society/ Bronx Zoo.

Applicants are required to have a Ph.D. in a life science or related field, and should have postdoctoral or equivalent experience and a record of published work. The successful candidates will be expected to supervise an independent research program that will attract extramural funding, provide research opportunities and mentoring for graduate and undergraduate students, and offer professional service to the Department and University.

To apply, submit a cover letter, curriculum vitae, contact information for three references, research and teaching statements, and three reprints via interfolio. Questions can be directed to the Biological Sciences Department Chair Dr. Evon Hekkala (ehekkala@fordham.edu).

For full consideration, applications should be received by November 1, 2024.

Evon Hekkala <ehekkala@fordham.edu>

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# FordhamU EvolutionaryBiology

## IllinoisStateU EvolutionaryEcol

Ecology and Evolutionary Biology Faculty Position, Fordham University.

Applications are invited for a tenure-track position in Ecology or Evolutionary Biology at the Assistant Professor level in the Department of Biological Sciences at Fordham's Rose Hill Campus in the Bronx, New York, beginning Fall 2025.

The applicant will conduct research in ecology and/or evolutionary biology in a specialty that complements the existing strengths of the department, and will contribute The School of Biological Sciences at Illinois State University in Normal, IL (https://biology.illinoisstate.edu/) invites applications for a nine-month tenure-track position in EVOLUTIONARY ECOLOGY at the level of Assistant Professor. We seek candidates whose research addresses the ecology of organisms in the context of evolution or patterns of evolution as explained by ecological processes, including responses to changing environments (e.g. urban development) and environmental stressors. Successful candidates are expected to establish a rigorous, nationally recognized, and extra-

murally funded research program. Research programs should include undergraduate and graduate students, and our new colleague should be an active mentor to both these student populations. They should be able to contribute to ecological or evolutionary courses at the undergraduate or graduate level, and a biostatistics course using R at the graduate level. A Ph.D. in the specific field of biology or a closely related field and relevant post-doctoral experience are required. State law mandates demonstrable oral proficiency in the English language as a requirement of this position. Salary is competitive and commensurate with qualifications and experience.

The University and the School of Biological Sciences are committed to increasing the diversity and inclusivity of the campus community, recognizing that a diverse and inclusive faculty, staff, and student body enriches the scholarly experiences for the ISU campus and greater community. Candidates who have experience working with a diverse range of faculty, staff, and students, and a demonstrated commitment to fostering a diverse and inclusive community are encouraged to apply. We are sensitive to the needs and invested in the success of dual career partnerships.

The School of Biological Sciences comprises 24 faculty, 9 instructional faculty, approximately 65 graduate students (M.S. and Ph.D.), and approximately 700 undergraduate majors. We value research and teaching and offer a collegial environment fostering research collaboration among ecologists, conservation biologists, evolutionary biologists, cell and molecular biologists, physiologists, and neuroscientists. We also offer opportunities for interdisciplinary collaborations within the college or the university. The School of Biological Sciences features several cutting-edge shared facilities, including a confocal and live-cell imaging center, flow cytometry, vertebrate and aquatic animal housing, and greenhouses.

Please complete a faculty application for posting number 519269 at https://www.jobs.ilstu.edu. Applicants will be instructed to attach the following as separate pdf files: i) a cover letter, ii) curriculum vitae, iii) a two-page research statement, iv) a one-page teaching statement, v) a one-page statement describing your interest in or effort toward furthering diversity, equity, and inclusion, vi) a combined file of three representative publications, and vii) names and e-mail addresses for three references. Review of applications will begin on September 23, 2024, and continue until the position is filled. Intended start date is August 16, 2025. Questions about the search should be directed to Dr. Ben Sadd (bmsadd@ilstu.edu).

Illinois State University, IllinoisState.edu, was founded

in 1857 as Illinois' first public university. We enroll approximately 21,000 students in six colleges. Our new strategic plan, Excellence by Design: 2024-2029, lists our seven core values: Excellence in Teaching, Learning, and Scholarship; Individualized Attention; Equity, Diversity, Access, and Belonging; Collaboration; Community and Civic Engagement; Respect; and Integrity. By acting on these values, we create a learning environment that results in our university being the first-choice public university in Illinois for high-achieving, motivated students who seek an individualized educational experience combined with the resources of a large university. Learn more about Illinois State's Metrics of Excellence at IllinoisState.edu/PointsofPride.

Bloomington-Normal: Illinois State University is located in the growing twin cities of Bloomington and Normal, with a metro population of approximately 172,000. The community is also home to Illinois Weslevan University, Heartland Community College, St. Joseph Medical Center, Carle BroMenn Medical Center, COUNTRY Financial, State Farm Insurance's International Headquarters, Central Illinois Regional Airport, and electric truck manufacturer Rivian Motors. The community has distinguished itself for its outstanding school systems, and its citizens' high level of educational attainment, as well as its parks and recreation, health care, vibrant fine arts scene, job growth, economic opportunity, historic sites, and low crime rates. Bloomington made Livability's top 100 Best Places to Live (2024) and ranked No. 3

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# NaturalHistoryMuseum London HeadMolecularLabs

Dear evoldir community,

We are excited to announce an exceptional job opportunity at the Natural History Museum for an experienced scientific lead to oversee our Molecular Biology Laboratories. This critical role is integral to our Science Innovation Platforms, significantly contributing to our research in biological diversity.

About the Role: We are looking for someone with ex-

tensive experience in molecular biology, particularly in delivering technically challenging experiments (involving historical and environmental samples, and ancient DNA) and staying updated with the latest sequencing methods. The ideal candidate should have broad taxonomic knowledge and a proven project development and management track record.

Why Join Us? At the Natural History Museum, we are committed to creating an inclusive environment where diversity is valued, and everyone can thrive. As a leader of a dynamic team, you'll have the opportunity to contribute to groundbreaking research in biological diversity and help push the boundaries of scientific discovery.

Please see a full description of the position, desired qualifications, and application instructions at the following link: https://jobs.nhm.ac.uk/internal/Job/-JobDetail?JobId=251 Please share this opportunity with anyone in your network who might be interested.

#### Best regards, Paschalia Kapli

Paschalia Kapli, PhD Research Leader and Genomics Theme Leader Natural History Museum Cromwell Road London SW7 5BD U.K.

Paschalia Kapli <paschalia.kapli@nhm.ac.uk>

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# NewMexicoTech EvolutionaryBiology

#### Dear Colleagues,

The Biology Department at New Mexico Institute of Mining and Technology (NM Tech/NMT) seeks outstanding candidates for a tenure-track Assistant Professor position. A PhD in Biology or related field is required. Successful candidates are expected to establish a vigorous extramurally funded research program, contribute to our teaching mission, support the academic success and growth of students, and serve the Biology Department, the University, and their profession.

For full consideration, applications should be submitted by September 27, 2024.

Research programs on any level of biotic organization from molecules to ecosystems are welcome. Ideal research experience and vision will include an appreciation for biologys role in understanding global change (climate adaptation, emerging diseases, evolution, etc.) or contribute to our historical strengths in biomedical research. In addition, the successful candidate will demonstrate a well-conceived plan for including both undergraduate and graduate students in their research, as the Department actively promotes student participation in lab work and research courses.

Research will be supported by institutional start-up funds, and NMT faculty are uniquely eligible for multiple early-career funding opportunities, including NSF-EPSCoR, NIH via New Mexico INBRE, and NSF-Building Research Capacity in Biology awards. Teaching expectations are typically 6-8 contact hours per semester divided among upper division/graduate and lower division Biology courses, seminars, or lab courses. The successful candidate may be supported in developing courses in their area of expertise that are not currently offered.

The Biology Department at NMT offers B.A., B.S., and M.S. degrees in Biology. The Department is the academic home for the transdisciplinary B.S. in Biomolecular Sciences and Technology and is part of a threedepartment consortium with Earth & Environmental Science and Chemistry offering a B.S. degree in Environmental Science. Biology faculty also have the opportunity to advise Ph.D. students via the inter-departmental Biotechnology Ph.D. program. The Department has numerous shared resources, including access to multiple state-of-the-art high- performance computing clusters, and well-equipped teaching laboratories.

New Mexico Tech is located in Socorro (population ~8500), in the scenic middle Rio Grande Valley of central New Mexico, with a relatively low cost of living for the desert southwest, and the campus is situated in a residential area. The nearby Magdalena mountains and numerous desert canyons provide excellent opportunities for hiking, climbing, and mountain biking. The Bosque del Apache National Wildlife Refuge, located just south of Socorro along a major north-south flyway, offers some of the best birding in the United States. Socorro is about an hour south of Albuquerque with its many attractions and convenient airport access. NMT offers excellent benefits (health, vision, dental), tuition fee waiver, a generous retirement plan, and access to a childcare center on campus. NMT is committed to creating a community in which a diverse population can learn, live, and work in an atmosphere of tolerance, civility, and respect for the rights and sensibilities of each individual. NMT is an Equal Opportunity Employer. All those interested in the position are encouraged to apply, particularly individuals from historically marginalized groups.

Application must include the following sent as a one pdf attachment to the email below:

1) Cover letter (2-page maximum) summarizing the applicants qualifications/potential as a researcher, teacher, and productive member of a University or Institution community.

2) Curriculum vitae including educational and employment history, list of publications and funding history, and examples of past service to the candidates community and profession may be included here.

3) Research Experience & Vision Document (3-page maximum) highlighting the candidates research experience, 5-year funding plan, and experience/plan for incorporating early-career scientists (e.g., undergrad-uate, graduate students) into your research program. Self-citations of the described work are welcome.

4) Statement of Teaching Experience and Philosophy (2-page maximum) describing past teaching experiences and pedagogical approaches/philosophies. In addition, include a list of courses that are already offered by NMT (see course catalog) that you are qualified to teach.

5) Contact information for 3-5 professional references (email/phone & relationship, i.e., supervisor, collaborator, advisor). The search committee will request letters of reference after preliminary screening and are not necessary at this stage.

Questions about the position can be directed to Dr. Benjamin Duval at benjamin.duval@nmt.edu

For full consideration, please email the requested materials as a single PDF by September 27th, 2024 to Human Resources and CC Dr. Steve

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last Research Excellence Framework (REF21), Queen Mary's computer science was ranked 8th overall in the UK and 1st for research impact.

The Faculty of Science and Engineering is now seeking talented individuals for up to 30 new permanent academic positions, integrating with our existing teams, including in the areas of: "Applications of AI, Machine Learning and Computational Modelling in" - Genomics and Life Sciences - Ecology, Conservation and Biodiversity

Apply from https://www.qmul.ac.uk/strategic-hires-se/ These posts are available at all academic levels: lecturer, senior lecturer, reader and full professor and are traditional academic research focused positions ('Teaching and Research'). Applicants will be expected to demonstrate an appropriate track record of research publications and grant awards, and a vision and funding strategy to build a successful research group at Queen Mary.

In addition, we are alsoâ $\in$  recruiting for positions focused on education leadership ('Teaching & Scholarship' or â& Professional Practice')â $\in$ at senior lecturer and above. Applicants are expected to demonstrate experience of education leadership or new program development in any of the areas of AI, Machine Learning and computing listed above. We also seek applications from those with a Science and Engineering background whose professional practise in these areas leads to broader influence beyond the field e.g. AI/ML policy, law, ethics, decision making.

The deadline for applications is 23:59 GMT on 29th September 2024. First interviews are expected to take place in November.

Matteo Fumagalli <m.fumagalli@qmul.ac.uk>

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# QueenMaryLondon MachineLearningGenomics

Queen Mary is a world class university ranked 7th in the UK in the latest Research Excellence Framework (REF 2021). Queen Mary has an excellent track record in areas of AI, Machine Learning and computer science covering both fundamentals and applications. In the

# RiceU EvolutionInTheAnthropocence

The Department of BioSciences < https://biosciences.rice.edu/ >—at Rice University invites applications for a tenure-track assistant professor position, with an anticipated but flexible start date of July 1, 2025,—in the area of "Evolution in the Anthropocene."

Humans are contributing to unprecedented changes to our planet, creating challenges for understanding the effects of anthropogenic environmental change on the distribution, traits, genes, and interactions of species. In alignment with the Wiess School of Natural Sciences' initiatives < https://e4.rice.edu/ >—in this area, we are searching for applicants with outstanding research that contributes to our understanding of Evolution in the Anthropocene. Examples may include, but are not limited to, the molecular basis of adaptation to anthropogenic change, effects of spatial heterogeneity on adaptation, the evolution of interspecific interactions in new ecosystems, understanding eco-evolutionary dynamics in a changing world, and the evolution of infectious disease in response to anthropogenic environmental change. Research areas can include but are not limited to evolutionary genetics/genomics, animal behavior, coevolution, evolutionary ecology, evolutionary modeling, experimental evolution, microbial evolution, phylogenetics, evolutionary developmental biology, lifehistory evolution, molecular evolution, and evolution and plasticity. We particularly welcome applications from scholars who leverage genomics, transcriptomics, or proteomics tools and include quantitative, theoretical, and/or computational biology approaches in these areas.

The position is embedded within the Department of BioSciences with expectations to participate in our graduate program in Ecology and Evolutionary Biology < https://biosciences.rice.edu/ecology-andevolutionary-biology-graduate-program >. This vibrant research group has a strong track record in molecular, phenotypic, and behavioral evolution, global change biology, and community and population ecology. In addition, our BioSciences Department offers collaborative opportunities, expertise, and graduate programs in Biochemistry and Cell Biology, Systems and Synthetic Biology, and Neurobiology, as well as collaborative opportunities with the Texas Medical Center. The successful candidate will be equipped to teach undergraduate and graduate classes in Ecology or Evolutionary Biology, conduct high-quality externally funded research in Evolutionary Biology, publish papers in top journals, and present research broadly. The position duties also require the commitment, capacity and motivation for ethical and quality student mentorship for enhancing the experience and training of mentees in the scholar's lab and in the program more broadly. Candidates must have a PhD or equivalent degree in a biological science or a related field by July 1, 2025.

Rice University, a private university in the heart of Houston, Texas, is committed to a diverse intellectual community. In this spirit, we particularly welcome applications from all genders and members of historically underrepresented groups who exemplify diverse cultural experiences and who are especially qualified to mentor and advise all members of our diverse student population.

To apply, please submit the following materials online at http://apply.interfolio.com/152527: (1) cover letter; (2) curriculum vitae; (3) research statement (3 pages or fewer); (4) statement of teaching philosophy (2 pages or fewer); (5) statement on fostering diversity, equity, and inclusion (1 page); and (6) names and contact information for three references. The statement on fostering diversity, equity, and inclusion should discuss any past or current activities and/or future plans as a faculty member to foster and advance diversity, equity, and inclusion in alignment with our University's mission to meet the educational needs and interests of its diverse student population. Application review will commence October 1st, 2024, and continue until the position is filled.

Once the search committee has determined the initial shortlist of candidates, the committee chair will request letters of recommendation. For additional information, please contact the search chair, Dr. Amy Dunham at aed4@rice.edu—. Applicants will be notified when the final candidate has been selected.

Amy Dunham <aed4@rice.edu>

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## SimonFraserU BC PestEvolution

Colleagues,

The Department of Biological Sciences at Simon Fraser University invites applications, from Canadian and international researchers, for a full-time tenure-track position at the rank of Assistant or Associate Professor for the Thelma Finlayson Chair in Biological Control.

The very general position description is below, purposefully written to be broad, which may make it so you don't see yourself in it. But Biology at SFU includes significant research strength in evolutionary biology, and we would love to see applications from evolutionary biologists who study, for example, the evolution of invasiveness, the evolution of host/parasite interactions, the mechanisms of selection in new environments vs. the home range, etc. The focus on a practical question (pests and their control) as mandated in the endowment doesn't change the need for that larger conceptual foundation of the research our new colleague will do.

To see the full ad, please go to the position posting: https://www.sfu.ca/biology/about/employment/faculty/faculty-thelma-finlayson-chair-repost.html For more on the research groups in the department, go to: https://www.sfu.ca/biology/research.html The Thelma Finlayson Chair in Biological Control We invite applications from outstanding, early-career scientists from a broad range of disciplines related to biological control or pest management, including but not limited to applied insect biology, plant-insect interactions, invasion biology, and plant or insect genetics, biotechnology, or genomics, in any forest, agricultural, horticultural, urban or natural ecosystem. The position would begin no earlier than September 2025. The successful candidate should have demonstrated research excellence through a strong publication record in internationally recognized, peerreviewed journals and be a current or future leader in their field. The new hire will be expected to contribute to development and teaching of new or existing courses related to biological control and pest management, as well as other core undergraduate and graduate courses in BISC's program. We encourage applications from researchers who will contribute to the Department's efforts in supporting equity, diversity and inclusion.

Dr. Elizabeth Elle (she/her/hers) Professor | Department of Biological Sciences Simon Fraser University | Shrum Science Centre B8242 8888 University Dr., Burnaby, B.C. V5A 1S6 T: 778.782.4592 | C: 604.813.4592 | E: eelle@sfu.ca sfu.ca/people/eelle/

At Simon Fraser University, we work on the unceded traditional territories of the Coast Salish peoples of the Musqueam, Squamish, and Tslleil-Waututh Nations.

Elizabeth Elle <<br/>eelle@sfu.ca>

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## SmithsonianFellowships Oct15

Dear Colleagues,

Applications for the Smithsonian Institution Fellowship Program (SIFP) < https://fellowships.si.edu/opportunity/smithsonian-institution-fellowshipprogram-sifp > are now open.

The deadline is October 15th, 2024.

The Smithsonian Institution Fellowship Program < https://fellowships.si.edu/opportunity/smithsonianinstitution-fellowship-program-sifp > offers opportunities for independent research to graduate students and postdoctoral researchers related to Smithsonian collections, facilities, and staff expertise. Smithsonian researchers serve as advisors for the in-residence fellows.

Eligibility: Fellowship category is based on the anticipated academic level at the time the fellowship would begin. Postdoctoral - up to five years beyond the Ph.D. Predoctoral - for doctoral candidates to conduct dissertation research. Ten-Week Graduate Student Fellowships - any graduate students.

Within the Department of Invertebrate Zoology, we encourage you to contact your potential advisor to determine the suitability of your project to the programs.

For more information about the SIFP and other Invertebrate Zoology fellowships see this page < https://naturalhistory.si.edu/research/invertebratezoology/opportunities >.

Please spread the word! Best wishes, 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

"Osborn, Karen" <OsbornK@si.edu>

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# UAkron Ohio GenomicsBioinformatics

The Department Biology https://of <www.uakron.edu/biology/ > at the University of Akron invites applications for an Assistant Professor of Genetics, Genomics or Bioinformatics position starting in August 2025. This position will fill a critical need providing Biology and Biomedical Science majors with training in genetics/genomics and related topics, which are integral for modern healthcare professionals. This position will enhance our degrees by offering lower and/or upper-level courses in a variety of topics related to genetics. The ideal candidate will have expertise in topics related to Health, Well-being and Community Flourishing such as: classical genetics, health disparities, genetic/genomic interactions with environmental exposures, behaviors associated with cancer risk and related outcomes, epigenetics of racism, human diversity, DNA vaccination, genomics/bioinformatics, population migration, biodiversity loss and/or genetics of sustainable agriculture. Successful applicants will demonstrate an ability to integrate across two or more of the college's focus areas: Data Science & Analytics (critical to working with large biological datasets), Global Change Science (e.g., emerging infectious diseases, crop responses to climate change), and Health, Well-being & Community Flourishing (e.g., human genetic diseases, population genetics). This faculty member can also provide research opportunities to our large undergraduate population, as well as supervising Master's and Ph.D. students.

The mission of the Department of Biology is to provide students with a broad understanding of biology, spanning molecules to ecosystems, through community engaged teaching, research, and service. We are seeking a tenure-track faculty in genetics, genomics, or related areas, who can maintain an active research program and teach modern genetics, genomics, and/or bioinformatics techniques to a diverse range of students. The advertised position is part of a public and community health cluster hire being led by the Buchtel College of Arts and Sciences < https://www.uakron.edu/bcas/ >. The search is part of an effort to grow certificate and curricular pathways in health, well-being, and community flourishing, with an emphasis on increasing research and teaching expertise in topics related to the social determinants of health, urban health, and health disparities. Participating units include: the Departments of Biology, Sociology, and the School of Communication. The University of Akron strongly values inclusion and diversity of ideas, experience, and methodology within the classroom and in the research and creative activity of its faculty. As such, we welcome applicants who use integrative approaches across a range of biological, computational, humanistic, socio-cultural, communitybased, prevention science, behavioral, and statistical methods.

This search seeks to build a cohort of teacher-scholars who will offer a strong contribution to the excellence of UA through teaching, scholarship, service and collaboration. Specifically, as an urban-research university, we are particularly interested in scholars whose work touches on the pressing needs of cities and urban communities. Through our teaching, scholarship, and service, we strive to create an environment where every student at the University feels included and welcomed. We value < https://www.uakron.edu/bcas/diversity/ > the contribution of each individual in their commitment to a better University of Akron, and welcome applications that demonstrate experience working with students from different backgrounds, experiences and beliefs.

Required Qualifications: Ph.D. in Biology or related area

Preferred Qualifications: Evidence of research and teaching excellence in genetics, genomics, or a related area.

Applicants' research should demonstrate potential for external funding. Applicants' research and teaching should show potential to leverage existing resources such as the local health care infrastructure (e.g. Northeast Ohio Medical School, Summa Health, Akron Children's Hospital, The Cleveland Clinic), Cleveland Museum of Natural History, Cuyahoga Valley National Park, the UA field station, or promote interactions with similar regional resources. This hire would support education in our biology and pre-health majors, graduate education in the Integrated Bioscience PhD program, and potentially reach into the underserved communities in our local urban school systems in Akron and Northeast Ohio. The ideal applicant should have Post-doctoral research experience.

Additional Job Description Application Instructions:

Applicants should submit a cover letter, C.V., and contact information for three references. The application should include statements of research and teaching.

Application Deadline:



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## UArkansas EvolutionaryBiology

Tenure-track Faculty Position: Evolutionary Biology

Job Title: Assistant Professor of Evolutionary Biology Department/School: Department of Biological Sciences, University of Arkansas Location: Fayetteville, AR Start date: August 11, 2025

Position Summary: The Department of Biological Sciences in the Fulbright College of Arts and Sciences at the University of Arkansas invites applications for a tenure-track Assistant Professor of Evolutionary Biology to start August 2025. This is a standard nine-month faculty appointment.

We seek candidates whose research addresses significant questions in evolutionary biology, broadly defined. Candidates whose research programs complement current research areas in the department are particularly encouraged to apply. A Ph.D. in evolutionary biology, or a related field, and demonstrated research accomplishments are expected, as is postdoctoral experience. Successful candidates are expected to establish an extramurally funded research program, contribute to graduate and undergraduate education, including teaching our core undergraduate Evolution course, and participate in service activities.

Regular, reliable, and non-disruptive attendance is an essential job duty, as is the ability to create and maintain collegial, harmonious working relationships with others.

About the Department: The Department of Biological Sciences includes 34 tenured or tenure-track faculty members conducting research and teaching in the areas of evolutionary biology, ecology, genetics, genomics, development, cell biology, and microbiology. More information about the department can be found at: https:/-/fulbright.uark.edu/departments/biology/. There are additional opportunities for collaboration and graduate recruitment through the Cell and Molecular Biology program (http://cell.uark.edu), Statistics and Analytics program (http://statistics-analytics.uark.edu/index.php), and Center for Advanced Spatial Technologies (https://cast.uark.edu). The Arkansas High Performance Computing Center provides state-of-the-art computing resources.

The University of Arkansas is a recipient of the NSF AD-VANCE Award (2021-2024). The University of Arkansas Empowering Network Groups for Arkansas Gender Equity (ENGAGE) program promotes institutional change for gender equity in STEM departments and across campus by harnessing institutional resources and mentoring networks.

APPLICATION INSTRUCTIONS: Completed applications received by Friday October 4, 2024, will be assured full consideration. Late applications will be reviewed as necessary to fill the position.

Applicants must submit: a Curriculum Vitae, Cover Letter, Research Statement Teaching Statement, and three letters of recommendation.

For a complete position announcement and information regarding how to apply, please visit:

https://uasys.wd5.myworkdayjobs.com/en-US/UASYS/job/Assistant-Professor-of-Evolutionary-Biology\_R0060075-1?locations=-17a66cdad98201f7890cfb48ca00e249 . For additional inquiries, please contact the search committee chair, Erica Westerman, at ewesterm@uark.edu.

#### EMPLOYER INFORMATION

The University of Arkansas: Founded in 1871, the University of Arkansas is a land grant institution, classified by the Carnegie Foundation among the nation???s top 2 percent of universities with the highest level of research activity. The University of Arkansas works to advance Arkansas and build a better world through education, research and outreach by providing transformational opportunities and skills, promoting an inclusive and diverse culture and climate, and nurturing creativity, discovery and the spread of new ideas and innovations.

Fulbright College: The Fulbright College of Arts and Sciences is the largest and most academically diverse unit on campus with 3 schools, 16 departments, and 43 academic programs and research centers. The University of Arkansas is committed to providing an educational and work environment in which thought, creativity, and growth are stimulated, and in which individuals are free to realize their full potential. The Fulbright College promotes these ideals and welcomes applicants who foster an inclusive environment through an open exchange of voices and ideas from populations of diverse backgrounds.

The Community: Fayetteville is home to the University of Arkansas campus, and is known for its spectacular views and ample green spaces. Fayetteville is considered one of the country???s finest college towns, and the surrounding northwest Arkansas region is regularly ranked as one of the best places to live in the U.S. Some

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# UCalifornia Berkeley HostMicrobeEvolution

Assistant Professor - Global Change Biology- Department of Integrative Biology

Position overview Position title: Assistant Professor -Global Change Biology - Integrative Biology

Salary range: The current salary range for this position is \$78,200 - \$123,400 (9-month academic year salary), however, off-scale salary and other components of pay, which would yield compensation that is higher than this range, are offered to meet competitive conditions.

Anticipated start: July 1, 2025

Application Window Open date: July 3, 2024

Next review date: Monday, Aug 26, 2024 at 11:59pm (Pacific Time) Apply by this date to ensure full consideration by the committee.

Final date: Monday, Aug 26, 2024 at 11:59pm (Pacific Time) Applications will continue to be accepted until this date.

Position description

The Department of Integrative Biology (IB) at the University of California, Berkeley (UCB) invites applications for a tenure-track Assistant Professor faculty position in the area of global change biology with emphasis on the Ecology and Evolution of Host-Microbe Interactions. The potential start date is July 1, 2025.

The Department of Integrative Biology at the University of California, Berkeley seeks candidates working on the ecological and/or evolutionary dynamics of host-microbe interactions in the context of global change. Researchers working on any aspect of the ecology and/or evolution of host-microbe interactions including pathogens/parasites, microbiomes and mutualisms are encouraged to apply. We seek a colleague who uses any combination of laboratory, fieldwork or theoretical approaches. Candidates will be expected to have a strong interest in both undergraduate and graduate teaching and to contribute to instruction in core courses in ecology, evolution, microbial interactions and/or global change. Competitive candidates will demonstrate evidence of outstanding research productivity, the potential to obtain external funding, a commitment to excellence in teaching and in mentoring of undergraduates, graduate students, and postdoctoral fellows, and a commitment to advancing equity, inclusion, non-discrimination, and belonging consistent with Berkeley's principles of community. We anticipate that on-campus interviews will be held during November and December 2024.

UCB has exceptional strengths in many areas of climate change science, technology, economics, and policy, and our new colleague will have the opportunity to partner in research and teaching. The ideal candidate will develop collaborative links with faculty working in these areas while also providing distinctive, complementary expertise in the ecology and evolution of host-microbe interactions. Learn more about the Department of Integrative Biology at: https://ib.berkeley.edu . The department is committed to addressing the family needs of faculty, including dual career couples and single parents. We are also interested in candidates who have had non-traditional career paths or who have taken time off for family reasons, or who have achieved excellence in careers outside academia. For information about potential relocation to Berkeley, or career needs of accompanying partners and spouses, please visit: http://ofew.berkeley.edu/new-faculty. The University of California is committed to creating and maintaining a community dedicated to the advancement, application, and transmission of knowledge and creative endeavors through academic excellence, where all individuals who participate in University programs and activities can work and learn together in a safe and secure environment, free of violence, harassment, discrimination, exploitation, or intimidation. Consistent with this commitment, UC Berkelev requires all applicants for Senate faculty positions to complete, sign, and upload an Authorization of Information Release form into AP Recruit as part of their application. If an applicant does not include the signed authorization, the application will be considered incomplete, and as with any incomplete application, will not receive further consideration. Although

all applicants for faculty recruitments must complete the entire application, applicants will only be subject to reference checks if and when they are selected as the candidate to whom the hiring unit would like to extend a formal offer. More information is available on https:/-/ofew.berkeley.edu/attestation-prior-misconduct . Integrative Biology: https://ib.berkeley.edu/ Qualifications Basic qualifications (required at time of application) Minimum Basic Qualifications:

PhD (or equivalent international degree), or enrolled in PhD or equivalent international degree-granting program at the time of application.

Additional qualifications (required at time of start)

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#### **UEssex EvolutionaryBiology**

The University of Essex, UK, is seeking a Lecturer conducting research in evolutionary biology or a related field. The new Lecturer will join the collegial and supportive environment of the School of Life Sciences, contributing to teaching and leading a research programme, ideally relating to any aspect of evolutionary biology.

Application closing date 16/09/2024

Details of the post and application process can be found at the following url:

#### https://vacancies.essex.ac.uk/tlive\_webrecruitment/wrd/run/ETREC107GF.open?VACANCY\_ID=-202575WW5Z&WVID=9918109NEm&LANG=USA

Informal enquiries may be made by email to the Head of the School of Life Sciences Prof Terence McGenity at tjmcgen@essex.ac.uk(all formal applications for the post should be made online through the University of Essex website).

"Hoyal Cuthill, Jennifer F" <j.hoyalcuthill@essex.ac.uk>

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## UKansas BiodiversityDevelopment

New position: Assistant Director for Development, University of Kansas Biodiversity Institute

Summary: The University of Kansas Biodiversity Institute & Natural History Museum (BI/NHM - https://biodiversity.ku.edu/), on the Lawrence campus, is one of the premier research and education institutes in the U.S. in biodiversity science, biodiversity informatics, paleobiology, biogeography, evolutionary biology, and archaeology. The Assistant Director for Development is responsible for planning, advancing and implementing development and fundraising activities and events of the BI/NHM.

Detailed information: https://employment.ku.edu/jobs/staff/assistant-director-for-development/28624br Application review: starts 09/16/2024

Inquiries are encouraged: Dr. Nico Franz, nico.franz@asu.edu

nico.franz@ku.edu

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> UKansas Technician DrosophilaGenomics

A full-time research assistant position is available at the University of Kansas to work on a federally funded project to explore the genomics of male fitness variation in the model fruit fly system, Drosophila melanogaster. The project is led by Drs. John Kelly, Stuart Macdonald, and Rob Unckless. The successful candidate will assist with both fly work (maintaining stocks, crossing flies, executing fitness assays) and with molecular biology and genomics work (isolating DNA, generating next-generation sequencing libraries), and will have the opportunity to learn a range of new skills. We are looking for an enthusiastic and organized individual who wants to learn new experimental skills in the broad areas of evolution and genetics, and has excellent oral and written communication skills. Previous research assistants in our groups have been authors of research publications, and have leveraged their experiences with us to further their careers in academia and/or industry. This position is funded through a multi-year NSF (National Science Foundation) research grant and has an anticipated start date of Jan 2, 2025, although this is flexible/negotiable.

The environment for evolutionary and quantitative genetics/genomics at the University of Kansas is exceptional, with a number of relevant research groups in EEB (https://eeb.ku.edu/faculty), MB (https://molecularbiosciences.ku.edu/faculty), and Center for Genomics (https://genomics.ku.edu/). Collectively our groups provide a strong, collaborative training environment. The tentative start date for the position is Jan 2, 2025, but that is negotiable. Salary \$46,000 commensurate with qualifications and experience.

Required Qualifications: 1. A bachelor's degree in biology or a related field by start date. 2. Previous experience with molecular biology techniques (e.g., PCR), as evidenced by the application materials. 3. Effective written communication skills as evidenced by the application materials.

Preferred Qualifications: 1. Experience with Drosophila husbandry. 2. Significant laboratory experience, including troubleshooting and optimizing protocols. 3. Experience making next generation sequencing libraries 4. Prior experience managing large scientific projects, including managing undergraduate assistants.

A complete electronic application includes the following materials: (1) A CV/resume, (2) a cover letter outlining relevant experience and interest in the position, and (3) contact information for three referees (phone/email) that should be submitted to: http:/-/www.employment.ku.edu/staff/28629BR Inquiries about the position can be directed to Stuart Macdonald (sjmac@ku.edu) or Rob Unckless (unckless@ku.edu).

"Kelly, John K" <jkk@ku.edu>

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# UMichigan Cichlid CTSegmentationTech

https://careers.umich.edu/job\_detail/251695/researchlaboratory-technician-senior-friedman-lab HOW TO APPLY Applicants should submit: (1) a cover letter of no more than two pages outlining interest in the position and relevant skills and experience; (2) a CV; (3) a portfolio of images and/or surface files of completed segmentations; and (4) contact information for three references to Matt Friedman (mfriedman@umich.edu) with the subject line <last name> Application: Friedman NSF-Cichlids project. Informal inquires before applying are welcome. Individuals from underrepresented backgrounds are especially encouraged to apply. Review of applications will begin immediately until August 31, 2024.

JOB SUMMARY The Friedman Lab in the Department of Earth and Environmental Sciences and the Museum of Paleontology at the University of Michigan seeks a technician to generate, curate, segment, and archive micro-CT data for extinct and extant cichlid fishes. The project is a collaboration between the University of Michigan, The American Museum of Natural History, and Middle Tennessee State University, funded by the U.S. National Science Foundation, and with support from partners in several national and international institutions. The Michigan-based technician will lead in collecting, organizing, segmenting, and depositing micro-CT data for the project. Segmentation work will emphasize fossil specimens, and the technician will also aid in preparing modern preserved specimens for scanning.

The technician will work with PIs Friedman (UM Museum of Paleontology), Lopez-Fernandez (UM Ecology and Evolutionary Biology, Museum of Zoology), and Stiassny (AMNH). The technician will work in close coordination with a UM postdoc to help manage data curation and accessibility needs through a dedicated GitHub site and other resources for all project participants following the project's Data Management Plan. If desired, the technician will have opportunities to participate in museum-based outreach activities in coordination with the PIs, UM postdoc, and the University of Michigan Museum of Natural History.

MISSION STATEMENT The mission of the University of Michigan is to serve the people of Michigan and the

world through preeminence in creating, communicating, preserving and applying knowledge, art, and academic values, and in developing leaders and citizens who will challenge the present and enrich the future.

RESPONSIBILITIES\* The successful technician will work in-person in Ann Arbor at the Biological Sciences Building and Research Museums Center and will be responsible for:

(5% effort) - gathering micro-CT data for specimens; (5% effort) - preparing modern specimens for scanning; (70% effort) - segmenting scan data, emphasizing paleon-tological material; (10% effort) - producing high-quality images and animations based on segmented micro-CT data; (10% effort) - working with the project postdoc on data curation.

REQUIRED QUALIFICATIONS\* The position requires a Bachelor's degree in evolutionary biology, zoology, paleontology, or a related field. One to two years of relevant experience preferred. The candidate must be able to work independently and as part of a team. Experience with one or more CT segmentation platforms (e.g., Mimics, Dragonfly, Aviso, etc.) and online data repositories (e.g., MorphoSource) is essential. Familiarity with operating lab-based micro-CT scanners and software for generating high-quality images based on scan data (e.g., Blender) is desired but not essential; training opportunities will be available.

There is no prerequisite that the candidate has previous experience working with fossils or fishes, although both are desired qualifications.

ADDITIONAL INFORMATION The position comes with a salary range of \$35,000 to \$41,400. A higher salary may be possible for well qualified candidates.

This is a one (1) year term limited position with possibility of renewal based on availability of work, availability of funding and overall satisfactory performance

The technician will be based in the Museum of Paleontology at the University of Michigan in Ann Arbor.

Matt Friedman <mfriedm@umich.edu>

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# UNebraskaLincoln ResTech EvolutionaryGenomics

The Moore Lab (mooregenomicslab.com) at the University of Nebraska Lincoln is recruiting an enthusiastic and motivated research technician to join the team to work on evolutionary systems genomics questions, and more! We use beautiful and charismatic Malawi African cichlid fishes to study the mechanisms underlying complex adaptive traits, with a focus on gene expression related to behaviors and sex-associated phenotypes. All projects will focus on generating and integrating different types of genomic data (epigenetics, gene expression, and/or whole genome sequencing), but may also include tissue collection, histology, and/or state-of-the-art, creative behavioral phenotyping.

The technician will be responsible for assisting PI Moore with organization and ordering in the lab, coordinating undergraduate researchers for fish care duties, and sequencing experiment data generation. Additional opportunities for bioinformatic tasks or field work are possible depending on candidate interest. This position is ideal for someone looking to gain additional research and publication experience prior to applying for graduate programs, or an experienced technician looking to be located in Lincoln NE. Initial hire will be for a 1 year appointment, with the opportunity to extend dependent on performance and funding.

Required qualifications:

\* Excellent time management and organizational skills \* Ability to work independently or with a team to achieve scientific goals \* Interest in gaining new skills \* A willingness to contribute to a supportive and engaging intellectual environment that includes researchers at all career stages. \* BA or BS in Biology or related field, or relevant coursework or experience if in an unrelated field

Skills that would give you a head start on the job:

\* Wet lab experience (nucleic acid extractions, genomic library preparations) \* and/or fish handling and husbandry experience \* and/or familiarity with bash scripting/R or other programming languages (python, perl, etc)

As an EO/AA employer, the University of Nebraska considers qualified applicants for employment without regard to race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation. See https://www.unl.edu/equity/notice-nondiscrimination . Feel free to email Emily Moore if you have any questions (emoore28@unl.edu). https://employment.unl.edu/postings/93152 Application review will begin on 9/9 and will continue until position is filled.

emoore28@unl.edu

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# UNorthCarolina Charlotte LabManager

The University of North Carolina at Charlotte Department of Bioinformatics and Genomics is looking for an experienced and motivated molecular biologist to lead and manage shared laboratory resources at the North Carolina Research Campus (NCRC) (https://ncresearchcampus.net). The ideal candidate will have a BS (MS preferred) in a biological science with at least five years of molecular biology lab experience. Candidates should have direct experience with sample preparation and sequencing workflows for Illumina and Oxford Nanopore sequencing platforms as well as quantitative molecular detection methods such as ddPCR and qPCR. This position is not "soft-funded" but is funded by state funds.

The successful candidate will provide expertise in the design and use of standard and state of the art molecular biology laboratory protocols. They will train researchers, graduate students and department staff in the operation of specialized equipment and the performance of complex protocols. They will also be responsible for the ordering of materials and equipment and proper handling and reception of materials. The lab manager will also provide oversight of shared equipment and spaces, including recommendations for space organization, service schedules, and equipment replacement. Also, they will work with Facilities and EHS on equipment certification, repair, and maintenance.

Applications must be made electronically at https://jobs.charlotte.edu/ (position #002190) and must include a cover letter, CV, and contact information for at least three references.

For additional information about the department, please

visit our website at https://bioinformatics.uncc.edu https://bioinformatics.charlotte.edu/ . For questions about the position or the application process, please contact Cory Brouwer at cory.brouwer@charlotte.edu.

Laurel Yohe <lyohe1@charlotte.edu>

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## UPittsburgh EvolutionaryBiology

#### FACULTY POSITIONS IN ECOLOGY AND/OR EVO-LUTIONARY BIOLOGY

The Department of Biological Sciences at the University of Pittsburgh invites applications for tenure-track faculty positions in the broad fields of Ecology and/or Evolutionary Biology. The positions are anticipated at the ASSISTANT PROFESSOR level with an anticipated start date of 15 August 2025. We seek a scientist who will enhance and complement existing strengths in our broad-based, interdisciplinary, and collaborative biological sciences department.

We are specifically searching for colleagues with demonstrated (or potential for) excellence in research, undergraduate and graduate teaching and mentorship, as well as the potential to collaborate with other faculty in the department. Furthermore, we seek colleague who share our commitment < https://www.biology.pitt.edu/diversity > to mentoring and supporting trainees and colleagues from diverse backgrounds and to developing more inclusive and equitable academic practices (www.biology.pitt.edu/diversity). We are broadly interested in applicants working in any area of ecology or evolution, including those with expertise in individual systems and those who integrate across approaches, systems, or scales. We particularly invite applications from candidates whose research focuses on global change and/or community ecology. We aim to fill one of the available positions with an individual who uses computational, theoretical or primarily quantitative techniques but the other position is open to researchers utilizing any range of laboratory-based techniques.

The department has a variety of resources available to support the development of the incumbent's research program and scholarship. For example, our Pittsburgh campus life sciences complex accommodates research involving animals, plants, and microbes in extensive greenhouses, animal husbandry facilities, and environmentally-controlled growth chambers. In addition, the Pymatuning Laboratory of Ecology (the University's biological field station) is a vibrant research and education facility located on Lake Pymatuning in Northwest Pennsylvania (less than two hours' drive from campus) with facilities to support both aquatic and terrestrial research.

The Department of Biological Sciences is a highly interactive community situated on the undergraduate campus of the University of Pittsburgh. We are dedicated to the mutual success of our faculty and students in our research, education, and outreach missions. We offer low teaching loads and highly competitive start-up, compensation, and benefits packages. The University of Pittsburgh is a thriving research institution with a research budget of \$1 billion; it is part of a broader scientific community that includes the University of Pittsburgh School of Medicine and Carnegie Mellon University. We are dedicated to fostering an inclusive and welcoming environment that values and nurtures diverse perspectives (www.provost.pitt.edu/universitypittsburgh-embracing-diversity-and-inclusion). Further information about the Department of Biological Sciences is available at: www.biology.pitt.edu. More information about the Pymatuning Laboratory of Ecology is available at: www.ple.pitt.edu . Successful candidates will have a Ph.D. or M.D. in a relevant field; postdoctoral experience in Ecology, Evolution, or a related field; and will be expected to establish an extramurally funded research program, train graduate students, and participate in undergraduate science education. To ensure full consideration, applications and reference letters should be received by 30 September 2024. Applicants can apply online at https://tinyurl.com/mryuyhu6. Candidates should submit (a) a one-page cover letter; (b) a CV; (c) a teaching statement; (d) a one-page description of how your past or anticipated scholarly activities (research, teaching, mentorship, service) demonstrate a commitment to diversity and inclusion; (e) a ~threepage statement of past research and future plans. Applicants should also arrange for three letters of reference to be sent to biojobs@pitt.edu. The positions are pending budgetary approval. The Dietrich School of Arts and Sciences is committed to building and fostering a culturally diverse environment, so the ability to work effectively with a wide range of individuals and constituencies in support of a diverse community is essential. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer and values equality of opportunity, human dignity, and diversity. EOE, including disability/vets.

Corinne L. Richards Zawacki, Ph.D. (pronouns: she/her) email: cori.zawacki@pitt.edu

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## UPuertoRico Two EvolutionaryBiology

These two positions in phylogenetics and neuroscience are now re-opened. Since evolutionary biologists can apply to either positions, please post on EvolDir. There is a link for futher information:https://www.uprrp.edu/empleos/ 1. TENURE TRACK FACULTY POSITION ANNOUNCEMENT The Department of Biology of the College of Natural Sciences, Río Piedras Campus, University of Puerto, is inviting highly qualified candidates to apply for a tenure-track faculty position in Phylogenetics, available to start on August 1, 2025.

The position is open to candidates with research programs focused on Animal Phylogenetics, Animal Systematics, Biological Collections, and related areas.

Requirements: §Ph.D. or an equivalent degree in Phylogenetics, Systematics, or related field from an accredited university. §Post-doctoral research experience. §Strong publication record, in area of specialty. §Demonstrated ability to seek and obtain extramural funds. §Teaching experience using diverse technologies. §Availability to direct research projects, theses and dissertations. §

Bilingual (Spanish and English) skills are desirable. §Women and underrepresented minorities are encouraged to apply.

Responsibilities: The new faculty member is expected to develop a strong research program supported with external funds; strengthen the course offering of the Department at the undergraduate and graduate levels, including teaching at all available teaching hours and using diverse technologies; provide mentorship for undergraduate and graduate (M.Sc. and Ph.D.) students; supervise theses and dissertations; and participate in service activities at the level of the Department, University and beyond. Moreover, the faculty will be in charge of the maintenance and development of the Biology Department Zoological Collection.

We seek a colleague who has demonstrated a commitment to enhancing and promoting inclusion, equity, and diversity in research, mentoring, teaching, and outreach. The University of Puerto Rico is an equal opportunity employer and has a strong commitment to achieving diversity in faculty, staff, and students.

Documents required: §Intent letter briefly explaining the candidate's strengths §Updated Curriculum Vitae §Research statement (maximum 3 pages) describing research accomplishments, and short- and long-term research plans §Teaching statement (maximum 3 pages) describing overall teaching philosophy and approaches to teaching under diverse scenarios, prior teaching experience, and approaches to mentoring minority undergraduate and graduate students from groups that have been historically underrepresented in science §Official academic credentials and evidence of all degrees earned §Names and contact information of at least three reference writers

#### Deadline for applications: December 31, 2024

Applicants must submit documentation to: idelisa.rodriguez@upr.edu Dr. Jose L. Agosto Rivera, Chair Department of Biology University of Puerto Rico PO Box 23360 San Juan, PR 00931

2. TENURE TRACK FACULTY POSITION AN-NOUNCEMENT The Department of Biology of the College of Natural Sciences, Río Piedras Campus, University of Puerto, is inviting highly qualified candidates to apply for a tenure-track faculty position in Neuroscience, available to start on August 1, 2025. The position is open, to candidates with research programs focused on basic fundamental neuroscience, brain-related diseases such as neurodegenerative and mental disorders, and environmental neurosciences.

Requirements: §Ph.D. or an equivalent degree in Neuroscience or related field from an accredited university. §Post-doctoral research experience. §Strong publication record, in area of specialty. §Demonstrated ability to seek and obtain extramural funds. §Teaching experience using diverse technologies. §Availability to direct research projects, theses and dissertations. §

Bilingual (Spanish and English) skills are desirable. §Women and underrepresented minorities are encouraged to apply.

Responsibilities: The new faculty member is expected to develop a strong research program supported with external funds; strengthen the course offering of the Department at the undergraduate and graduate levels, including teaching at all available teaching hours and using diverse technologies; provide mentorship for undergraduate and graduate (M.Sc. and Ph.D.) students; and participate in service activities at the level of the Department, University and beyond. We seek a colleague who has demonstrated a commitment to enhancing and promoting inclusion, equity, and diversity in research, mentoring, teaching, and outreach. The University of Puerto Rico is an equal opportunity employer and has a strong commitment to achieving diversity in faculty, staff, and students.

Documents required: §Intent letter briefly explaining the candidate's

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# USouthCarolina AIinEvolBiology

Colleagues:

My department has an opening for an Assistant Professor of Biology who incorporates artificial intelligence into a research program that addresses fundamental questions in any area of biology. While not specifically a search in evolution, we encourage applications from evolutionary biologists. The ad appears below, and you can contact me with any questions (I'm the search chair).

#### Cheers,

Jeff Dudycha — The faculty of the Department of Biological Sciences at the University of South Carolina, Columbia campus, invites applications for a 9-month, full time, tenure track position at the rank of Assistant Professor to begin on August 16, 2025. We seek to hire a biologist who incorporates artificial intelligence into a research program that addresses fundamental questions in any area of biology. The successful candidate will have a vision for an empirical biological research program in which at least one component substantively uses and/or develops artificial intelligence tools, including but not limited to machine learning, deep learning, neural networks, computer vision, or genetic algorithms.

Candidates must have a Ph.D. in biology or related discipline, and at least one year of postdoctoral research experience in biology by the start date of employment.

The successful candidate will join either our graduate group in Ecology & Evolutionary Biology or our group in Molecular, Cellular, and Developmental Biology (or both) and will be expected to establish an independent, extramurally funded research program relevant to biology. The successful candidate also will be responsible for teaching undergraduate and graduate courses in biology and mentoring undergraduate and graduate students in research.

At the University of South Carolina, we strive to cultivate an inclusive environment that is open, welcoming, and supportive of individuals of all backgrounds. We recognize diversity in our workforce is essential to providing academic excellence and critical to our sustainability. The University is committed to eliminating barriers created by institutional discrimination through accountability and continuous process improvement. We celebrate the diverse voices, perspectives, and experiences of our employees.

The USC Department of Biological Sciences is a multidisciplinary unit including 35 tenured/tenure-track faculty members representing a broad range of research areas. It includes more than 1,800 undergraduate majors and over 70 graduate students and post-doctoral fellows. Our department is complemented by strong research connections to the School of Earth, Ocean, & Environment, the Baruch Institute for Marine and Coastal Sciences, and the USC School of Medicine. For more information about the Department, please visit our website here < http://www.biol.sc.edu/ >.

The department is located on the University of South Carolina's main campus in Columbia. The Carnegie Foundation for the Advancement of Teaching has designated the University an institution with "very high research activity." The University has over 35,000 students on the main campus, more than 300 academic programs, and the top Honors College in the United States. Columbia is the center of an increasingly sophisticated metropolitan area with a population of over 800,000, while still maintaining the natural environment through nearby state parks, forests, and Congaree National Park.

The University of South Carolina is an Affirmative Action/Equal Opportunity Institution. Women, minorities, protected veterans, and individuals with disabilities are encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of age, ancestry, citizenship status, color, disability, ethnicity, familial status, gender (including transgender), gender identity or expression, genetic information, HIV/AIDs status, military status, national origin, pregnancy (false pregnancy, termination of pregnancy, childbirth, recovery therefrom or related medical conditions, breastfeeding), race, religion (including religious dress and grooming practices), sex, sexual orientation, veteran status, or any other bases under federal, state, local law, or regulations.

#### How to Apply:

All applicants must apply online at USC Jobs at https://uscjobs.sc.edu/postings/174848. Applications must include (1) a curriculum vita, (2) a research statement (up to 3 pages), (3) a statement describing teaching experience and interests (up to 2 pages), and (4) the names and email addresses of at least three references. Letters will be solicited after the initial review of applications by the search committee. Review of applications will begin October 6, 2024, and the position will remain open until filled. Inquiries about



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# UtahValleyU AnimalEvolutionaryBiologist

#### UtahValleyU.AnimalBiologist.Zoologist

The Department of Biology at Utah Valley University invites applications for an open-rank tenure-track faculty position, to begin in August 2025. We seek an outstanding candidate with a background in Animal Biology/Zoology. https://www.schooljobs.com/careers/uvu/Faculty/jobs/4526274-0/faculty-assistantprofessor-animal-biology-zoology The successful candidate should demonstrate a strong commitment to effective teaching utilizing engaging, data-driven pedagogies. Teaching responsibilities for this position include College Biology I for Majors (BIOL 1610) and courses supporting the new Zoology degree. Additionally, candidates may be asked to teach other courses as needed by the department and may develop new courses within their area of expertise. The preferred candidate will complement and strengthen the current course offerings and subject expertise within the department and Zoology program. Applicants with experience and interest in teaching hybrid and/or online instruction are especially encouraged to apply.

In addition, the candidate should demonstrate their ability to establish an active and welcoming research program that centers around the active mentoring of undergraduates and leads to peer-reviewed publications. Research interests may include, but are not limited to, fields such as organismal biology, taxonomy, systematics, ecology, and evolutionary biology, etc. The ideal candidate will demonstrate a willingness to engage in professional development, collaborate with faculty, staff, and students to promote the university's mission and values and serve on department, college, and university committees as fitting a tenure-track position.

UVU is committed to preparing all students for success in an increasingly complex, diverse, and globalized society. We value and promote collegial relationships and mutual respect among students, faculty, staff, and the community. We acknowledge and seek to address the needs of students who are underserved as well as students with varying levels of academic preparation. As such, we encourage applicants from all backgrounds who are eager to help construct and maintain a welcoming culture within biology education and research, and who act with resolute commitment to eliminate barriers to college access, success, and completion. UVU is an Affirmative Action/Equal Opportunity/Equal Access employer.

Utah Valley University is the largest public university in the state of Utah with over 40,000 undergraduate students, and one of a few in the US offering a dualmission model that combines the rigor and richness of a first-rate teaching university with the openness and vocational programs of a community college. As an open-enrollment institution, UVU serves a varied population that includes many working, non-traditional (24+ years old), and first-generation students. The university community is comprised of people from different cultural and religious backgrounds and is actively involved in interfaith and intercultural activities. UVU provides an abundance of resources for both teaching and scholarly activities, such as certifications and workshops through our Office of Teaching and Learning, and a plethora of internal funding opportunities at the University, College, and Departmental levels. Additionally, UVU offers a competitive and comprehensive benefits package, including health insurance, an excellent retirement program in addition to base salary, and free parking and public transportation passes.

UVU is located in Orem, Utah, at the foot of the beautiful Wasatch Mountains about 40 miles south of Salt Lake City. We are centrally located along public transportation, which spans from Provo to Ogden, including Salt Lake City. Salt Lake City has a bustling food and arts scene, an international airport, and access to multiple professional sports teams. Along the entire Wasatch Front, you are always within 30 minutes of hiking, skiing, and other outdoor recreational activities, along with a variety of family-friendly entertainment options including Hogle Zoo, Loveland Living Planet Aquarium, and the nature discovery museums and gardens at Thanksgiving Point. Additionally, UVU is within four hours of six national parks and the highest concentration of dark sky parks anywhere in the world.

Minimum Qualifications - Graduation from an accredited institution with a doctorate in Biology or related discipline required. - Evidence of experience teaching undergraduate students. - ABD applications will be considered if doctorate verification is received by July 31, 2025

Preferred Qualifications - Strong knowledge of active learning pedagogies and an established record of incorporation of those techniques in the classroom (especially in Introductory Biology courses).



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## WashingtonU EvolutionaryTheory

Cluster hire in Theory, Computation, and Data Science for Understanding Living Systems Washington University in St. Louis

Description: Washington University in St. Louis invites applications for tenure-track faculty positions at the rank of assistant or associate professor for a cluster hire in the area of theory, computation, and data science in the departments of Biology, Chemistry, and Physics. Life operates across a diversity of scales, from molecular-scale processes shaping cellular function to the delicate dynamic balance of our biosphere as a whole. System-level properties and processes are affected by interactions operating at all scales and between scales. Understanding these interconnected systems requires an interconnected and multidisciplinary research community. From AI-driven advances in protein structure and dynamics, to advanced imaging methods enabled by quantum sensing, to developing entirely new mathematical and computational frameworks to achieve insight from complex data, transformative advances in life sciences will require the synergistic work of scientists working across disciplinary boundaries.

This cluster aims to create a hub of researchers using theoretical, computational, artificial intelligence, statistics, and data-science methods to advance life sciences from molecular to ecological scales. Applicants whose research synergizes with current areas of strength at Washington University will be favorably considered. Applicants whose research includes an experimental component but is primarily focused on developing theoretical, computational, and data-science methods will also be favorably considered. Joint applications exhibiting a high degree of research synergy will be considered. Duties will include conducting research, teaching, advising students, and participating in departmental governance and university service. Diversity, equity, and inclusion are core values at Washington University, and we seek to create inclusive classrooms and environments in which a diverse array of students can learn and thrive.

Qualifications: Candidates should have a Ph.D. in Biology, Chemistry, Physics, or a closely related field. Candidates for the rank of Associate Professor should have an outstanding academic record of research, publication, teaching, and service commensurate with tenure at this rank. Application Instructions: This institution is using Interfolio's Faculty Search to conduct this search. https://apply.interfolio.com/152466 Review of applications will begin October 19, 2024. Applications should consist of a cover letter describing how the candidate's research fits within the theme of the cluster; a detailed curriculum vitae; statements of research directions (3-5 pages), teaching interests (1 page), and contributions towards promoting an inclusive research culture or community at large (1 page); and contact information for at least three references.

Each year Washington University publishes a Safety and Security brochure that details what to do and whom to contact in an emergency. This report also publishes the federally required annual security and fire safety reports, containing campus crime and fire statistics as well as key university policies and procedures. You may access the Safety and Security brochure at https://police.wustl.edu/clery-reports-logs/ . "Olsen, Kenneth" <kolsen@wustl.edu>

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# Other

# CallForCollaboration BirdColorPolymorphismData

Call for Collaboration: Unpublished Data on Birds of Prey Color Polymorphism

Dear EvolDir community members,

We are reaching out to invite you to participate in a project focused on a systematic review and metaanalysis of color polymorphism in birds of prey. We are seeking collaborators who can share unpublished data SSE GREG Seminar Aug26 ......57

on the distribution and frequency of color morphs in natural populations of birds of prey.

The goal is to expand the existing dataset, which currently includes data from published peer-reviewed articles and publicly accessible datasets. The data you contribute should meet the following criteria: 1. Unpublished Data: The data must be unpublished and not yet publicly available or published in non-indexed outputs such as preprints, pre- registrations, etc.

2. Morph Distribution: It should contain information about the presence(and if available abundance/frequency) of different morphs within populations.

3. Trait Association: The data may include information

on the relationship between specific morphs and individual traits. The list of traits is open but may include factors such as life history success, overall condition, fitness, immune response, foraging effectiveness, gene expression, behavior, and more. However, data concerning exclusively morph distribution/abundance/frequency also will be valuable and hence additional traits are optional.

Researchers who contribute suitable data will be offered co-authorship on any resulting research papers.

If you are interested in contributing to this project, please contact me at: pawel.podkowa@uj.edu.pl

Thank you for considering this opportunity.

Best regards,

Pawel Podkowa, PhD Szymon Drobniak, PhD

Institute of Environmental Sciences Jagiellonian University, Kraków, Poland

PaweÂ<sup>3</sup> Podkowa <pawel.podkowa@uj.edu.pl>

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# GenomicHistory Inference StrategiesTournament

The 2024 Genomic History Inference Strategies Tournament (GHIST) is live!

There are many ways to infer population history, natural selection, or other evolutionary properties from genomic data, and it is often unclear which methods work best for which tasks. GHIST is an annual forum for the community to test inference approaches in an unbiased fashion. Each year, the GHIST organizers release simulated population genomic data sets and host a competition to infer various aspects of the processes that generated those data. From the submissions, the community will learn what approaches perform well or poorly in particular circumstances. And it is a great training opportunity! Top competitors will be invited as coauthors on the publication describing the year's competition.

This year, GHIST consists of 4 demographic history inference tasks, ranging from simple to complex. You can use whatever approach you prefer to tackle each task. The competition will close October 18, 2024. So there is plenty of time, including for new trainees who start in the Fall semester.

To help you get started, we've created a 1-hour workshop which leads you through analyzing the first challenge's data using dadi-cli and submitting your results. Find that on our webpage: http://ghi.st For questions, please contact Ryan Gutenkunst <rgutenk@arizona.edu>, chair of the Design Committee.

"Gutenkunst, Ryan N - (rgutenk)" <rgutenk@arizona.edu>

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# **SMBE IDEA ProposalCall**

Dear SMBE Members,

SMBE, through the IDEA (Inclusion,Diversity,Equity and Access) task force, aims to address systemic racism, sexism, colonialism and other exclusion in our SMBE society. With this in mind, a budget of up to \$25,000 per year will be dedicated to initiatives that help reduce inequities in molecular biology and evolution research. The task force would therefore like to invite members of SMBE to propose initiatives that would take place in the year 2024/2025.

Examples of initiatives could include, but are not limited to, workshops, symposia, training opportunities, stand-alone featured talks, or inequity data collection in particular groups, countries, or regions (to name a few). If you are interested in knowing what projects have previously been funded, please visit SMBE IDEA tab of the SMBE website. We especially encourage initiatives that could potentially be sustainable beyond the funded year. We welcome proposals that require the full or only a portion of the budget, (budget justification will need to be provided). Special emphasis will be given to projects that directly benefit the members of the SMBE society.

This form allows applicants to submit their proposal. You will find specific information for each requirement below.

Timeline:

13th of September -Submit your initial description via this form.Initial description of the proposed idea must be submitted via the present form. More information regarding format and requirements are below.ATTENTION: Regardless of the number of organisers, each proposal should be submitted only once. Once submitted, you can no longer edit this form. You can choose to have the form sent to your email by clicking "send me a copy of my responses" at the bottom of this page.

11th of October- Be notified on whether your project is pre-selected or not:Initial submissions will be reviewed and pre-selected by the IDEA task force and candidates will be notified with a decision on whether their proposal was pre-selected or not.

8th of November- Submit your full project plan: If your initial submission is pre-selected, organisers will be informed and will be expected to submit a full project plan by email tosmbe.idea@gmail.com. This must include a budget and time plan, as well as relevance and expected short and long-term impacts of the initiative on inclusion, diversity, equity and/or access. You will receive more information regarding the requirements for the full proposal if your project was pre-selected.

6th of December - Hear whether your project will be funded or not:Successful proposals will be notified. SMBE treasury will be notified of the selected proposals so that the funds can be transferred as soon as possible.

-At least one of the organisers must be a member of SMBE. Please note that students from underrepresented regions may apply for free membership by contacting SMBE directly. More information on how to do this is found in the SMBE webpage under membership:https://www.smbe.org/smbe/MEMBERSHIP.aspx -All dead-lines are 5pm local time.

-Organisers of successful proposals are expected to submit a report (around 2 pages) to the SMBE IDEA task force (smbe.idea@gmail.com) within 3 months of its completion.

-Successful proposals will have the opportunity to present their progress at the IDEA symposium during the 2025 SMBE meeting - however we are unable to provide travel funding at this time.

If you have any questions, please reach out to us atsmbe.idea@gmail.com.

We look forward to hearing from you!

Tugce Bilgin Sonay

(On behalf of the SMBE IDEA committee)

"Bilgin Sonay Tugï¿ ½ (bilg)" <br/> bilg@zhaw.ch>

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## SSE GREG Seminar Aug26

Join the Society for the Study of Evolution for a series of virtual talks from recipients of our Graduate Research Excellence Grants! The GREG Seminar Series returns for a third round, to be held Mondays at noon Eastern, August 26 - November 18, via Zoom.

This is a great way for students interested in submitting a proposal for the GREG awards < https:/-/www.evolutionsociety.org/content/society-awardsand-prizes/graduate-research-excellence-grants.html

> to learn about what research has been previously funded. It's also a great opportunity to hear from up-and-coming scientists across our field!

Join us Mondays at noon via Zoom: https://zoom.us/j/8248834624 Meeting ID: 824 883 4624

Learn more about this series, and each talk, on our website: https://www.evolutionsociety.org/meetings/-greg-seminar-series.html SCHEDULE:

August 26 - Megan Molinari

The evolution of the hormonal mechanisms underlying complex social behavior in a group of Mediterranean wrasses September 2 - Holiday

September 9 - Laura Perez

Investigating the role of evolutionary mismatch and gene-by-environment interactions in Type 2 Diabetes

September 16 - Krish Sanghvi

Is an old male doomed to fail?- Understanding male reproductive senescence

September 23 - Brittany Velikaneye

Regulatory role of DNA methylation in temperatureinduced plasticity

September 30 - Jeremy Summers

The fitness impact of immigration in a population of Florida Scrub-Jays

October 7 - Joshua Dominguez

Unraveling the eco-evo causes and consequences of microbiome variation in aquatic ecosystems

October 14 - Matías Gómez-Corrales

Speciation and Heat Tolerance across Depth Gradients in in Reef Corals

October 21 - Yasmeen Erritouni	les or their expression? Hypothesis tests in a mountain
Towards a phylo(genetic) understanding of avian irides-	crucifer across an elevation gradient
cence	November 18 - Haley Carter
October 28 - Amanda Vieira da Silva	Causes and consequences of floral scent diversity in a
What is causing the presence of multiple color variants	rare evening primrose
in spiders?	*Kati Moore*she/her *Communications Man-
November 4 - Megan Barkdull	ager <sup>*</sup> *Society for the Study of Evolu- tion <sup>*</sup> communications@evolutionsociety.org
Evolutionary insights from complex traits in ants	www.evolutionsociety.org SSE Communications
November 11 - Shelby Tisinai	$<\!\!\mathrm{communications@evolutionsociety.org}\!>$
Do populations evolve by altering the frequency of alle-	(to subscribe/unsubscribe the EvolDir send mail to gold-ing@mcmaster.ca)

# **PostDocs**

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# ArizonaStateU ComputationalGenomics

Postdoctoral position in Computational Genomics The Pfeifer Lab is looking for a postdoctoral researcher

#### in Computational Genomics.

Research topics are open to discussion and mutual interest though should align with the overall interests of the lab which combines the development of novel genomics 'big data' with computational and statistical methods for evolutionary inference to gain a better understanding of (i) the molecular and genetic differences that underlie species-specific phenotypic traits and heritable disease, (ii) the evolutionary processes that explain the accrual, and fate, of these differences, and (iii) the impact of these processes on genome evolution.

The ideal applicant will have a scientific background (biology, bioinformatics, computational biology, computer science, mathematics, physics, statistics, or related fields) with a genuine interest in evolutionary biology, bioinformatics, and/or genomics. Prior experience with large-scale genomic data and/or quantitative skills - including proficiency in a programming language/shell, theoretical and computational population genetics, and/or statistical modeling experience are beneficial. Applicants should have good organizational skills and enjoy working in a collaborative and interdisciplinary team.

The Pfeifer Lab offers a supportive and stimulating work environment with excellent opportunities for training and collaboration. The Lab is based in the School of Life Sciences and is associated with the Center for Evolution and Medicine (https://evmed.asu.edu/), the Center for Mechanisms of Evolution (https://biodesign.asu.edu/mechanisms-of evolution/) and the Mathematical, Computational, and Modeling Sciences Center (https://mcmsc.asu.edu/). The Lab has strong intellectual ties - including lab meetings, seminars, and journal clubs with the local evolutionary/population genetics, primate genomics, and computational biology research communities (http://asupopgen.org/). The office space is located in the Life Sciences building C on Arizona State University's main campus (interactive map with 360 degree panorama views: https://tours.asu.edu/tempe) which is the scientific home to researchers from 157 countries across the globe. Phoenix stays warm year-round with over 300 days of sunshine and offers many excellent restaurants, a vibrant art, music, and cultural scene, as well as beautiful nature preserves for any kind of outdoor activities.

Funding is available for three years, contingent on annual renewal based on progress. The start date is flexible.

Interested? Contact Susanne Pfeifer <susanne@spfeiferlab.org> for informal inquires, and/or to send an application (including a CV, names of two references, and a cover letter describing your interests and fit for the position). The evaluation of applications will begin September 15, and will continue until a suitable candidate has been found.

Susanne P. Pfeifer Associate Professor School of Life Sciences Arizona State University spfeiferlab.org

"susanne@spfeiferlab.org" <susanne@spfeiferlab.org>

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## **Brazil PlantPopGenetics**

Population genomics of colonizing tropical trees in newly assembled plant communities resulting from animal seed dispersal

We are accepting applications for a full-time Postdoctoral Research Scientist interested in working with seed rain ecology and genetics of tropical plant species. The successful candidate will investigate how animal seed dispersal affects the genetic composition of new tropical plant communities using an experimental setting to study forest regeneration. The postdoctoral researcher will play a key role in managing field and laboratory teams, assisting and supervising steps from seed collection to seedling germination in the greenhouse, and generating genomic and transcriptomic resources for the selected plants. The position is for 24 months with the possibility of extension for an additional 12 months. The postdoctoral researcher will be part of Dr.Marina Cortes' research groupat UNESP in Rio Claro - SP and will have the opportunity to undertake a training period with Co-PI Dr. James Marden at Penn State University, USA.

The selected candidate will be part of theDimensions US-S $\bar{a}$ o Paulo: Animal biases in fruit selection and seed dispersal as drivers of biotic filters in the assembly of successional forests and their carbon capture potential.Process #: NSF 2129365; FAPESP 2021/02943-6.

**Responsibilities:** 

#### management

of seed collection in the field, seed germination, and seedling development in the greenhouse

and supervising DNA/RNA extraction from plant species leaves

and analysis of genomic/transcriptomic data using bioinformatics tools

data analysis

up reports and manuscripts for scientific publication

students and technicians

Requirements:

reside in Rio Claro but available for fieldwork in Paranapanema - SP and training period in Penn State, USA.

in ecology, genetics, and evolution

#### experience

laboratory experience

or strong interest in generating genomic or transcriptomic data and bioinformatics

communication skills in Portuguese and English

Application:

Applicants should send an email to Marina Côrtes (marina.cortes@unesp.br) including:

3 pages CV (FAPESP-style curriculum summaryacceptable)

cover letter

document containing the names, relationship to the candidate, and contact information of at least two references

Pre-selected candidates may be called for an interview. The submission deadline is September 2, 2024.

The position is open to both Brazilian and international applicants. The selected candidate will receive a FAPESP Postdoctoral Fellowship of R\$ 12,000.00 per month and a Technical Reserve equivalent to 10% of the annual fellowship amount. More details about the fellowship and eligibility can be found at: FAPESP Postdoctoral Fellowships (https://fapesp.br/en/postdoc).

Marina Corrêa Côrtes Profa. Dra. Assistente | Assistant Professor, Ph.D. Lab

Departamento de Biodiversidade | Department of Biodiversity Universidade Estadual Paulista (UNESP) | S $\bar{a}$ o Paulo State University (UNESP) Av. 24-A, no. 1515 13506-900 Rio Claro - SP, BRASIL

(19) 3526 4231

Marina Correa Cortes <marina.cortes@unesp.br>

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## **CharlesU Prague Bioinformatics**

Bioinformatician Postdoc position in Plant Evolutionary Biology

The Department of Botany, Charles University, Prague, Czech Republic, offers a two years Bioinformatician Postdoc position in Plant Evolutionary Biology. The preferred start date for this position is the 1st of January 2025 (with some flexibility).

The postdoc position aims to unravel the consequences of whole genome multiplication (WGM), i.e. polyploidisation, on genomic traits that alter the reproductive strategies of autopolyploid plants and determine their evolutionary trajectory. The postdoc position is part of a project funded by the Czech Science Foundation (GA??R) and led by Patrik Mr??z (Department of Botany) with the participation of experts in plant physiology, embryology and bioinformatics.

Polyploidisation is a key evolutionary mechanism that can lead to instantaneous multiple changes manifested at different structural, developmental and functional levels, from genes to phenotypic traits. Despite the widespread occurrence of polyploidy in vascular plants, we still know little about the direct phenotypic effects of WGM, the underlying physiological and transcriptomic patterns, and the fitness consequences.

We will use Pilosella rhodopea (Asteraceae, Compositae), a species that forms the largest primary contact zone of diploids and recurrent autopolyploids ever recorded in angiosperms. Although WGM severely disrupts sexual reproduction in autopolyploids, it enhances vegetative reproduction both quantitatively and qualitatively to such an extent that it literally changes the game by allowing autopolyploids to successfully establish and persist, with putative strong effects on their spatial clonal structure and ramet age.

The successful candidate will investigate (i) the impact of WGM on transriptomic profiles in diploid and autotriand autotetrapolyploids, with aspecial emphasize on two newly expressed clonal traits - root sprout buds and aposporic initials, and (ii) phylogenetic relationships and genetic structure of the Pilosella alpicola group.

Profile & Qualifications

Highly motivated applicants with excellent communication and demonstrable writing skills, and a strong interest in evolutionary biology should hold PhD in Bioinformatics or Biology. Previous experience and proven skills with analyses of genomic / transcriptomic data is a requirement.

#### Funding

Accepted applicant will be supported by the project from the Czech Science Foundation for two years (2025-2026) with a50,000 CZK / month gross salary (~ 2,000 EUR, depending on the current rate).

#### How to apply

Please send your motivation letter including your CV and contact details of two referees as a single pdf file by e-mail to Patrik Mr??z, mrazpat@natur.cuni.cz before the 15th of October 2024.

For further information please write to:

mrazpat@natur.cuni.cz

https://botany.natur.cuni.cz/apomixisgroup/ https:/-/botany.natur.cuni.cz/mraz Patrik Mr??z Herbarium PRC & Department of Botany

Charles University, Faculty of Science Ben??tsk?? 2, 128 00 Praha 2 CZECHIA Tel.: +420 221 95 1642 https://botany.natur.cuni.cz/prc/?lang=en

https://botany.natur.cuni.cz/apomixisgroup/

https://botany.natur.cuni.cz/mraz Patrik Mr??z <mrazpat@natur.cuni.cz>

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## DresdenU Germany SpermBiology

#### Dear All,

In our group we have a position open for a postdoctoral scientist (90% part-time) for three years, starting 1 Nov 2024 or later, with the possibility for extension. We are looking for somebody who is interested in evolutionary, ecological and/or cell and molecular biology of sperm cells and male (in)fertility. Our current focus is on environmental effects (diet, microbes, immune system) and we mainly work with insect sperm. The candidate is expected to develop their own independent research project, collaborate with existing ones in our group and support our teaching portfolio.

Please send your application and cv (without photograph, date of birth and marital status), a summary of your relevant research experience (max. 1 page), a summary of your future research interests (max. 1 page) and a summary of your teaching experience, if any, to TU Dresden, Faculty of Biology, Chair of Applied Zoology, Prof. Klaus Reinhardt, 01062 Dresden, Germany, all in one file combined via secure mail (https://securemail.tu-dresden.de) or per email to applied.zoology@tu-dresden.de. Application deadline is 2 Sept 2024, the interview is currently scheduled for 1 October 2024, subject to change. Further information about the position can be obtained from Klaus.Reinhardt@tu-dresden.de after 23 Aug.

Klaus Reinhardt, Applied Zoology, TU Dresden, Germany, https://tudaz.net Klaus Reinhardt <klaus.reinhardt@tu-dresden.de>

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## Flagstaff Arizona BacterialEvolution

Position:Postdoctoral Scholar in Bacterial Evolution

We are pleased to announce a Postdoctoral Scholar position to study bacterial evolution at the Pathogen and Microbiome Institute at Northern Arizona University with Professor Paul Keim. The scholar will have the opportunity also work with Professor Sam Sheppard at The University of Oxford on joint projects. See our recent paper on interspecific gene flow in Campylobacter. (DOI:https://doi.org/10.1128/mbio.00581-24) The job description: "This research position focuses on the science of bacterial evolution. It will consist of researching theoretical principles, but could include translational applications. Phylogenomic and bioinformatic analysis of bacterial populations in nature or in laboratory experiments will be a key component of the work. Prior experience is an asset though training will be possible at PMI. Likewise, laboratory microbiological, molecular, and biochemical skills are an asset though not essential. Communication and critical thinking skills are essential for performing the work and for communicating to the local and international scientific communities. Participating in team or independent grant writing to obtain research funding will be required. Student mentoring is a part of the NAU mission and is a partial expectation." https://hr.peoplesoft.nau.edu/psp/ph92prta/EMPLOYEE/HRMS/c/-HRS\_HRAM.HRS\_APP\_SCHJOB.GBL?Page=-HRS\_APP\_JBPST&Action=U&FOCUS=-

Applicant&SiteId=1&JobOpeningId=-

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608024&PostingSeq=1 Northern Arizona University is located in Flagstaff, Arizona, a beautiful mountain town with a surprisingly vibrant restaurant scene. Located a little over an hour from the Grand Canyon and ~45 min from Sedona, Flagstaff is a hiker's paradise. In fact, the city of Flagstaff operates more than 50 miles of unpaved trails and there are, on average, 266 sunny days per year with which to enjoy them. At 7000 ft in elevation, Flagstaff experiences all four seasons, but the summers are mild and, in the winter, you can be on the ski slopes within 30 min! https://www.flagstaffarizona.org/ As mentioned, joint projects with Professor Sheppard at Oxford University are possible, including travel to his laboratory in the United Kingdom. https://www.biology.ox.ac.uk/people/samuel-sheppard Contact Information: Paul.Keim@nau.edu

Paul S. Keim, Ph.D. Regents Professor, & Cowden Endowed Chair of Microbiology

Northern Arizona University Flagstaff, AZ 86011-4073

Paul S Keim <Paul.Keim@nau.edu>

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# Frankfurt EvolutionaryGenomicsOfMammals

Dear all, I would like to draw your attention to our new job posting.

The Senckenberg Biodiversity and Climate Research Centre, Frankfurt am Main, Germany, invites applications for a

# Postdoc Researcher (m/f/d) in Evolutionary Genomics of Mammals

There is an exciting opportunity for a talented and motivated applicant to join the working group of Prof. Dr. Axel Janke. The applicant will be closely involved in gene flow, evolutionary, population or phylo-genetics to study speciation in mammals (bears, giraffe, kangaroos or allies) at the genomic level. Strong own and proven research interests including other vertebrate groups will be considered.

#### Your profile

- PhD degree in Biology, Genetics, Bioinformatics or a related field - Strong interest and proven skills in evolutionary, population or phylogenomics. Knowledge in gene-flow analyses and/or drift process are an advantage - Experience in genome assembly & annotation and programming of scripts, R - Very good written and oral communication skills in English - Interest to be involved in an international and interdisciplinary group to expand the work to species distribution modeling, paternal inference and conservation genetics

What is awaiting you?

a workplace in a central location with good transport connections in the heart of Frankfurt - flexible working hours - opportunities for mobile working - support with childcare or caring for family members (certified by the "audit berufundfamilie") - Senckenberg badge for free entry in museums in Frankfurt - special annual payment - company pension scheme

Place of employment: Frankfurt am Main

Working hours: full time, part-time optional (at least 75%)

Type of contract: The contract should start preferably on January 1st, 2025 and is limited to two years

Salary: according to the collective agreement of the State of Hessem(pay grade E 13, TV-H)

Senckenberg is committed to diversity. We benefit from the different expertise, perspectives and personalities of our staff and welcome every application from qualified candidates, irrespective of age, gender, ethnic or cultural origin, religion and ideology, sexual orientation and identity or disability. Women are particularly encouraged to apply, as they are underrepresented in the field of this position and will be given preference in the case of equal qualifications.

Applicants with disabilities ("Schwerbehinderung") will be given preferential consideration in case of equal suitability. Senckenberg actively supports the compatibility of work and family and places great emphasis on an equal and inclusive work culture.

You would like to apply?

Then please send us your complete and informative application documents (CV, letter of motivation, academic transcripts and certification / credentials, two relevant publications, and contact details of two potential references to) in electronic form (as a single PDF file) by 15.09.2024 to recruiting@senckenberg.de, quoting the reference number #11-24005, or apply directly on our homepage using the online application form.

Senckenberg Gesellschaft für Naturforschung

Senckenberganlage 25

60325 Frankfurt a.M.

E-Mail: recruiting@senckenberg.de

For scientific enquiries please contact Prof. Dr. Axel Janke, axel.janke@senckenberg.de.

The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. SGN conducts natural history research with more than 800 employees and research institutions in seven federal states. The Senckenberg Biodiversity and Climate Research Centre (BiK-F) explores the interactions between biodiversity, climate, and society. For more information about the Senckenberg Gesellschaft für Naturforschung, please visit www.senckenberg.de . Yours sincerely,

Isabel GajèeviA, M.A.

Referentin Recruiting/HR Department & Personalmarketing

Besucheradresse: Mertonstraße 17-21, 60325 Frankfurt am Main (1. OG)

Telefon/Phone: 0049 (0)69 / 7542 -

Stellv. Leiterin Personal/Human Resources

- 1458 Loke, Uta

Recruiting/HR Department & Personalmarketing

- 1478 Gajcevic, Isabel

- 1309 Heinrichsohn, Sabine

- 1564 di Biase, Maria

Fax: 0049 (0)69 / 7542-1445

Mail: recruiting@senckenberg.de

Senckenberg Gesellschaft für Naturforschung Rechtsfähiger Verein gemäß ç 22 BGB

Mitglied der Leibniz-Gemeinschaft

Direktorium/Impressum

Vernetzen Sie sich mit uns:www.senckenberg.de/socialmedia "recruiting@senckenberg.de" <recruiting@senckenberg.de>

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# GeorgeWashingtonU MolecularSystematics

Postdoc in Barnacle Molecular Systematics at George Washington University (GWU)

About the Project The Computational Biology Institute, at the Milken Institute School of Public Health's Department of Biostatistics and Bioinformatics, GWU, is offering a Postdoc position to develop a comprehensive phylogeny of the barnacles (Crustacea: Thecostraca) and study the evolution of sexual systems.Barnacles rank among the most biologically diverse, ubiquitous and ecologically important marine metazoans. They exhibit a fascinating and unique range of sexual systems, including hermaphroditism (both sexes), dioecy (separate sexes) and androdioecy (hermaphrodites and males). We want to apply exon probes for targeted capture sequencing to ~1,200 barnacle species to build a robust phylogeny of the Thecostraca. Then coupling this barnacle tree with fossil, morphological and ecological information in a comparative analysis framework, we will test long-standing theoretical predictions about the evolution of sexual systems and its diversification across broad spatial, temporal and ecological scales.

#### About the Postdoc

The postdoc candidate will conduct research in phylogenomics and evolutionary biology of barnacles and work together with the PI (Pérez-Losada), collaborators and graduate students. Responsibilities: - Compilation, generation and curation of genomic and other (e.g., morphological and ecological) trait data for selected barnacle species. - Bioinformatic analysis of genomic data to infer phylogenies and perform comparative analyses on traits to test hypotheses. - Preparation and submission of manuscripts to scientific journals. - Availability to travel to other institutions and work abroad for short periods of time. - Training of graduate and undergraduate students in the lab on the above- mentioned duties. - Delivering guest lectures or short workshops for relevant courses and related topics offered at GW in the disciplines involved in the research program.

#### Qualifications

PhD and expertise in molecular systematics, bioinformatics, comparative phylogenetic methods, genomics and ideally barnacle taxonomy.

Hiring Range 61,008 - 65,000

Expected duration of appointment Up to 3 years renewable every year upon performance

Starting date 01/09/2024

Healthcare Benefits GWU offers a comprehensive benefit package for Postdoc Associates and Scholars that includes medical, dental, vision, life & disability insurance, time off & leave, well-being and various voluntary benefits. Postdoc Scholars may also be eligible for retirement savings and tuition programs. For program details and eligibility, please visit https://hr.gwu.edu/postdoc\_benefits . Applicant Documents to Submit Cover Letter Curriculum Vitae Statement of Research Interest Two Letters of Recommendation

#### **Online Application**

All candidates must apply online via the following GWU link https://www.gwu.jobs/postings/113663 Contact If you have further questions regarding this position you can email Marcos Perez-Losada at mlosada@gwu.edu

#### Marcos Perez-Losada, PhD

Marcos Perez-Losada <mlosada@email.gwu.edu>

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# JohnInnes UK PlantGeneticPolymorphisms

Postdoctoral Researcher Salary: 36,720 - 44,500 per annum depending on qualifications and experience.

Contract: 36 months, full time Location: John Innes Centre, Norwich, UK.

Closing date: 24 September 2024 Reference: 1004748

An exciting opportunity has arisen for a Postdoctoral Researcher to join the Arora Group at the John Innes Centre, working on cutting-edge science in the field of Biochemistry and Metabolism.

About the John Innes Centre:

The John Innes Centre is an independent, international centre of excellence in plant and microbial sciences. We nurture a creative, curiosity-led approach to answering fundamental questions in bioscience, and translate that knowledge into societal benefits. Our strategic vision, Healthy Plants, Healthy People, Healthy Planet, sets out our ambitious long-term goals for the game changing impact of our science globally. Our employees enjoy access to state-of-the-art technology and a diverse range of specialist training opportunities, including support for leadership and management.

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

About the Arora Group:

The Postdoctoral Researcher will be based in the Arora group and will have frequent interactions with the Balk group as part of the Pulse Crop Genetic Improvement Network (PCGIN) programme. Both groups explore the natural diversity of Pisum species to identify genetic polymorphisms that enhance resistance to biotic stresses (Arora group) or nutritional traits (Balk group).

The Arora group employs innovative genomic approaches combined with genetics, pathology and molecular biology to investigate molecular mechanisms underlying disease resistance. Additionally, both groups collaborate intensively with industry to translate the discoveries for practical use by breeders and food processors with the ultimate goal to develop a nutritious, climate-resilient pea crop tailored to the UK's agricultural needs.

#### The role:

The John Innes Centre holds the UK collection of pea genetic resources that are actively explored to identify genes and alleles for traits of interest. Funding from the Department for Environment, Food & Rural Affairs (Defra) will support a Postdoctoral Researcher to identify genetic variation underlying resistance to diseases that are of primary concern for UK pea crops, as well as tolerance to drought.

The successful applicant will carry out research activities using a combination of genetics, genomics, molecular biology and statistical tools. Pea diversity panel will be screened for resistance to specific viruses, emerging downy mildew strains and study role of root architecture for resilience against root pathogens. The data will be subject to genetic and statistical analysis to identify associated genes and validate them using gene editing and/or gene silencing approaches Genetic alleles of interest will be shared with the stakeholder network, to translate the findings to pea breeders, growers and other end users. The post holder will design molecular markers for this purpose (e.g. KASP), write reports for stakeholders and the funding agency (Defra) and draft manuscripts for publication.

#### The ideal candidate:

The successful candidate will have a PhD in Genetics/Molecular Biology/Plant Pathology or a related discipline and a proven ability to work with plants, genetic analysis and skilled in molecular biology techniques.

Experience of working with legumes is desirable, but not essential. The candidate should have strong interest in understanding the genetic basis of disease resistance and other agronomically important traits and crop improvement. Candidates should have experience with conducting and designing plant phenotyping experiments,molecular cloning and have an understanding of the disease resistance mechanisms.

The candidate will have the opportunity to further enhance skills in all areas or diverse transferrable scientific and personal. Scientific skills include plant pathology and genetics, gene editing, bioinformatics and data analysis and interactions with industry. Personal skills include project planning, time management, presentation and writing skills.

#### Additional information:

For further information and details of how to apply, please visit our website http://jobs.jic.ac.uk or contact the Human Resources team on 01603 450814 or nbi.recruitment@nbi.ac.uk quoting reference 1004748. This role meets the criteria for a visa application, and we encourage all qualified candidates to apply. Please contact the Human Resources Team if you have any questions regarding your application or visa options.

We are an equal opportunities employer, actively supporting inclusivity and diversity. As a Disability Confident organisation, we guarantee to offer an interview to all disabled applicants who meet the essential criteria for this vacancy. We are proud to hold a prestigious Gold Athena

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# KU Belgium PDF PhD PlantAdaptiveEvolution

Postdoc position on microclimate ecology and adaptive potential of two forest herbs

The Division of Ecology, Evolution and Biodiversity Conservation of KU Leuven (Belgium) is seeking a highly motivated postdoctoral researcher to work on the MICROMICS project: "microclimate- and genomicsinformed distribution modelling to improve predictions of species' range dynamics and extinction risk under environmental change". The postdoctoral candidate will, under the supervision of Prof. Hanne De Kort and Prof. Koenraad Van Meerbeek, focus on the role of microclimate in shaping adaptive evolution (adaptability) and plant dispersal dynamics using extensive field and genetic data. All data have already been collected and will be used to explore relationships between genetic variation and microclimate. Please contact hanne.dekort@kuleuven.be for more information.

PhD position - can epigenetic variation increase evolutionary potential?

The Phd candidate will be among the first to join a team of researchers addressing how epigenetic variation and environmental stressors interact to shape natural mutation rate variation. This position, under the supervision of Hanne De Kort, will involve sequenceevolve-resequence experiments with Daphnia magna as a versatile study system. By re-sequencing the genome after multiple generations, the rate at which new mutations and epigenetic signals arise can be monitored. We will also explore to what extent temperature and landscape characteristics drive natural mutation rate variation, and whether the same processes might be relevant to other species. Please find more information at

https://www.kuleuven.be/personeel/jobsite/jobs/-60367215, and contact hanne.dekort@kuleuven.be if you are interested in this position.

PhD position on epigenetic ecotoxicology

The PhD candidate will be among the first to join a team of researchers from KU Leuven, Ghent University and Sciensano, addressing how epigenetic variation and environmental stressors interact to shape natural mutation rate variation. This position, under the supervision of prof. Hanne De Kort, will focus on the genotoxicity of BPA and of BGs in Daphnia magna, an ideal ecological study system for sequence-evolveresequence experiments. Such experiments will reveal epigenetic and genetic signals specifically associated with pollutants, and how these signals alter evolution in response to heat stress. In combination, the impact of pollution will be studied on multi-trophic systems with algae and Daphnia, to verify whether conclusions hold in more complex ecological systems. Please find more information at https://www.kuleuven.be/personeel/jobsite/jobs/60367349?utm\_medium=-

jobsites&utm\_source=AcademicPositions, and contact hanne.dekort@kuleuven.be if you are interested in this position.

Hanne De Kort <hanne.dekort@kuleuven.be>

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# LehighU CavefishEvolutionaryGenomics

Postdoctoral position in genomics of cave adaptation in teleost fish

The Kowalko and Meyer labs at Lehigh University are recruiting a postdoctoral researcher to conduct gene editing experiments and comparative genomics analyses to investigate patterns of genomic change involved in the repeated adaptation of fish to cave habitats.

Our two groups are broadly interested in understanding the genetic and developmental mechanisms that underlie convergent evolution of phenotypes within and across species. We use complementary approaches in experimental and computational settings, including gene editing, behavioral quantification, and phylogenetic comparative methods.

We are looking for a colleague interested in studying the evolutionary constraints influencing the molecular basis of repeated evolution of cave phenotypes in multiple subterranean fish species, including the emerging model system the blind Mexican cavefish, Astyanax mexicanus. The position will afford opportunities for collaboration across institutions (University of Minnesota and University of Missouri - St. Louis) and mentorship of graduate and undergraduate students.

Applicants should have a PhD in Biology, Evolution, Genetics, or a related field. Our labs are committed to fostering inclusive lab culture, and we encourage applications from individuals historically excluded from research in evolutionary biology.

Lehigh University is an R2 (high research activity) university in Bethlehem, PA, within the Lehigh Valley and a short distance from Philadelphia and New York. For more information about Lehigh and resources available for postdocs, please see: https://postdoc.lehigh.edu/ This position is funded by a NSF grant, with a starting salary based on NIH postdoctoral scales, with some flexibility. To apply, please send a CV, a brief letter explaining your interest in the position, and references to Johanna Kowalko (jok421@lehigh.edu) and Wynn Meyer (wynn@lehigh.edu). Kowalko lab website: https://kowalkolab.weebly.com/ Meyer lab website: https://sites.google.com/lehigh.edu/meyer-lab/home Wynn K Meyer, PhD Assistant Professor, Department of Biological Sciences < https://www.lehigh.edu/~inbios/ >, Lehigh University < https://www1.lehigh.edu/home > wynn@lehigh.edu 610-758-5603 https://sites.google.com/lehigh.edu/meyer-lab Pronouns: she, her, hers

I am hiring! If you are interested in working with our team on exciting projects in evolutionary genetics, please see my ad and apply here: https://careers.pageuppeople.com/865/cw/enus/job/501630/laboratory-manager-meyer-lab "Wynn Meyer (Lehigh)" <wym219@lehigh.edu>

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# LMU Munich PlantDiversityGenomics

PostDoc in Plant Biodiversity Genomics

\*About us\* The plant phylogenomics and systematics group at the Faculty of Biology, LMU Munich is conducting evolutionary and ecological research on land plant biodiversity. We want to understand when, where and how our current plant biodiversity evolved and how plants adapted to different habitats and environmental conditions, with a focus on water limitation. In our research, we integrate over genomic and transcriptomic evidence as well as morphological and ecological data. Our current model organisms are drought or desiccation tolerant on different levels and range from bryophytes to angiosperms. For more information on our current research, please visit: https://en.sysbot.bio.lmu.de/research/res-gr-bechteler/index.html \*We are looking for you<sup>\*</sup> Research and Teaching Assistant (Akademischer Rat auf Zeit) - Plant Biodiversity Genomics (m/f/x)in Munich, Germany

\*Your tasks and responsibilities\* – Research: - Participate in ongoing and future projects of the group and actively take part in group and project meetings -Develop and conduct own third-party funded research to establish your own research line - Manage and analyze research data, publish research findings in peerreviewed scientific journals, present research results at inter-/national conferences

- Teaching: - Participate in teaching (five weekly hours

per semester) (teaching is partly mandatory in German) and contribute to the development of teaching material - Supervise students at the Bachelor-, Master-, and PhD-level

\*Your qualifications\* - Doctoral degree in a relevant field (e.g., plant phylogenomics, comparative genomics and/or transcriptomics, population genetics) - Background in evolutionary-ecological genomics/genetics and plant systematics/functional biodiversity or equivalent -Experience in state-of-the-art molecular laboratory and bioinformatic/statistical methods - First experience with funding-acquisition and/or teaching is advantageous -Excellent oral and written communication skills in German and English (for non-native German speakers: the ability to teach (partly) in German is expected)

\*Benefits\* We offer you a stimulating research environment in a young and highly motivated international team. You will have the opportunity to join the interdisciplinary DFG-funded CRC1211 ???Earth ??? Evolution at the Dry Limit??? (https://sfb1211.uni-koeln.de) as an associate member through our project B07 ???Desert transcriptomics: assessing the genetic basis of adaptation to aridity in desert dwellers??? (https://sfb1211.uni-koeln.de/index.php/projects/cluster-b/project-b7?subprojectID=27)

Your workplace is located next to the Munich Botanical Garden and is easily reachable by public transport as well as by car. We offer flexible working hours, support in balancing work and family life, and professional training and personal development activities through a variety of LMU support services . In addition you can benefit from various LMU corporate benefits. The position is remunerated according to the civil servant category of ???Akademischer Rat/R??tin auf Zeit??? BesGr. A13, or in salary group TV-L E13 (100%). The position is initially limited to three years with a possibility for extension for additional three years. You have the possibility to work towards the completion of a habilitation (German post-doctoral degree) at the Faculty of Biology.

Also possible in a part-time capacity. People with disabilities who are equally as quali\_ed as other applicants will receive preferential treatment.

\*Contact\* Please send your application documents (letter of motivation, CV, list of publications and list of teaching experience, two-page research concept, contact details of three references, copies of degree certi\_cates and transcripts) in one PDF via e-mail to the group leader Prof. Dr. Julia Bechteler: j.bechteler@lmu.de, no later than 25 August 2024. For questions about the advertised position please contact Prof. Dr. Julia Bechteler via e-mail. Also kindly let us know briefly in your cover letter through which medium/website/etc. you became aware of our job advertisement. Where knowledge is everything.

LMU researchers work at the highest level on the great questions affecting people, society, culture, the environment and technology ??? supported by experts in administration, IT and tech. Become part of LMU Munich! In the course of your application for an open position at Ludwig-Maximilians-Universit??t (LMU) M??nchen, you will be required to submit personal information. Please be sure to refer to our LMU Privacy Policy. By submitting your application, you confirm that you have read



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# London UK EvolutionMethylationGiantVirus

An open post-doctoral position in the laboratory of Dr. Alex de Mendoza at Queen Mary University of London (United Kingdom). This is a European Research Council funded position under the project METHYLEVOL, aimed at understanding the evolution of DNA methylation in animals and other eukaryotes. This position is for 2 years.

For this position previous experience in molecular biology and/or bioinformatics is highly desirable. Alternatively, experience in functional genomic techniques is also welcome (e.g. ATAC-seq, bisulfite sequencing), virology or comparative genomics. Some bioinformatics experience would be a plus, but we can train the candidates and offer ample support on this aspect. Plenty of opportunities for gaining expertise in functional genomics (DNA methylation, ChIP-seq).

The goal is to understand the role of DNA methylation in various organisms and its link to genome evolution, the project can be defined according to candidate's experience and interests. See some of our latest work here: https://www.demendozalab.com/publications The link to the position is:

https://qmul-jobs.tal.net/vx/mobile-0/appcentreext/brand-4/candidate/so/pm/1/pl/3/opp/1666Postdoctoral-Research-Assistant/en-GB Postdoctoral Research Assistant - QMUL Jobs

ID: 1666. Title: Postdoctoral Research Assistant. Application Deadline: qmul-jobs.tal.net

Applications close on August 14th, but feel free to get in touch if you cannot make the deadline. Start could be from September 2024 onwards.

All you will need is your CV and a cover letter. No nationality restrictions.

Potential candidates are encouraged to get in touch with a.demendozasoler@qmul.ac.uk to discuss your interest in the post and the project.

Alexandre de Mendoza Soler <a.demendozasoler@qmul.ac.uk>

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# OklahomaStateU OutbreakBiodiversity

Postdoctoral Research Associate Statistical Modeling of Outbreak Risk and Biodiversity

Applications are invited for a Post Doctoral Research Associate in the Statistical Modeling of Outbreak Risk and Biodiversity, in the Department of Integrative Biology at Oklahoma State University, Stillwater OK. The successful candidate will build statistical models capturing how large-scale environmental and socioeconomic factors and affect disease dynamics and large-scale patterns of biodiversity. Knowledge of statistical modeling, machine learning (such as boosted regression trees, ridge regression), GIS, proficiency with R and experience either with macroecological analyses or statistical analyses of disease dynamics are required. Additional skills such as knowledge of diseaseï $\frac{1}{2}$  ecology, economic or biodiversity analyses, mechanistic mathematical modelling or phylogenetic comparative methods are welcome but not essential.

Required qualifications are a Ph.D. in ecology, evolutionary biology, statistics, epidemiology or closely related fields. Candidates with a past record of publication in disease ecology, epidemiology or macroecology will be given preference. Candidates must have excellent English writing and verbal communication skills, as well as an established record of productivity (i.e., at least one previous peer reviewed publication). The positions is available immediately and will remain open until filled. The position will initially have a duration of one year, with possibility of extension to a second year depending on satisfactory performance and funding availability. Compensation will include \$54,000 for 12 months of salary, health insurance and other benefits.

To apply, please submit a cover letter addressing how the candidate's expertise meets the position requirements, a CV, one representative publication, and contact info (phone and email) for three references to Patrick Stephens (patrick.stephens@okstate.edu). Please include your name and the name of the position (e.g., "Application for Statistical Modeling of Outbreak Risk: LASTNAME"). Please send all inquiries to Patrick Stephens at (patrick.stephens@okstate.edu). Review of applications is underway and will continue until a suitable candidate is found. We value the diversity of perspectives that a team made up of individuals with varied backgrounds will possess and encourage applications from members of groups underrepresented in STEM.

Patrick R Stephens Assistant Professor Department of Integrative Biology 420 Life Sciences West Oklahoma State University Stillwater, OK 74078

"Stephens, Patrick" <patrick.stephens@okstate.edu>

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## PurdueU EvolutionNewMolecularFunctions

Two postdoc positions in the evolution of new molecular functions

The Metzger lab (https://www.evolutionofnovelfunctions.com/) at Purdue University is seeking two postdoctoral scholars to join externally funded research projects. The first position is NIH funded, with a focus on the evolution of gene expression and regulation among Saccharomyces yeast species. Available projects make use of quantitative genetics, CRISPR genome editing, single cell techniques in flow cytometry and RNA-seq, ancestral protein reconstruction, and deep mutational scanning.

Basic qualifications: - Applicant should have, or expect to complete within a year, a Ph.D. in genetics, molecular biology, evolutionary biology, or a related field. -Demonstrated interest in evolutionary biology - Ability and willingness to work collaboratively with graduate and undergraduate researchers

Preferred qualifications: - Prior experience in yeast genetics or CRISPR mediated genome editing - Familiarity with analysis of genomic and high-throughput data sets

Interested individuals may apply at: https://careers.purdue.edu/job/Post-Doc-Research-Associate/-33054-en\_US/ The second position is funded through a collaboration with Pau Creixell's group at the University of Cambridge through the Human Frontier Science Program. It is focused on dissecting the molecular, biochemical, and evolutionary mechanisms underlying the repeated evolution of tyrosine kinase activity. This position is principally computational, with room for both theoretical and tool development work on ancestral protein reconstruction.

Basic qualifications: - Applicant should have, or expect to complete within a year, a Ph.D. in genomics, bioinformatics, evolutionary biology, or a related field - Demonstrated interest in evolutionary biology - Ability to work collaboratively with biochemists

Preferred qualifications: - Prior expertise in phylogenetics

Interested individuals may apply at: https://careers.purdue.edu/job/Post-Doc-Research-Associate/-33056-en\_US/ Additional information about the Metzger research group can be found at: https:// www.evolutionofnovelfunctions.com/ Review of applications for both positions will begin immediately and continue until the positions are filled. Position is initially for one year, with continuation available pending satisfactory progress.

For questions, please contact Brian Metzger at bphm@purdue.edu

Brian P.H. Metzger, PhD Assistant Professor, Department of Biological Sciences Purdue University, West Lafayette IN

"Metzger, Brian Patrick Ha" <br/> <br/>bphm@purdue.edu>

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## **RostockU Germany PopGenomics**

#### Dear All,

The newly established Population Genetics Group at the University of Rostock is looking for a postdoctoral scientist (full-time) for three years, starting 1 Nov 2024 or later, with the possibility for extension.

The successful candidate will have a Ph.D. in evolutionary biology or similar field. They would bring experience in evolutionary genomics, as evidenced by at least one publication in this broad area. We are looking for an enthusiastic researcher who is keen to develop their own research profile with the aim of scientific qualification (habilitation) and simultaneously enjoys collaborating with others. The tasks include scientific teaching in the amount of 4 semester periods per week in the form of lectures and practical courses in the Bachelor, Master and teacher programs.

Please send your application via the university application portal, official ad here: https://jobs.uni-rostock.de/jobposting/-

0402d256e57231a34ae134759ef3222bd72d5a840?ref = -

homepage Application should comprise a cover letter, resume with a publication list and contact information for at least two references, diploma with indication of final grade, summary of previous research experience and exciting projects you want to conduct (max 2 pages) all in one single file combined. Application deadline is Sept 10th, 2024. Further information about the position can be obtained from mathilde.cordellier@uni-hamburg.de

About the lab: The Population Genetics group at the University of Rostock is a newly established chair led by Dr. Mathilde Cordellier, with a focus on evolutionary research, mainly with invertebrate species. Our work is at the interface of evolution and ecology. Our goal is to understand rapid adaption through hybridization processes by studying the genomes of invertebrate species such as Daphnia. Working on these species offer the unique opportunity to look back in time by using resting stages, and planned projects include the genomic analysis of sediment cores. Further, the group is working on genome and sex chromosome evolution in spiders. We make use of a broad range of techniques: life history experiments, transcriptomics, genome sequencing, bioinformatics are contributing to our understanding of species' evolution.

Mathilde Cordellier, Population Genetics https://cordellierlab.wordpress.com/ "Dr. Mathilde Cordellier" <mathilde.cordellier@uni-hamburg.de>

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## Senckenberg Two Genomics

Job Announcement ref.#12-24011

For the LOEWE funded Centre for Translational Biodiversity Genomics Centre (LOEWE-TBG), Project area Genomic Biomonitoring, Senckenberg invites applications for a Postdoctoral fellow in Population Genetics (Macrogenetics) (m/f/d) (2 years / 80 ' 100% FTE)

This project will focus on large scale synthesis of published genetic and genomic data (Macrogenetics, see Leigh et al., 2021 NRG) to explore patterns and trends within species genetic diversity. Genetic diversity is declining globally. Society's ability to protect it is hampered by poor understanding of geographical patterns of genetic diversity and its key drivers. This project will focus on improving our understanding of within species genetic diversity of tree and/or island species. The postdoctoral fellow will develop methods and work with open access genetic and genomic datasets from nuclear and genomic markers, searching the literature for new data to add to compiled datasets, enriching datasets with key information, and establishing pipelines to extract key summary statistics for multiple species in a standardized manner. There are many open questions in Macrogenetics, and there is also a degree of flexibility to pursue additional questions of mutual interest alongside those planned.

You will work in the new Genomic Biomonitoring lab at Senckenberg (Prof. Deborah Leigh) and have the chance to work within an established network of international collaborators, offering a great opportunity to grow as a scientist. The working language of the lab is English. We encourage healthy working habits, part time employment (80% minimum) and partial remote working/flexible hours can be arranged. The salary will follow the E13 scale.

#### YOUR TASKS

- Collate published nuclear genetic and genomic datasets to add to growing Macrogenetic databases

- Enrich datasets with key species information (i.e. meta-

data)

- Conduct population genetic and genomic analysis on multiple species by establishing standardized pipelines

- Publish findings in high quality peer-reviewed scientific journals and present results at international conferences

- Co-supervise MSc thesis students and/or BSc summer interns

#### YOUR PROFILE

- PhD in Population Genomics / Macrogenetics / Bioinformatics

- Good to strong knowledge of basic population genetic theory

- Familiarity with at least one of the fields of: conservation biology, evolutionary biology, or ecology

- Good knowledge of different molecular genetic and genomic data types and common analysis methods

- Experience working on remote computing clusters and analysing genomic data

- Collaborative working style, with interest in working both in a lab and as part of international working groups.

- Interest in Open Science - Excellent communication skills and writing skills in English - Strong personal and research organization skills

BENEFITS - An interesting task in a newly established international research group - Flexible working hours ' leave of absence due to family reasons (certified by "auditberufundfamilie") ' parent-child- office ' annual special payment ' company pension scheme ' Senckenberg badge for free entry in museums in Frankfurt ' leave of 30 days/year

LOCATION: Frankfurt am Main WORK HOURS: Full time / Part time (80 ' 100% position, 32-40 hours/week) CONTRACT TYPE: 2 years, starting September 16th, 2024 (or soon thereafter) SALARY: according to the German collective agreement TV-H (pay grade E 13)

Senckenberg is committed to diversity. We benefit from the different expertise, perspectives and personalities of our staff and welcome every application from qualified candidates, irrespective of age, gender, ethnic or cultural origin, religion and ideology, sexual orientation and identity or disability. Women are particularly encouraged to apply, as they are underrepresented in the field of this position; in the case of equal qualifications and suitability they will be given preference. Applicants with a severe disability will be given special consideration in case of equal suitability. Senckenberg actively supports the compatibility of work and family and places great

#### September 1, 2024 EvolDir

emphasis on an equal and inclusive work culture.

HOW TO APPLY Please send us your complete application documents (including a 1-2 page cover letter detailing your past research experience and interest in the position, detailed curriculum vitae, PhD certificates or a signed letter from your official super visor stating your defense data, and the contact details of two references,) in electronic form as a single merged PDF file by 03.09.2024 to recruiting@senckenberg.de, quoting /reference number #12-24011, or apply directly on our homepage using the online application form.

Job Announcement Ref. #12-24012

For the LOEWE funded Centre for Translational Biodiversity Genomics Centre (LOEWETBG), Project area Genomic Biomonitoring, Senckenberg invites

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> StonyBrookU NY EvolutionaryGenomics

Postdoctoral Position in Evolutionary Genomics, Stony Brook University

The Veeramah Lab (https://you.stonybrook.edu/veeramahlab/), in collaboration with the Wund Lab at The College of New Jersey ( https://owd.tcnj.edu/wundm/Wund\_Lab/Welcome.html), seeks a postdoctoral researcher to work on a 3-year, NSF-funded research project investigating the early stages of ecotype formation and ecological speciation in four recentlyestablished populations of threespine stickleback fish. We are specifically interested in how phenotypic plasticity, reproductive isolation, and patterns of residency vs. migration interact to promote or constrain adaptive divergence between newly-established freshwater populations and their immediate anadromous ancestors. This work integrates genomic approaches with both observational and experimental assessments of mate choice and seasonal migration in stickleback. The postdoctoral researcher will have primary responsibility for conducting the genomic work, but will have the opportunity to

provide input on any aspect of the project depending upon their interests and expertise.

The individual's primary tasks will be to generate sequencing data from stickleback fish and perform population genetic analysis of this data. They will be expected to work closely with the Wund Lab and assist in mentoring undergraduate students from TCNJ during the summer. As well as primary research duties applicants will be expected to write papers, help in grant writing and train/mentor graduate students. There will be opportunities to perform field work.

All applicants are required to have a PhD or equivalent foreign degree in the areas of population, evolutionary or ecological genetics, or related field in hand before starting the position. Ideally candidates will have experience in generating and/or bioinformatically processing 2nd generation sequencing data and performing population genomic analysis, molecular wet lab experience, knowledge of python or equivalent or programming languages and excellent English skills as demonstrated by peer-reviewed scientific manuscripts. Applications should also be able to work as part of a team and think creatively

Applications will be accepted until September 29th 2024. Applications should apply online at https://tinyurl.com/56dzv24w The official REF# is: 2402968

Applicants should submit a State employment application, a cover letter, CV and a one page research statement. At least two letters of recommendation will be requested of candidates selected for interview, so please include contact information for references in your cover letter.

Inquiries about the job can be made by email to Krishna.Veeramah@stonybrook.edu.

\*Stony Brook University is committed to excellence in diversity and the creation of an inclusive learning, and working environment. All qualified applicants will receive consideration for employment without regard to race, color, national origin, religion, sex, pregnancy, familial status, sexual orientation, gender identity or expression, age, disability, genetic information, veteran status and all other protected classes under federal or state laws.\*

Krishna Veeramah <krishna.veeramah@stonybrook.edu>

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# UBath UK EvolutionMolecualrMicrobiology

Postdoc in gene regulation of multiple bacterial defence systems

The Taylor lab (https://tiffanybtaylor.wordpress.com/; @TaylorLabGroup (X and Blue Sky)) at the Department of Life Sciences and Milner Centre for Evolution, University of Bath has an opening for a postdoctoral researcher interested in evolution and molecular microbiology which will be part of a BBSRC sLola funded consortium MultiDefence (https://sites.exeter.ac.uk/multidefence/).

\*Applications must be submitted via https://www.bath.ac.uk/jobs/Vacancy.aspx?ref=ED11919\* Deadline: 25th September 2024

\*\*About the role\*\*

The MultiDefence consortium brings together leading specialists as well as early career researchers and technicians from the UK universities of Exeter, Cambridge, Durham, Manchester, Bath, Bristol, Liverpool and St Andrews to build a network of expertise in bioinformatics, molecular microbiology, biochemistry, mathematical modelling, microscopy, and experimental evolution techniques. Our collective ambitious goal for this project is to tease apart how complex, multi-layered, bacterial immune systems operate at the level of individual molecules, cells, populations and microbial communities. You will benefit from the broad expertise of this consortium and have opportunities to train in other labs.

At the University of Bath, you will be within the Taylor lab group (https://tiffanybtaylor.wordpress.com/) where our goal is to utilise the power of microbial experimental evolution to decode the evolutionary and ecological forces shaping bacterial genomes. We foster a supportive and respectful environment and are committed to maintaining the highest standards of scientific integrity.

\*\*About the project\*\*

Bacterial genomes have evolved sophisticated defence systems against infections by mobile genetic elements (MGEs), including phages and plasmids, that shape genome structure and function. The very recent discovery of dozens of diverse and formerly unknown defence systems that cluster in 'defence islands' has led to the hypothesis that bacterial immune systems consist of multiple integrated layers that act in concert to constrain MGE infections; analogous to how our own innate and adaptive immune systems work together to combat pathogen infections.

This project will propel our understanding of microbial genome evolution, improve our ability to predict and manipulate the spread of antimicrobial resistance (AMR), and help to optimise the use of phages to combat bacterial pathogen infections (phage therapy).

\*\*About you\*\* Your part in the project will be focused on understanding how these multi-layered defence systems are regulated, both locally (i.e. on the defence islands) and globally (i.e. with regulatory elements in the host cell). You will hold a PhD in a relevant discipline. You will have good, practical experience with molecular microbiology techniques and genetic engineering which will be used to validate predicted regulatory elements. In addition, previous experience with flow cytometry and FACS would be beneficial for expression analysis. Some experience with bacteria-phage culture techniques is desirable. Excellent experimental design, scientific writing and data analysis skills are essential. This role will involve working closely with a full-time research technician that will support the project for the first year.

\*\*Additional information\*\* This is a full-time, fixedterm position for 3-years, to start by January 2025.

The University of Bath provides an exceptional intellectual environment - with strong integration between microbiology and evolutionary biology research staff as well as an outstanding infrastructure to conduct the microbiological, molecular and genomic research. The Milner Centre for Evolution is unique in the UK, providing a research environment focused on doing groundbreaking research that addresses major questions in evolutionary biology (https://www.bath.ac.uk/researchcentres/milner-centre-for-evolution/).

Contact: Informal enquiries encouraged. Please contact Prof Tiffany Taylor(T.B.Taylor@bath.ac.uk). More information can be found at https://www.bath.ac.uk/jobs/Vacancy.aspx?ref=ED11919 Tiffany Taylor <tt515@bath.ac.uk>

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### UCollege London Airborne eDNA

The main purpose of this position is to lead the molecular, bioinformatics and statistical analyses on a NERCfunded project innovating new technologies for the detection of terrestrial biodiversity using environmental DNA isolated from the air. Your role will be to develop and optimise a sampling array for the capture of eukaryotic airborne eDNA, taking into account enduser requirements and capture and preservation of DNA. You will work closely with scientists from the National Physical Laboratory to experimentally validate models of particulate dispersal which will allow us to estimate the effects of wind flow on sampling. You will deploy this sampling array in the UK's national nature reserves to assess biomonitoring capabilities when compared to conventional survey methods, and assess the ability of airborne eDNA to enhance our understanding of functional connectivity at the landscape scale. You will work with scientists from Natural England to understand the requirements of end-users for this technology, and how it can be used to contribute to national monitoring targets. This is a fixed-term role until 31/05/2027 initially.

To read more about the post and apply, please go to:

https://www.ucl.ac.uk/work-at-ucl/search-ucl-jobs/details?nPostingId=10623&nPostingTargetId=-25644&id=Q1KFK026203F3VBQBLO8M8M07&LG=-UK&languageSelect=UK&mask=ext Please email j.littlefair@ucl.ac.uk for enquiries Closing date 19th August

Dr Joanne Littlefair Lecturer (Research), UCL East People and Nature Lab Centre for Biodiversity and Environment Research Department of Genetics, Evolution and Environment University College London https://profiles.ucl.ac.uk/96976-joanne-littlefair https://www.ucl.ac.uk/biosciences/gee/people-andnature-lab "Littlefair, Joanne" <j.littlefair@ucl.ac.uk>

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### **UCopenhagen PopulationGenomics**

A fully funded postdoc position is open in associate professor Ida Moltke's lab at the University of Copenhagen, Denmark. The postdoc will get to work on an exciting whole genome sequence based population genetics project focused on several Greenlandic land mammals. Application deadline is September 27 2024.

For more details see https://tinyurl.com/2zae8zym. Also, feel free to email if you are potentially interested and have informal enquiries (ida@bio.ku.dk).

Ida Moltke <ida@bio.ku.dk>

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### **UEssex ConvergentEvolution**

A Postdoctoral Research Associateship is available to work collaboratively in the research group of Dr Jennifer Hoyal Cuthill in the School of Life Sciences at the University of Essex, UK.

The successful candidate will conduct collaborative research as part of the project 'Is evolution predictable? Unlocking fundamental biological insights using new machine learning methods', with Dr J. Hoyal Cuthill and collaborators.

We hope to recruit a researcher with strong biological data science skills to collaborate in machine learning, and other statistical, analyses of digital data to analyse evolutionary convergence in vertebrate and invertebrate groups. The PDRA will play a key project role in managing "big data" biological image datasets and developing, testing, running and interpreting digital data analysis pipelines, in collaboration with other members of the project team.

The position has funding in place until 2028 and is available from 1st October 2024. The closing date is 01/09/24. Informal enquiries may be made by email to j.hoyal-cuthill@essex.ac.uk. All formal job applications should be made online on the University of Essex website at the link below. For further information and to apply please see:

https://vacancies.essex.ac.uk/tlive\_webrecruitment/wrd/run/ETREC107GF.open?VACANCY\_ID=-512491WbMv&WVID=9918109NEm&LANG=-USA "Hoyal Cuthill, Jennifer F" <j.hoyalcuthill@essex.ac.uk>

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#### **UExeter PopulationGenomics**

Population genomics postdoc at the University of Exeter: 'Solving the Pangenome Paradox'

#### The post

We seek a Postdoctoral Research Associate or Postdoctoral Research Fellow to participate in the project 'Solving the Pangenome Paradox' which will use cutting-edge methods in population genetics and genomics to estimate the selective effects of accessory genes in bacterial pangenomes. This Leverhulme funded post involves collaboration with Michiel Vos (Penryn) and three project partners: Adam Eyre-Walker (Sussex), Ed Feil (Bath) and Sion Bayliss (Bristol). The successful applicant will make use of available whole genome data to quantify the presence and diversity of accessory genes in an existing set of bacterial whole genome sequences and co-develop population genetics models to estimate their selective effects. This role could involve travel across the UK between the teams. It will be a hybrid role based in Penryn (Cornwall), although there may be the possibility for remote working based anywhere in the UK.

### About you

Applicants will possess a relevant PhD or equivalent, or MSc or equivalent (please view the job descriptions) and possess specialist knowledge, specifically related to statistical modelling, bioinformatics, population genetics and evolutionary theory. The successful applicant is expected to both be able to work independently and to collaborate with the PI and three project partners. You are able to take initiative, critically evaluate data and research questions and answers and to disseminate work both verbally (in group meetings and scientific meetings) and written (in manuscripts and for outreach activities).

#### Further information

Please see the full job advert at:

https://jobs.exeter.ac.uk/hrpr\_webrecruitment/wrd/run/etrec179gf.open?WVID=171839ediw&LANG=-USA Michiel Vos, m.vos@exeter.ac.uk.

The closing date for completed applications is 21st August 2024. Interviews are expected to take place on or shortly after the 2nd September.

Michiel Vos Senior Lecturer in Evolutionary Microbiology European Centre for Environment and Human Health Environment and Sustainability Institute University of Exeter Penryn, U.K.

"Vos, Michiel" <M.Vos@exeter.ac.uk>

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### **UGlasgow PlanktonEvolution**

Delighted to announce a Post Doctoral research assistant post to look at plankton community ecology and evolution the context to salmon and seaweed aquaculture,

The candidate to work with Martin Llewellyn < https://www.linkedin.com/in/martin-llewellyn-618a09215/ >, Sofie Spatharis < https://www.linkedin.com/in/sofie-spatharis-41578329b/ > and Simon Babayan < https://www.linkedin.com/in/simon-babayan-22914799/ > in Glasgow University to develop new molecular and statistical tools to tackle challenges to aquaculture from the plankton.

Funded by UK Research and Innovation < https://www.linkedin.com/company/uk-research-innovation/ > in collaboration with Aberdeen (Sam Martin < https:/-/www.linkedin.com/in/sam-martin-6231a721/ >), Plymouth (Dan Smale), Stirling (Simon MacKenzie < https://www.linkedin.com/in/simon-mackenzie-30848374/ >) and Edinburgh (Diego Robledo) Universities, as well as major producers in the salmon and seaweed sectors across Northern Europe. We are developing diagnostic and prediction tools to tackle challenges to aquaculture from the plankton.

Come and join a dynamic team in academic and industry partners to do great science on plankton ecology and fish evolution.

Deadline 12th September. We are looking for a candidate with exceptional lab and / or analytical skills with an interest in the marine environment. For more details see https://www.jobs.ac.uk/job/-DJH120/research-assistant Director of Innovation, Engagement and Enterprise, SBOHVM, University of Glasgow Room 207, Graham Kerr Building, G12 8QQ

Tel 0044 1413305571 Mob 0044 7968587547 https:/-/www.llewellynlab.com www.salmosim.co.uk Martin Llewellyn <Martin.Llewellyn@glasgow.ac.uk>

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### **UIIlinois FishEvolutionGenomics**

Postdoctoral Research Associate - Illinois Natural History Survey/PRI - Application Deadline: October 1, 2024 Ad Link: https://blogs.illinois.edu/view/7426/-1755495505 Postdoctoral Research Associate Illinois Natural History Survey Prairie Research Institute

Illinois is a world leader in research, teaching, and public engagement. We serve the state, the nation, and the world by creating knowledge, preparing students for lives of impact, and addressing critical societal needs through the transfer and application of knowledge. Illinois is the place where we embrace differences. We embrace it because we value it. Illinois is especially interested in candidates who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the Illinois community.

The Prairie Research Institute (PRI), a research and service institute of the University of Illinois at Urbana-Champaign centrally located between Chicago, St. Louis, and Indianapolis, houses five State Scientific Surveys covering a wide range of expertise including biology, water resources, climate, geology, sustainable technology, and archaeology. PRI's mission is to provide objective, integrated scientific research and service that allow citizens and decision-makers to make choices that ensure sustainable economic development, enduring environmental quality, and cultural resource preservation for the people, businesses, and across Illinois, the nation, and the world. Learn more at https:// go.illinois.edu/PRIjobs . The Illinois Natural History Survey (INHS), which investigates and documents the biological resources of Illinois and other areas and acquires and provides natural history information that can be used to promote the common understanding, conservation, and management of these resources, is seeking a Postdoctoral Research Associate to assist with studying the diversification of North American minnows. The

project is funded by the National Science Foundation, and the objective is to combine genomics, phylogenomics, biogeography, and comparative phylogenetic methods to gain insights into the evolution and diversification of North American minnows. This position will be based in Champaign, IL.

Duties & Responsibilities

fer, and assist with inventorying, databasing, and managing incoming samples

- Lead the extraction and quantification of DNA, and prepare libraries of genomic data

- Plan and lead field expeditions in the United States to collect samples and contribute to the identification and preservation of samples for deposition in the INHS fish collection

- Work closely and coordinate efforts between collaborative partners associated with the project

- Write code, analyze data, synthesize results, and lead the preparation of multiple manuscripts for submission to peer-reviewed scientific journals

- Assist in training and mentorship of graduate and undergraduate student partners

- Disseminate research findings to the scientific community, management agencies, and general public through presentations at professional meetings, manuscripts, and public outreach activities

- Ensure the safety of staff and equipment.

- Respond to requests for scientific/technical information and communicate effectively with collaborators.

- Participate in community outreach and service events, and mentor staff

- Keep abreast of developments in this discipline

- Perform other duties as needed to further the mission and goals of the Survey, PRI, and the University of Illinois

Minimum Qualifications

- Ph.D. (within the last 10 years or by the start date) in evolutionary biology, ichthyology, or related discipline, with a research interest in bioinformatics.

- Strong quantitative analytical skills, competence with R and/or Linux command-line interface, and writing and troubleshooting code, preferably including experience in phylogenomics and/or comparative phylogenetic methods.

- Ability to write clearly and scientifically, with evidence of successful publications.

- Possess excellent organizational, interpersonal, oral, and written communication skills.

- Ability to apply analytical/scientific thinking to define and solve problems.

- Ability to work independently, analyze data, and coherently translate findings both verbally and in writing to granting agencies and to scientific and public communities.

- Effective communication, collaboration, personal relations, and teamwork skills.

- Valid driver's license.

Knowledge, Skills, and Abilities

Demonstrated strong leadership and administrative skills. Demonstrated ability to manage and oversee all aspects of a large research program, including management of finances, personnel, and research activities.

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### **UKansas DrosophilaGenomics**

We are recruiting a postdoctoral researcher to join John Kelly, Stuart Macdonald and Rob Unckless on an NSF funded project to study the genomic basis of fitness variation in wild populations of Drosophila. Our research groups at the University of Kansas use a range of genetic, genomic, and statistical techniques to address basic questions in evolutionary genetics. The postdoctoral researcher will help to lead a collaborative project exploring the genomic basis of male fitness components in Drosophila melanogaster. The project will combine field and laboratory experiments to identify the processes generating fitness differences, both among diploid individuals and their haploid gametes, and to estimate how that variation results in allele frequency change. This project employs massive-scale genome sequencing, data that will enable a wide range of novel, independent projects. The project also involves a substantial theoretical component including algorithm development. The breadth of the project, and depth of the data we are collecting, allows for a range of questions to be addressed, providing the opportunity for the successful candidate to position themselves as an independent investigator.

The environment for evolutionary and quantitative genetics/genomics at the University of Kansas is exceptional, with a number of relevant research groups in EEB (https://eeb.ku.edu/faculty), MB (https://molecularbiosciences.ku.edu/faculty), and Center for Genomics (https://genomics.ku.edu/). Collectively our groups provide a strong, collaborative training environment. The tentative start date for the position is Jan 2, 2025, but that is negotiable. Salary: \$60,000, commensurate with qualifications and experience.

Required Qualifications: 1. A PhD in evolution, genetics, genomics, or a related field. 2. A first-author publication/preprint that shows your ability to initiate and execute a research project. 3. Experience with molecular/population/quantitative genetics, as evidenced by application materials and/or publications. 4. Experience with bioinformatics (such as coding or scripting in R or Python) as evidenced by application materials.

Preferred Qualifications: 1. Experience working with genomic datasets resulting from next- generation sequencing applications (e.g., whole genome sequencing, RNAseq). 2. Experience working with undergraduates or other researchers in a team setting.

A complete online application consists of: (a) CV/Resume, (b) Cover Letter outlining how the required and preferred qualifications are met, relevant experience, and interest in the position, and (3) Contact information for three references that includes phone/email.

Inquiries about the position can be directed to John Kelly (jkk@ku.edu), Stuart Macdonald (sjmac@ku.edu) or Rob Unckless (unckless@ku.edu). Applications should be submitted directly through the KU employment portal: https://employment.ku.edu/jobs/-staff/postdoctoral-researcher/28415br "Kelly, John K" <jkk@ku.edu>

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### UKansas PlantEvo

Postdoc position at the University of Kansas, Department of Ecology and Evolutionary Biology (eeb.ku.edu), to study the genetics/genomics of complex floral trait adaptation across a species boundary in the wildflower genus, Penstemon.

Contact Lena Hileman (PI, hilemanlab.org, lhile-

man@ku.edu) and/or John Kelly (co-I, jkk@ku.edu) directly to share your interest in the position, even if you are not immediately finishing your PhD.

The postdoc will be co-mentored by Hileman and Kelly in research and professional development,

an active member of the vibrant genomics postdoctoral community at KU supported intellectually by the KU Center for Genomics (genomics.ku.edu),

supported in development of quantitative and evolutionary genetics and genomics skills in an exciting emerging model plant system,

a major contributor to the focal project and provided opportunities to develop independent lines of related research,

supported in mentoring junior researchers including those who participate regularly in Hileman/Kelly lab research through the KU Office for Diversity in Science Training (odst.ku.edu).

Project overview: The Hileman & Kelly labs at KU, in collaboration with Dr. Carolyn Wessinger at the University of South Carolina (https://wessingerlab.github.io/-), will use recently developed genetic and genomic resources to dissect the genome to phenome relationship between bee- and hummingbird-adapted floral syndrome traits that define species in a Penstemon complex. In previous work, we have shown that a handful of unlinked genomic regions are strongly diagnostic of bee- vs. hummingbird floral syndrome and therefore species identity (Wessinger et al. 2023; https://doi.org/10.1371/journal.pbio.3002294). These diagnostic genomic regions result from natural selection favoring alternative floral trait combinations promoting bee- versus hummingbirdpollination. Through continued genome-wide association mapping, these regions are expected to include only 1-2 genes each.

The Hileman & Kelly labs, including the recruited postdoc, will use population genomic, transcriptomic and gene functional prediction methods, to genetically dissected these divergent genomic regions. The results will contribute to our understanding of complex trait evolution including the discover of floral traits experiencing natural selection that contribute to divergent pollination syndromes, the role of regulatory versus protein coding mutations in adaptive evolution, and how selection acts to maintain multi-locus species differences in the face of gene flow. In addition, the postdoc will be mentored in developing independent lines of related research, including support developing postdoctoral training and/or standard (co-I) grant proposals aimed at advancing independent lines of research and the postdoc's professional development.

"Hileman, Lena" <lhileman@ku.edu>

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# UMaryland EvolutionaryQuantitativeGenomics

The Fritz Lab is seeking a postdoctoral scholar who will develop and execute research to determine the evolutionary history of structural variants involved in rapid insect adaptation.

Location: University of Maryland Institute for Advanced Computer Studies, College Park, MD

Supervisor: Principal Investigator (PI) Megan Fritz

Salary: \$52,000 - \$58,000 plus University benefits ( http://uhr.umd.edu/benefits/)

Category Type: Non-tenured, continuing contract (12 mo.)

Duration: 24 months, contingent upon performance

Project Topic: Structural variants and their role in rapid adaptation to human-imposed selection.

Position Description: The postdoctoral project leader will conduct experiments to quantify nucleotide sequence and structural changes across the genome over time, as well as characterize haplotypic variation in adaptive genomic regions from long-read data. The postdoc will be responsible for collection and analysis of data, reporting, communication of results at conferences and through peer-reviewed manuscripts, as well as mentorship of graduate and undergraduate researchers.

Minimum Requirements: Ph.D. in Biology, Genetics, Entomology, or related fields. Candidates must have experience using standard molecular techniques (e.g. DNA isolation, PCR, gel electrophoresis) and substantial experience conducting population and evolutionary genomic analyses.

Preferred Qualifications: Analysis of large genomic datasets (Illumina short reads, Oxford nanopore long reads), familiarity with Linux command line, and use of R and/or Python.

For best consideration apply by September 15, 2024. Interested applicants should send a cover letter, CV/resume, and a list of 3 references to Megan Fritz (mfritz13@umd.edu). The University of Maryland, College Park, actively subscribes to a policy of equal employment opportunity, and will not discriminate against any employee or applicant because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry or national origin, marital status, genetic information, political affiliation, and gender identity or expression. Minorities and women are encouraged to apply.

#### Megan Fritz

Associate Professor Department of Entomology Institute for Advanced Computer Studies University of Maryland

4291 Field House Dr. Plant Sciences Bldg. Rm. 3126 College Park, MD 20742 Office Phone: 301-405-3945 Website: www.meganfritzlab.com Twitter Handle: @MosquitoDoc she/her

Megan Lindsay Fritz <mfritz13@umd.edu>

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# UmeaU ModelingMicrobialEvolution

We would like to advertise some exciting postdoc projects available at the interdisciplinary research center IceLab in UmeA¥ University, Sweden. They can be found at the link: https://www.umu.se/en/workwith-us/postdoctoral-scholarships/6-1263-24/. In particular, the project "Environmental paleomicrobiology: Inferring community composition and function from metabolic fossils" combines quantitative modeling techniques to rich empirical data sets to understand the evolution of microbial communities in response to changes in oxygen availability. The postdoc positions are twovear fellowships financed by Kempestiftelserna and are part of the IceLab Multidisciplinary Postdoctoral Program. A fellowship amounts to 700 000 SEK over two years. The scholarships are tax-free. Application deadline September 20, 2024. Start winter/spring 2025 (exact start date according to agreement).

Project description: This project explores the impact of coastal deoxygenation on microbial ecosystems. As oceans face declining oxygen levels due to climate change and human activities, understanding how these changes affect microbial communities becomes increasingly important. Using an interdisciplinary approach that combines molecular ecology, paleogenomics, bioinformatics, and mathematical modeling, we aim to characterize the taxonomic and functional diversity of microorganisms in coastal systems such as the Baltic Sea, the Black Sea, and northern fjords. By analyzing newly acquired data from water columns and sedimentary archives, we seek to uncover how past and ongoing deoxygenation events have shaped microbial community structures and their roles in ecosystem processes.

A key part of this research will be the use of metabolic models to simulate and study possible microbial community dynamics. These models will be informed by extensive genomic and transcriptomic data, enabling us to assess which metabolic pathways may be active under varying environmental conditions. Our goal is to determine the reliability of genetic signatures as indicators of specific metabolic functions and to assess how these functions have evolved over millennia. By integrating empirical data with simulations, we aim to provide new insights into the resilience and adaptability of microbial communities in response to environmental stressors, ultimately improving our understanding of their contributions to broader, biogeochemical cycles.

This postdoc will be housed in IceLab and hosted by either the Institute of Mathematics and Mathematical Statistics or the Department of Ecology & Environmental Science depending on what is most appropriate for the candidate. The postdoc will be supervised by a multidisciplinary team with complementary expertise in environmental DNA, microbial ecology/evolution, and mathematical modeling.

Specific Qualifications for the project: To qualify for the fellowship, the candidate should have a PhD degree, or a foreign degree that is deemed equivalent, in a relevant discipline such as aquatic microbial ecology, molecular biology, applied mathematics, mathematical/computational biology, evolution, etc. We note that since the project is multidisciplinary and can be tailored to the specific expertise of the candidate, we are inclusive of many academic backgrounds that may be appropriate for addressing the topic. The ideal candidate should be motivated to carry out research in data-driven science with a strong interest in ecology. The candidate should also possess skills in analyzing varied molecular data sets via computer programming.

Contact Information: Eric Capo, Assistant Professor at Department of Ecology & Environmental Science, Umeå University (eric.capo@umu.se). Eric Libby, Associate Professor at Department of Mathematics and Mathematical Statistics, IceLab, Umeå University (eric.libby@umu.se).

Eric Libby <elibbyscience@gmail.com>

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# UNebraska-Lincoln ButterflyGenomics

Post-doctoral Research Associate: Conservation Genomics of Monarch Butterflies

We are seeking a candidate for a post-doctoral research associate at the Nebraska Cooperative Fish and Wildlife Research Unit and the University of Nebraska-Lincoln. The researcher will analyze genomic datasets to evaluate the influence of historical declines on genomic diversity on Monarch Butterflies. The successful candidate will work with samples that span over 100 years to conduct temporal comparisons in genomic diversity metrics. The project will produce actionable science with the results informing the decision to list the Monarch butterfly as endangered or threatened under the U.S. Endangered Species Act. As such, a candidate with experience in conservation genomics and pollinator ecology is desired.

Start Date: January 2024 (Flexible)

Salary and Benefits: \$65,000-72,000 plus benefits, depending on experience (one year)

Qualifications: Ph.D. in biology, evolution, genetics, or other relevant discipline. Experience with coding in R or python, genomic analyses, molecular ecology techniques, and publishing are desirable.

Contact: Sarah Sonsthagen (ssonsthagen2@unl.edu) for more information about the project. To apply, please send the following to the email address above: 1) Onepage cover letter describing your interest in the position, skills, and goals, 2) CV, 3) unofficial transcripts, 4) contact information for 3 references, and 5) writing example(s) (e.g., 1-2 manuscripts, proposals etc.).UNL and NECFWRU values equity, diversity, and inclusion.

Review of applications will begin immediately and continue until the position is filled.Preference will be given to applications received by September 31, 2024.

Sarah Sonsthagen <ssonsthagen2@unl.edu>

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# UNorthCarolina ChapelHill PopulationGenetics

Postdoctoral Research Associate Position Population Genetics University of North Carolina, Chapel Hill

The Johri Lab is seeking a postdoctoral researcher to join us at the University of North Carolina, Chapel Hill. Our research interests involve understanding how evolutionary processes like selection, mutation, recombination, and historical population size changes shape patterns of genomic variation. Projects can involve employing computational and theoretical approaches or statistical method development or using an empirical approach to ask fundamental questions in population genetics. More information about our research interests is provided at https://www.johrilab.org/. The position is best suited for someone trained in population genetics/evolutionary genomics and/or someone with a quantitative background (such as statistics, computer science, or mathematics) and an interest in population genetics. A Ph.D. in a relevant field will be required by the start date. Informal inquiries about your fit to the lab are very welcome!

Start date is flexible. Salaries will follow recommendations by the NIH.

We are located in the intellectually vibrant Research Triangle area where there are many excellent faculty studying evolutionary biology and genomics both at UNC and neighboring institutions, providing a fantastic opportunity for postdocs to interact with other labs.

How to Apply:

Interested candidates should send the following materials to Parul Johri (pjohri@unc.edu):

-CV -Contact information of two references -A brief explanation of your research interests and why you are interested in joining the lab. [Can be a single paragraph.]

Review of applications will begin on October 30th, 2024, and continue until a suitable candidate fills the position.

Parul Johri <pjohri@unc.edu>

"Johri, Parul" <pjohri@unc.edu>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

Tampa campus (813)-974-4576 www.margreslab.com Mark Margres <margres@usf.edu>

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

### USouthFlorida EvolGenomics

POSTDOCTORAL RESEARCHER

University of South Florida

Department of Integrative Biology

We are seeking a postdoctoral researcher for January 1, 2025 (or sooner) to work on genomics, transcriptomics, and machine learning in Tasmanian devils and devil facial tumor disease (DFTD). The NSF-funded international collaboration builds on 20+ years of research tracking the spread of this unique transmissible tumor across Tasmania and consequent endangerment of the iconic Tasmanian devil. A chromosome-level reference genome assembly is available for the devil, and population genomic data have already been collected for >3500 Tasmanian devil individuals. The successful applicant will have an unprecedented opportunity to analyze thousands of devil and tumor samples taken throughout epizootic progression to use GWAS, eQTL mapping, machine learning, and other approaches to understand the repeatability and predictability of the genotype-phenotype relationship in wild populations.

The position is centered in the lab of Dr. Mark Margres (https://www.margreslab.com) at the University of South Florida in close collaboration with Dr. Andrew Storfer (https://labs.wsu.edu/storfer/) at Washington State University. The University of South Florida offers genomic core facilities with state-of-the-art equipment, high-performance computational facilities, and staff support.

Review of applications will begin immediately and continue until the position is filled. A Ph.D. in Biology or a related discipline, combined with genomics and bioinformatics experience, is required. Desired qualities also include a background in machine learning, infectious disease evolution, and/or cancer genomics. Start date is negotiable. Salary and benefits are competitive. Position is for 1 year, with continuation for an additional year pending satisfactory progress. To apply, please send in pdf format a CV, statement of interest, up to three representative reprints, and names, addresses and emails for three references via email to: Mark Margres (margres@usf.edu).

#### Mark

Mark J. Margres, Ph.D. Assistant Professor Department of Integrative Biology University of South Florida

### **UTexas Biodiversity**

The University of Texas College of Natural Sciences is pleased to announce the 2025 Stengl-Wyer Scholars Competition.

ABOUT THE AWARD Recent Ph.D.s are invited to apply for distinguished postdoctoral positions to study the diversity of life and/or organisms in their natural environments at The University of Texas at Austin(UT), one of the top campuses in the country for this area of research. Funded by the Stengl-Wyer endowment, the Stengl-Wver Scholars Program provides up to three years of support for talented postdoctoral researchers in the broad area of the diversity of life and/or organisms in their natural environments. Scholars may study any groups of organisms, at levels from genes to populations to communities to ecosystems and may use any combination of approaches. Applications that advance research within the Texas Field Station Network or UT Biodiversity Collections are highly encouraged given the Stengl-Wyer Endowment???s mission.

Scholars will:

?? conduct cutting-edge research over three years

?? have access to the outstanding core research facilities at UT, including field stations, natural history collections, computational, imaging, and biomolecular facilities

?? reside locally and have a regular workspace and presence on the main UT campus

?? primarily focus on research; but in at least one of the three years, scholars should also develop educational or community engagement activities (Examples include, but are not limited to, teaching undergraduate/graduate workshops or modules, leading summer internship programs, leading outreach efforts at UT field stations, or K-12 engagement activities.)

?? participate in biweekly meetings (luncheons) with other Stengl-Wyer Scholars, Fellows or guests

?? receive career mentorship

Scholars are expected to be independent and propose

their own research project. The project start date at UT should be between June 1, 2025 and September 30, 2025. Applicants should identify one or more faculty members from UT???s College of Natural Sciences(CNS) who will serve as a mentor as well as provide laboratory space to the Scholar. Scholars will be encouraged to interact broadly and collaborate with other faculty, postdocs, and graduate students at UT. 2025 Scholar recipients will receive the following:

?? \$70,000 annual salary plus UT benefits

?? \$10,000 annual allowance for research and travel expenses

?? Up to \$3,000 relocation expenses

ELIGIBILITY Eligible applicants must have completed a Ph.D. or equivalent degree by the projected start date and must not have exceeded 24 months in a full-time postdoctoral position at the time of application deadline. Preference will be given to applicants not already in residence at UT. Applicants who are non-US citizens or permanent residents must be eligible for J-1 Scholar visa status; the Stengl-Wyer Scholars program cannot support H-1B visa applications. CNS encourages applications from individuals from all backgrounds with diverse viewpoints.

For more information: Program Website: https:// /cns.utexas.edu/research/research-initiatives/stengl-wyer-scholars Apply Here: https://utexas.infoready4.com/#competitionDetail/1945461

Lesley Bruner (she/her), Senior Administrative Program Coordinator Strategic Research Initiatives The University of Texas at Austin College of Natural Sciences |utexas.edu

"Bruner, Lesley" <lesley.bruner@austin.utexas.edu>

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### UWisconsin Madison PopulationGenetics

The Ragsdale Lab at UW-Madison is recruiting a postdoctoral researcher. We have an opening in an NIHfunded (MIRA) postdoc position to work on the development and/or application of population genetics approaches for evolutionary inference.

There is quite a bit of flexibility in research focus. Possible projects include demographic inference in humans and hominins (in particular, the deep evolutionary history of both modern and archaic humans), inference of natural selection and selective interactions (such as dominance, epistasis, or background selection), and connecting selection on quantitative traits (e.g., stabilizing selection) to selection on trait-contributing variation in non-equilibrium demographic settings. Potential applicants with related interests in population genetics and evolution are encouraged to reach out via email with informal inquiries.

UW-Madison offers a vibrant and interactive research community in evolution, genetics and genomics (https:/-/evolution.wisc.edu/). Quality of life in Madison, Wisconsin, is high, with excellent biking and public transit infrastructure, affordability, and ready access to both outdoors and urban activities. The position follows the NIH postdoc salary scale.

Informal inquiries are welcome and should be emailed to Aaron Ragsdale (apragsdale@wisc.edu), and more information about our lab and research can be found on our webpage (https://apragsdale.github.io/).

To apply, please email apragsdale@wisc.edu with your CV by August 31, 2024.

Aaron Ragsdale <apragsdale@wisc.edu>

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### **UYork ViralEvolution**

The Cell Surface Signalling laboratory led by Professor Gavin Wright (www.wright-lab.org) is interested in discovering the molecular basis of cellular recognition processes in both health and disease. A major aim of the laboratory's research is to understand how cells interact with pathogens such as viruses to inform the rational design of novel therapeutics and vaccines. Examples of our contributions include discovering vaccine targets for malaria (Crosnier et al. Nature 480 p534) and trypanosomiasis (Autheman et al. Nature 595 p96). Central to our approach is a large and unique collection of human cell surface receptor ectodomains that can be used to directly identify extracellular protein interactions (Shilts et al. Nature 608 p397). The Hull York Medical School and associated Department of Biology and York Biomedical Research Institute are recognised world leaders in pathogen research, and you will join a vibrant environment of scientific researchers who are

dedicated to tackling these important problems in global health.

Role We are looking for a postdoctoral level scientist to lead a project that will use our human receptor discovery platform to identify host receptors for up to 200 viruses listed on pandemic risk registers. In collaboration with Dr Dalan Bailey at The Pirbright Institute, the role these newly identified receptors in host recognition by viruses will be determined. This project will contribute scientific knowledge that will be crucial in preparing the response to the next pandemic. You will be responsible for leading the project to meet funder milestones, design and execution of experiments, preparing progress reports, and contributing to the local and wider scientific community through presentations and other engagement.

Skills, Experience & Qualification needed A PhD a biochemistry-related subject, ideally in host-pathogen interactions. Experience in protein sequence-based data analysis and/or high throughput screening Experience in recombinant protein expression and purification, ideally

in mammalian or insect cell lines.

Experience in molecular biology such as PCR and cloning Experience in virus infection assays would be an advantage Highly organised and reliable personality Interview date: Early October

https://jobs.vork.ac.uk/vacancy/research-associate-invirus-receptor-discovery-for-pandemic-preparedness-564682.html For informal enquiries: please contact Gavin Wright on gavin.wright@york.ac.uk

Link for more information and how to apply:

https://jobs.york.ac.uk/vacancy/research-associate-invirus-receptor-discovery-for-pandemic-preparedness-564682.html Professor Gavin J. Wright DPhil FMedSci Department of Biology, Hull York Medical School, York Biomedical Research Institute, University of York, UK. http://www.wright-lab.org/ Gavin Wright <gavin.wright@york.ac.uk>

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# **WorkshopsCourses**

Crete ComputationalMolecularEvolution May11-22 83	Online LongitudinalDataInP Nov25-28 00	
-	0	
CzechRepublic Genomics Jan5-18	Online MachineLearningComputationalBiology Sept16	
EMBL Heidelberg Vesicles Feb23-28	91	
Nafplion Greece ComparativeGenomics Nov3-684	Online NetworkAnalysisR Oct17-18	
Namibia CheetahConservation Jan5-15	Online Phylogenomics Dec2-6	
Online AnalysisDNAMethylation Sep18-20	Online PopulationGenomics Nov25-2992	
Online BiodiversityDataAnalysis Sep5-11	Online RNAseqNonModelOrganisms Nov18-22 92	
Online ConGen Aug26-Sep4	Online RNASeqPipelines Oct15-23	
Online DimensionReductionMethods Aug1287	Online ShotgunMetagenomics Dec10-13	
Online EvolutionaryCommunitiesWithVegan Sep18-22	Online StructuralVariants Dec2-4	
88	Online UsingChatGPTandCopilotForDataAnalysisR	
Online GeneticDataAnalysis Aug26-Sep4	Aug29-30	
Online IntroToNextflow Oct7-9		

### Crete ComputationalMolecularEvolution May11-22

#### Dear Community,

We are very happy to announce that the 15th summer school on Computational Molecular Evolution funded by EMBO Practical Courses and organized by Ziheng Yang, Alexis Stamatakis, Adam Leaché, and me, will take place from May 11th - 22nd 2025 in HCMR Crete, Greece!

Please visit the course web-site for further details: https://meetings.embo.org/event/25-comp-molevolution Applications for our summer school will close on November 1st 2024. Please feel free to circulate this message.

#### Aglaia (Cilia) Antoniou

Dr. Antoniou Aglaia (Cilia) Institute of Marine Biology, Biotechnology and Aquaculture (IMBBC) Hellenic Centre for Marine Research (HCMR) Gournes Pediados, P.O.Box 2214, 71003, Iraklio, Crete, Greece Tel.: +30 2810 337826 Fax: +30 2810 337820

Cilia Antoniou <antoniou@hcmr.gr>

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### **CzechRepublic Genomics Jan5-18**

#### Hello EvolDir Community!

PHILOSOPHY Our philosophy is to train participants in the most relevant topics in genomics, in a vibrant, immersive and inclusive environment. The Workshop on Genomics was developed in response to the increasing demand for training on how to effectively analyse and manage data generated by modern sequencing technologies. The Workshop curriculum includes extensive coverage of fundamental techniques required of all studies utilising modern sequencing data. This is the 14th time the Workshop on Genomics will be held in the Czech Republic.

APPLICATION The Workshop on Genomics 2025 is now open for Applications! Deadline is 18th September 2024. https://evomics.org/registration-form/apply-2025-workshop-on-genomics-cesky-krumlov/ DATES The workshop will be held from the 5 - 18th January, 2025 in Cesky Krumlov, Czech Republic. The workshop runs daily from 9 to 22 for two weeks, with Sunday kept free for town activities.

PROGRAM The 2025 program can be found here: https://evomics.org/2025-workshop-on-genomics/ and includes all things genomics, from UNIX and R, genome assembly and annotation, SNP and SV calling, pangenomics, population genomics, transcriptomics and RNAseq gene expression analysis, comparative genomics, microbiome analysis, transposable element analysis and BIG data.

WHO WE ARE Organisers: we are a friendly and approachable group of scientists working in diverse fields of genomics. Every year we gather a group of experts in genomics from across the world to come and teach genomics in the beautiful Czech Republic.

Our workshop team this year includes: Mike Zody (New York Genome Centre), Guy Leonard (University of Oxford), Mercè Montoliu Nerín (Uppsala University), Rayan Chikhi (Institut Pasteur), Camille Marchet (University of Lille), Antoine Limasset (University of Lille), Katharina Hoff (University of Greifsald), Fritz Sedlazeck (Baylor College of Medicine), Erik Garrison (University of Tennessee), Chris Wheat (Stockholm University), Evan Eichler (University of Washington), Vincenza Colonna (IGB-CNR, Naples / University of Tennessee), Brian Haas (Broad Institute), Rachel Steward (Lund University), Sonya Dyhrman (Columbia University), Francesco Cicconardi (University of Bristol), David Barnett (Maasricht University), Marcela Uliano-Silva (Wellcome Sanger Institute), Valentina Peona (Swedish Natural Museum / Swiss Vogelwarte, and Dag Ahrén (Lund University).

COST The Workshop registration fee is \$1,950. Note that this amount does not cover travel, lodging or boarding. Please note that we also have Equal Opportunities funding available for participants travelling from low / middle-low income countries. Please see https://evomics.org/bursaries/ for more information.

FAQs https://evomics.org/workshops/faq/ Any further questions or queries should be directed to evomics.workshops@gmail.com

We're very much looking forward to meeting you in (a hopefully snowy!) Cesky Krumlov in January,

The Workshop on Genomics 2025 Team :)

Josephine Paris Rayan Chikhi Joan Ferrer Obiol Guy Leonard Mercè Montoliu Nerín Daniel Kintzl Scott Han-

dley

Josie Paris cparisjosephine@gmail.com>

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# EMBL Heidelberg Vesicles Feb23-28

Here is a brief overview of our upcoming events:

1 .- EMBO Practical Course Extracellular vesifrom biology to biomedical applications cles: Date: 23 -28 Feb 2025 Application deadline: 17 Nov 2024 Location: EMBL Heidelberg Link: https://www.embl.org/about/info/course-andconference-office/events/exo25-01/ Course overview The extracellular vesicle (EV) research field is still growing with many researchers entering the field with a continued strength of demand for such specialized training. As research progresses, it becomes clear that EV's regulate an increasing number of (Patho)physiological processes and are harnessed in a variety of biomedical applications. Appropriate methodologies to prepare and characterize EV from biofluids are key to understanding the mechanisms that regulate their formation, composition and function. Given the large number of methods used, it is particularly important to provide practical hands-on training to new researchers covering the possibilities and limitations of the most widely used methods. This course will deliver such state-of-the-art training to participants, particularly those entering the field, and enable them to select the methodology which best fits their research question.

2.- EMBO | EMBL Symposium Wild frontiers of model organisms Date: 8 - 11 Apr 2025 Location: EMBL Heidelberg and Virtual Link: https://www.embl.org/about/info/course-and-conference-office/events/ees25-02/ Symposium overview The scientific community relies on a small number of model organisms to study larger themes in biology, with the assumption that gained insights can be extrapolated to most other organisms. However, recent advances in our ability to study organisms in the context of their natural environments have revealed that Jacques Monod's famous quote, 'What is true for E. coli is true for the elephant' does not do justice to the vast diversity of life on our planet. We will highlight research that challenges classical model organisms by looking at fluctuating, natural environments as a rich, relevant inspiration for new experiments in the lab and explore the challenges associated with the establishment of new model systems. This conference will showcase how exploring the wild frontiers of model systems is increasing our understanding of the biology, ecology, and evolution of organisms, ranging from microbes to plants and animals. We hope to bring together laband field-focused researchers from ecology, genomics, quantitative cell and molecular biology. Our aim is to debate the possibilities and limitations inherent to these disciplines and to develop unified approaches to gain comprehensive, mechanistic insights into the natural world.

Mayra	Gabriela	Sanchez	Ponce
<mayra.sar< td=""><td>nchez@embl.de&gt;</td><td></td><td></td></mayra.sar<>	nchez@embl.de>		

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# Nafplion Greece ComparativeGenomics Nov3-6

Dear all,

We are thrilled to announce the upcoming EMBO Early Career Lecture Course "Evolutionary and Comparative Genomics", that will be held in Nafplion, Greece on 3-6 November 2024.

For more information please visit the course's website: https://meetings.embo.org/event/24-genomics Registration fees: euro 300/420 (includes accommodation)

Abstract submission deadline: 16 August

Registration deadline: 15 September

For questions, contact the main organizer at: vakirlis@fleming.gr

Nikos Vakirlis, on behalf of the co-organizers:

Christoforos Nikolaou

Grigoris Amoutzias

Tereza Manousaki

Alexandros Pittis

Dr. Nikolaos Vakirlis

Junior Researcher - Group Leader Institute for Fundamental Biomedical Research, BSRC "Alexander Fleming" 34 Fleming street, 16672, Vari, Greece Nikolaos Vakirlis <vakirlis@fleming.gr>

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## Namibia CheetahConservation Jan5-15

RECEIVING APPLICATIONS: CONGEN2025, the Cheetah Conservation Fund Research Center, Namibia

We are pleased to announce that ConGen GLOBAL is offering a new ConGen course: the 2025 Recent Advances in Conservation Genetics course (CONGEN2025), which will be held at the Cheetah Conservation Fund Research Center, Namibia, from January 5-15, 2025.

### REGULAR APPLICATION IS NOW OPEN

Application is free. You do not need to pay the registration fee before receiving the acceptance letter. The comprehensive registration fee of \$2,750 includes tuition, accommodation, meals, and course-related transportation. Participants are responsible for their travel arrangements to Namibia.

CONGEN2025 is an immersive course that will accommodate 25-30 students. It is open to applicants from any part of the world, but prioritizing acceptance for the participants from African nations, and will feature 15-20 distinguished faculty members from across the globe. It aims to delve into the latest methodologies, interpretations, and practical applications of genetic and genomic analyses in the conservation of endangered species. Our faculty will impart their knowledge on cutting-edge technologies, research methodologies, and the practical application of population-based studies in conservation efforts.

To receive full consideration, applications must be submitted before September 15, 2024. Please fill out this form (https://conservationgenetics.org/congen2025/congen2025-application/) to be considered as one of the participants for the course.

Application for ConGen2025 acceptance is a competitive process: the committee will evaluate your application and will mail you an acceptance letter if you are qualified. Successful applicants will be notified of the committee's decision by September 20, 2024.

They will have until October 1, 2024, to pay a registration deposit of \$1,375, or forfeit their placement to the next person on the waiting list. The full registration fee of \$2,750 must be paid by October 15, 2024.

If the registration fee is not paid on time, your place will be offered to the next applicant on the waiting list.

Accommodations will be provided at the CCF Educational Lightfoot Camp near Otjiwarongo, Namibia, offering an authentic African experience. The camp features basic but comfortable huts with essential amenities. Shared facilities include wash stations with open-air showers and a communal kitchenette. A picnic and fire area is available for relaxation and socializing. Additional accommodations may include dormitories or rondavels.

The course is organized by esteemed professionals, including local hosts Dr. Laurie Marker and Dr. Anne Schmidt-Küntzel of the Cheetah Conservation Fund, Namibia, and members of the ConGen Organization Committee from various prestigious institutions worldwide. The ConGen Organization Committee members are Stephen J. O'Brien (NOVA Southeastern University, FL, USA, chair), Taras K. Oleksyk (Oakland University, MI, USA), Emma Teeling (University College Dublin, Ireland), Eduardo Eizirik (PUCRS, Brazil), Laurie Marker (CEO Cheetah Conservation Fund, Namibia), Cindy Harper (University of Pretoria Veterinary College, South Africa), Laurie Goodman (Executive Editor, Giga-Science), and Klaus-Peter Koepfli (Smithsonian-Mason School of Conservation, George Mason University, USA).

The CONGEN2025 course, now in its 29th year, continues to evolve, highlighting the latest advancements in conservation genetics and genomics. The curriculum includes plenary lectures, hands-on tutorials, and practical applications, addressing a wide range of topics from study design to the integration of AI in conservation genomic data analysis. For more information and examples of past course schedules, please visit our website: www.conservationgenetics.org/congen2025 . Tarás K. Oléksyk, Ph.D.

Associate Professor Department of Biological Sciences Oakland University Dodge Hall, Rm. #367 118 Library Dr Rochester, MI 48309-4479 office: +1 (248) 370-3359 fax: (248) 370-4225 oleksyk@oakland.edu https://oakland.edu/biology/directory/oleksyk Taras Oleksyk <oleksyk@oakland.edu>

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# Online AnalysisDNAMethylation Sep18-20

#### Hi everyone

Instats is offering a new 3-day seminar on the Analysis of DNA Methylation by professor Aline Muyle, running September 18 - 20 < https://instats.org/seminar/analysis-of-dna-methylation2>. This three-day workshop provides comprehensive training in the analysis of DNA methylation, a key epigenetic modification influencing gene expression and controlling the spread of transposable elements in genomes. Participants will gain theoretical knowledge and practical skills in data preprocessing, statistical analysis, and visualization using RStudio and various bioinformatic software using Bash scripts. The workshop is suited for researchers across a broad range of fields, including Biostatistics, Biology, Genetics, Ecology, Evolution, Bioinformatics, Molecular Biology, and Medical Research.

#### https://instats.org/seminar/analysis-of-dna-

methylation2 Sign up today to reserve your spot and please feel free to tell your friends and colleagues. We hope to see you there!

Best wishes

Michael Zyphur Director Institute for Statistical and Data Science instats.org

Michael Zyphur <mzyphur@instats.org>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca) sity data acquisition, cleaning, and analysis using R. Whether you work with palaeontological or neontological datasets, this course will equip you with the skills to integrate these datasets seamlessly for biodiversity analysis across time and space. Course Highlights: Dates: September 5th, 6th, 9th, 10th, and 11th, 2024 Format: Online, live sessions via Zoom (15:00 to 18:00 CST + 4 hours practicals) Course website: (https://www.physalia-courses.org/courses-workshops/biogeography-in-r/) What You Will Learn: Construct automated workflows for biodiversity data in R Analyze and visualize diversity data while accounting for sampling biases Explore the diversification process and its metrics across space and time Apply GIS, chronostratigraphy, and palaeogeography tools in R Gain practical experience with R scripts and key packages tailored to your research needs Who Should Attend: This course is ideal for students, researchers, and professionals interested in biodiversity analysis, regardless of their career stage. A basic understanding of R is recommended, and all necessary R scripts and packages will be provided. Don't miss this opportunity to deepen your expertise in biodiversity analysis with hands-on practicals and insightful lectures. The registration deadline is fast approaching, so be sure to secure your spot soon!

For the full list of our courses and workshops, please visit: ( https://www.physalia-courses.org/courses-workshops )

Best regards, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physaliacourses.org>

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### Online BiodiversityDataAnalysis Sep5-11

#### Dear all,

We would like to remind you that there are only a few days left to register for our upcoming course, "Analysing Biodiversity Through Time and Space using R," taking place online from September 5th to 11th.

This intensive 5-day course offers a comprehensive guide to constructing reproducible workflows for biodiver-

# Online ConGen Aug26-Sep4

Genetic Data Analysis Course and Workshop: ???ConGen-2024??? Online

Theme: Applications of Next Gen Sequencing Data in Population Genomics, Molecular Ecology, and Conservation Genetics.

Instructors include Eric Anderson, Ellie Armstrong, Chris Funk, Matthew Desaix, Marty Kardos, Brenna Forester, Will Hemstrom, Gordon Luikart, Angel RiveraColon, Rena Schweizer, Stephen Spear, Helen Taylor, Robin Waples, and 3-4 more TBA (e.g., NanoPore, PacBio).

When: August 26 - Sept 4, 2024 (with Aug. 19th precourse lecture on using command line, R & the basics of bioinformatics for NGS data handling)

Where: Online via Zoom

For details on ConGen-2024: see https://www.umt.edu/ces/conferences/congen/default.php Course Objective: To provide training in conceptual and practical aspects of data analysis for understanding the population and evolutionary genomics of natural and managed populations. The course covers concepts and methods including the coalescent, Bayesian, and likelihood-based approaches. Emphasis is on next-generation sequence data analysis (RADs, whole genome sequence analyses, targeted capture) and interpretation of output from recent novel statistical approaches, pipelines, and software programs. The course includes discussions among early career researchers (student participants) and >12 leaders in population genomics (instructors) to help develop our next generation of molecular ecologists, conservation geneticists, and evolutionary geneticists. Course lecture topics include taking raw reads to genotypes (de novo and with reference), genome assembly, Ne, GWAS, RoH, landscape genomics, assignment tests with low-coverage-WGseq data, and more (see past course contents). New lectures in 2024 (with handson exercises) will include eDNA metabarcoding analysis, phylogenomics, and genome assembly. Past course lecture videos will be available (e.g., RNAseq, epigenetics, Genome-QC, landscape genetics, etc.).

Who should apply: Advanced Undergrads, M.S. & Ph.D. students, post-docs, faculty, agency researchers, and population biologists who have taken at least a one-semester university-level course in population genetics and a course in population ecology. Participation will be limited to ~30 people allowing efficient instruction with hands-on computer exercises during the course. Priority will be given to persons with their own NGS data to analyze.

Past courses: see - Andrews & Luikart 2014: http:/-/onlinelibrary.wiley.com/doi/10.1111/mec.12686/-

abstract - Benestan et al. 2016: http://onlinelibrary.wiley.com/doi/10.1111/mec.13647/full -Hendricks et al. 2018: https://onlinelibrary.wiley.com/doi/full/10.1111/eva.12659 - Rena Schweizer et al. 2021: https://doi.org/10.1093/jhered/esab019 - Schiebelhut, L. 2023. Guidance in conservation genomics. doi.org/10.1111/1755-0998.13893 - Hemstrom et al. 2024. Next-generation data filtering in the genomics era. Nature Reviews Genetics, accepted. ??? be on the

lookout for this relevant review!

ConGen participants-2024. A course/meeting group review, contents to be determined.

Registration & Cost: Early Bird (before June 15th): \$US 840 ??? which includes all lectures (real-time and recorded) by at least 15 expert instructors, online question and answer sessions during hands-on exercises with worksheets and dummy datasets, copies of lecture PowerPoint slides, along with ConGen-2022 Swag (T-shirt, mug). Course materials are also available after the end of the course to all students in a box repository including all recorded lectures and class materials. \$US 890 if payment is after June 15th.

Sponsors: American Genetic Association (AGA), Journal of Heredity, National Aeronautics and Space Administration (NASA), National Science Foundation (NSF-USA), Dovetail Genomics, PacBio, NanoPore.

"Howard, Leif" <leif.howard@flbs.umt.edu>

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### Online DimensionReductionMethods Aug12

Hi everyone

Instats is offering a new 1-day workshop on Dimension Reduction Methods for Complex Datasets by professor Nikolay Oskolkov from Lund University, running August 12.

### https://instats.org/seminar/dimension-reduction-

methods-for-life-sciences-2494 This seminar provides a comprehensive overview of dimension reduction techniques in R and Python for high-dimensional biological data, focusing on their practical applications. Participants will gain theoretical knowledge and practical experience in linear and nonlinear methods such as tSNE and UMAP – unlike PCA and factor analysis, these methods allow for nonlinear solutions. By the conclusion of the seminar, participants will understand the theoretical and practical foundations of these methods, with a wealth of examples that can be rapidly applied for their own research problems.

Sign up today to secure your spot in this exciting workshop and learn the intricacies of data reduction for complex datasets using some of the most popular techniques available today. Best wishes

Michael Zyphur Director Institute for Statistical and Data Science instats.org

Michael Zyphur <mzyphur@instats.org>

(to subscribe/unsubscribe the EvolDir send mail to gold-ing@mcmaster.ca)

### Online EvolutionaryCommunititesWithVegan Sep18-22

ONLINE COURSE - Multivariate Analysis Of Ecological Communities Using R With The VEGAN package (VGNR06)

We onlyhave 4 places left on our next edition on Multivariate Analysis Of Ecological Communities Using R With The VEGAN package.

https://www.prstats.org/course/multivariate-analysisof-ecological-communities-using-r-with-the-veganpackage-vgnr06/ 18-22 September 2024

Please feel free to share!

This 5-day course will cover R concepts, methods, and tools that can be used to analyze community ecology data. The course will review data processing techniques relevant to multivariate data sets. We will cover diversity indices, distance measures and distance-based multivariate methods, clustering, classification and ordination techniques using the R package VEGAN. We will use real-world empirical data sets to motivate analyses, such as describing patterns along gradients of environmental or anthropogenic disturbances, quantifying the effects of continuous and discrete predictors. We will emphasise visualisation and reproducible workflows as well as good programming practices. The modules will consist of introductory lectures, guided computer coding, and participant exercises. The course is intended for intermediate users of R who are interested in community ecology, particularly in the areas of terrestrial and wetland ecology, microbial ecology, and natural resource management. You are strongly encouraged to use your own data sets (they should be clean and already structured, see the document: "recommendation if you participate with your data".

Please email oliverhooker@prstatistics.com with any questions

Upcoming courses

ONLINE COURSE - Reproducible and collaborative data analysis with R (RACR03) This course will be delivered live ONLINE

COURSE - Multivariate Analysis Of Ecological Communities Using R With The VEGAN package (VGNR06) This course will be delivered live

ONLINE COURSE - Hidden Markov Models for movement, acceleration and other ecological data - an introduction using moveHMM and momentuHMM in R (HMMM01) This course will be delivered live

ONLINE COURSE - Time Series Analysis and Forecasting using R and Rstudio (TSAF01) This course will be delivered live

ONLINE COURSE - Remote sensing data analysis and coding in R for ecology (RSDA01) This course will be delivered live

ONLINE COURSE - Introduction to Metabarcoding and Metagenomics Analysis (IMAM01) This course will be delivered live

ONLINE COURSE - Bioacoustics Data Analysis using R and Studio (BIAC04) This course will be delivered live

ONLINE COURSE - Metabarcoding Pipelines for Eukariotic Communities (MPEC01) This course will be delivered live

ONLINE COURSE - Genome Assembly and Annotation (GAAA01) This course will be delivered live

IN PERSON COURSE - Hierarchical modelling in ecology (HMIE01) (Universit $i; \frac{1}{2}$  de Sherbrooke, Canada)

ONLINE COURSE - Introduction to Machine Learning using R and Rstudio (IMLR02) This course will be delivered live

ONLINE COURSE - Introduction to Single Cell Analysis (ISCA01) This course will be delivered live

ONLINE COURSE - Using Google Earth Engine in Ecological Studies (GEEE01) This course will be delivered live

ONLINE COURSE - Species Distribution Modelling With Bayesian Statistics Using R (SDMB06) This course will be delivered live

Best wishes,

Oliver

Oliver Hooker PhD. PR stats

Oliver Hooker <oliverhooker@prstatistics.com>

(to subscribe/unsubscribe the EvolDir send mail to

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

## Online GeneticDataAnalysis Aug26-Sep4

Genetic Data Analysis Course and Workshop: "ConGen-2024" Online

Theme: Applications of Next Gen Sequencing Data in Population Genomics, Molecular Ecology, and Conservation Genetics.

Instructors include Sally Aitken, Eric Anderson, Ellie Armstrong, Chris Funk, Matthew Desaix, Marty Kardos, Brenna Forester, Will Hemstrom, Gordon Luikart, Eryn McFarlane, Angel Rivera-Colon, Rena Schweizer, Stephen Spear, Robin Waples, and more TBA.

When: August 26 - Sept 4, 2024 (with Aug. 20th precourse lecture on using Linus command line, R & the basics of bioinformatics for NGS data handling)

Where: Online via Zoom

Course Objective: To provide training in conceptual and practical aspects of data analysis for understanding the population and evolutionary genomics of natural and managed populations. The course covers concepts and methods including the coalescent, Bayesian, and likelihood-based approaches. Emphasis is on nextgeneration sequence data analysis (RADs, whole genome sequence analyses, etc.) and the interpretation of output from important statistical approaches, pipelines, and software programs. The course includes discussions among early career researchers (student participants) and >12 leaders in population genomics (instructors) to help develop our next generation of molecular ecologists, conservation geneticists, and evolutionary geneticists. Course lecture topics include taking raw reads to genotypes (de novo and with reference), genome assembly, Ne, GWAS, RoH, landscape genomics, assignment tests with low-coverage-WGseq data, and more (see past course contents). New lectures in 2024 (with hands-on exercises) will include eDNA metabarcoding analysis, phylogenomics, and genome assembly. Past course lecture videos will be available (e.g., RNAseq, epigenetics, Genome-QC, landscape genetics, etc.).

For details on ConGen-2024: see https://www.umt.edu/ces/conferences/congen/default.php Who should apply: Advanced Undergrads, M.S. & Ph.D. students, postdocs, faculty, agency researchers, and population biologists who have taken at least a one-semester universitylevel course in population genetics and a course in population ecology. Participation will be limited to ~30 people allowing efficient instruction with hands-on computer exercises during the course. Priority will be given to persons with their own NGS data to analyze.

Past courses: see Andrews & Luikart 2014: http://onlinelibrary.wiley.com/doi/10.1111/mec.12686/abstract Benestan et al. 2016: http://onlinelibrary.wiley.com/doi/10.1111/mec.13647/full Hendricks et al. 2018: https://onlinelibrary.wiley.com/doi/full/10.1111/eva.12659 Rena Schweizer et al. 2021: https://doi.org/10.1093/jhered/esab019 Schiebelhut, L. 2023. Guidance in conservation genomics. doi.org/10.1111/1755-0998.13893

Hemstrom et al. 2024. Next-generation data filtering in the genomics era. Nature Reviews Genetics, accepted. be on the lookout for this relevant review!

ConGen participants-2024. A course/meeting group review, contents to be determined.

Registration & Costs include all lectures (live and recorded) by at least 12 expert instructors, online question and answer sessions during hands-on exercises with worksheets and dummy datasets, copies of lecture PowerPoint slides, along with ConGen-2022 Swag (T-shirt, mug). Course materials are also available after the end of the course to all students in a box repository including all recorded lectures and class materials. \$US 890 if payment is after June 15th.

Sponsors: American Genetic Association (AGA), Journal of Heredity, National Aeronautics and Space Administration (NASA), National Science Foundation (NSF-USA), PacBio, NanoPore.

Journal of Heredity

gordon.luikart@mso.umt.edu

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

# Online IntroToNextflow Oct7-9

Dear all,

registrations are open for the next edition of the online course "Introduction to Nextflow".

Online, 7-9 October 2024 Course website: ( https:/-

#### /www.physalia-courses.org/courses-workshops/course60/ )

Nextflow is a widely adopted workflow system for running high-throughput, data-intensive applications across cloud and on-premise infrastructure. It has fast become one of the primary technology platforms for computational workloads in life sciences. The framework allows scientists to write code in any scripting language, define software dependencies with containers, connect tasks with the event-driven dataflow programming DSL and then deploy anywhere: local machines, grid computing systems or public cloud infrastructure.

The workshop is intended for users to become quickly proficient in Nextflow technology, starting from basic through to advanced concepts. The majority of the practicals will make use of command-line tools. Therefore familiarity with a \*nix environment (e.g. Linux or MacOS) and the shell (e.g. Bash) are highly desirable. PROGRAM Monday- Classes from 2-8 pm CET Introduction to Nextflow Basic Scripting in Nextflow Channels Processes Tuesday- Classes from 2-8 pm CET Operators Executors RNA-Seq pipeline Configuration Pipeline Parameter Wednesday - Classes from 2-8 pm **CET** Workflows Modules Sharing Pipelines RNA-Seq pipeline 2 A repository will be provided with all the necessary material and software as well as an AWS cloud environment to carry out the activities in the relevant practical sessions.

For the full list of our courses and workshops, please visit: ( https://www.physalia-courses.org/courses-workshops/-course60/ )

Best regards, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physaliacourses.org>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

# Online LongitudinalDataInR Nov25-28

Dear all, We are thrilled to inform you that registrations are now open for our upcoming online course, Introduction to the Analysis of Longitudinal Data in Biology Using R, taking place from November 25th to 28th. This course is a unique opportunity to master the complexities of analysing longitudinal data data that are repeated over time or space in the context of biological research.

Why This Course? Longitudinal data present unique challenges and opportunities. Whether you're dealing with time-series data, survival analysis, or geneexpression experiments, this course will equip you with the tools and knowledge to tackle these challenges effectively. You'll learn to recognise and manage spatial and temporal dependencies, apply forecasting techniques, and explore applications to specific scientific domains where longitudinal data are common: forecasting, epidemiology, gene expression.

Course website: https://www.physalia-courses.org/courses-workshops/longitudinal-data-in-r/ Course Format:

Daily Modules: Each day includes a blend of interactive lectures, class discussions, and hands-on practical sessions.

Collaborative Exercises: Work alongside peers and instructors to apply what you've learned in real-time.

Interactive Discussions: Interpret and discuss results with the class and instructors after each exercise.

Final Quiz: Recap and reinforce key concepts with a collaborative quiz at the end of the course.

Who Should Attend? This course is ideal for students, researchers, and professionals in biology who want to deepen their understanding of longitudinal data analysis. Whether you're an absolute beginner or an advanced user, this course is designed to meet you at your level. A background in biology and experience with predictive experiments will be beneficial, though not required. Basic knowledge of R programming is advantageous but not essential we'll guide you through it!

### What You Will Learn:

how to recognise and treat spatial and temporal dependencies in the data the most common methods to analyse data with repeated records methods and principles of data forecasting specific applications to life-science domains like epidemiology and gene expression experiments how to design, analyse and interpret scientific experiments with a time component

For the full list of our courses and workshops, please visit: ( https://www.physalia-courses.org/courses-workshops/-1 )

Best regards,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physaliacourses.org>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

### Online MachineLearningComputationalBiology Sept16

#### Hi everyone

Instats is pleased to be offering a new seminar on Machine Learning for Computational Biology < https://instats.org/seminar/machine-learningfor-computational-biolo2 > on September 16. This one-day workshop, led by Nikolay Oskolkov from Lund University, provides a comprehensive introduction to machine learning techniques in computational biology, focusing on both theoretical knowledge and practical coding skills in R and Python. Participants will learn to implement from scratch and optimize algorithms such as neural networks, random forest, k-means clustering, and Markov Chain Monte Carlo (MCMC), making it an essential resource for advancing research in biostatistics, genetics, and data science.

Sign up today < https://instats.org/seminar/machinelearning-for-computational-biolo2 > to reserve your spot in this workshop and don't forget about our upcoming 3-day workshop on the Analysis of DNA Methylation < https://instats.org/seminar/analysis-of-dnamethylation2 > running September 18 - 20 with senior researcher Aline Muyle. We look forward to seeing you there!

Best wishes

Michael Zyphur Director Institute for Statistical and Data Science \*instats.org\* < http://instats.org >

Michael Zyphur <mzyphur@instats.org>

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### Online NetworkAnalysisR Oct17-18

Hi everyoneInstats is offering a new 2-day seminar From Basic to Advanced Network Analysis in R, running October 17 - 18 by professor Antonio Zinilli. This seminar offers a comprehensive understanding of network analysis and its application in R. Tailored for PhD students, professors, and professional researchers, the workshop provides a strong theoretical foundation and hands-on experience in analyzing and  $\frac{1}{2}$  visualizing complex networks in socio-economic and health contexts, equipping participants with practical skills needed to apply network analysis in their own research. Professor Zinilli has extensive experience and expertise in network analysis, and will lead participants through the underlying theory of networks coupled with a large variety of hands-on applications, demonstrating the value of network analysis for academic research across multiple fields. The workshop comes with 30 days of access to the recordings and 30 days of Q&A Forum access with professor Zinilli.Sign up today to secure your spot, and please feel free to tell your friends and colleagues about this unique opportunity.Best wishesMichael ZyphurDirectorInstitute for Statistical and Data Scienceinstats.org

mzyphur@instats.org

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

## **Online Phylogenomics Dec2-6**

Dear all, we are excited to announce our upcoming online Phylogenomics course, taking place from December 2-6.

In this course we will present theory and exercises to infer time-calibrated phylogenies from multi-locus genome data sets while accounting for confounding factors such as the identification of orthologuous sequences that are suitable as phylogenetic markers, the selection of appropriate models of sequence evolution, and the detection of gene-tree discordance due to incomplete lineage sorting and introgression.

Course Highlights: Course website: (https://-

#### www.physalia-courses.org/courses-workshops/-

phylogenomics/ ) Format: Online (12:00-18:00 Berlin time) Topics Covered: Phylogenetic inference methods (Maximum Likelihood, Bayesian inference) Multispecies Coalescent Model and gene flow analysis Divergence-time estimation techniques Who Should Attend: This course is perfect for researchers, PhD students, postdocs and researchers who plan to infer phylogenetic relationships and divergence times from multilocus data, with little or no prior experience. Basic knowledge of UNIX and command-line tools is required.

Why Attend? By the end of this course, you'll have the skills to accurately infer time-calibrated phylogenies from genome-scale data, addressing key challenges like gene-tree discordance and model selection.

For the full list of our courses and workshops, please visit: (https://www.physalia-courses.org/coursesworkshops/phylogenomics/)

Best regards, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physaliacourses.org>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

# Online PopulationGenomics Nov25-29

Dear all,

We are excited to inform you that registrations are now open for our upcoming online course, Introduction to Population Genomics, taking place from November 25-29. Designed to foster international participation, this 5-day course offers a unique opportunity to learn cuttingedge techniques and concepts in population genomics

Course website: ( https://www.physalia-courses.org/courses-workshops/population-genomics/ )

Through a combination of lectures and hands-on workshops, you'll gain both theoretical knowledge and practical skills in topics such as: Basic Bioinformatics: Learn to handle large sequencing data. Population Structure & Introgression: Explore methods for detecting genetic clusters and introgression. Demographic Modeling: Reconstruct past population changes using advanced modeling techniques. Genome Scanning: Conduct Genome-Wide Association Studies (GWAS) and detect selective sweeps. Landscape Genomics: Understand gene flow in relation to geographical and environmental barriers. You'll actively engage with practical exercises and have the opportunity to discuss any challenges with our expert instructors. The course is structured to provide you with a global overview of population genomics methods and their real-world applications.

For the full list of our courses and workshops, please visit: ( https://www.physalia-courses.org/courses-workshops/-population-genomics/ )

Best regards, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physaliacourses.org>

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### Online RNAseqNonModelOrganisms Nov18-22

Dear all,

We are excited to announce our upcoming online workshop, RNA-Seq Analyses in Non-Model Organisms, scheduled for 18th-22nd November 2024.

Course website: ( https://www.physalia-courses.org/courses-workshops/course11/ )

This workshop covers modern applications of RNA-Seq technology, including de novo transcriptome assembly using tools like Trinity. Participants will learn to: Assess the quality of Illumina RNA-Seq data Assemble and quantify transcriptomes Perform differential expression analysis with Bioconductor Annotate transcripts using Trinotate Utilise PacBio IsoSeq for hybrid assemblies

We invite you to bring a subset of your own data for analysis.

For the full list of our courses and workshops, please visit: ( https://www.physalia-courses.org/courses-workshops/

Don't miss this opportunity to enhance your RNA-Seq skills!

Best regards,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physaliacourses.org>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

### **Online RNASeqPipelines Oct15-23**

Dear colleagues,

Registration is open for the online edition of the course "Introduction to RNA-seq bioinformatic pipelines".

Dates and schedule: Online live sessions on 15th,16th, 18th, 21st, and 23rd of October, 2024; from 13:00 to 17:00 (Madrid time zone).

More information and registrations: https://www.transmittingscience.com/courses/genetics-andgenomics/introduction-to-rna-seq-bioinformaticpipelines/ Course Overview:

This is an introductory course aiming to guide students through the execution of the most common pipelines used to analyze different types of data generated through RNA sequencing with NGS technologies.

The course focuses on using Linux-based software and tools and is oriented toward graduates or postgraduates with a Biomedical or Life Sciences degree. No previous experience working with Linux-based operating systems is required.

Programme:

\* Brief introduction to Linux \* Quality control and preprocessing of fastq files \* SAM format and samtools \* RNA-seq \* Small RNA sequencing \* LncRNA discovery

Best regards,

Sole

Check other upcoming Transmitting Science courses: https://www.transmittingscience.com/courses/

Soledad De Esteban-Trivigno, PhD Director Transmitting Science www.transmittingscience.com Twitter @SoleDeEsteban Orcid: https://orcid.org/0000-0002-2049-0890 Under the provisions of current regulations on the protection of personal data, Regulation (EU) 2016/679 of 27 April 2016 (GDPR), we inform you that personal data and email address, collected from the data subject will be used by TRANSMITTING SCIENCE SL to manage communications through email and properly manage the professional relationship with you. The data are obtained based on a contractual relationship or the legitimate interest of the Responsible, likewise the data will be kept as long as there is a mutual interest for it. The data will not be communicated to third parties, except for legal obligations. We inform you that you can request detailed information on the processing as well as exercise your rights of access, rectification, portability and deletion of your data and those of limitation and opposition to its treatment by contacting Calle Gardenia, 2 Urb. Can Claramunt de Piera CP: 08784 (Barcelona) or sending an email to info@transmittingscience.com or http://transmittingscience.com/additional-terms. If you consider that the processing does not comply with current legislation, you can complain with the supervisory authority at www. aepd.es .

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Soledad De Esteban-Trivigno <soledad.esteban@transmittingscience.com>

(to subscribe/unsubscribe the EvolDir send mail to gold-ing@mcmaster.ca)

### Online ShotgunMetagenomics Dec10-13

Dear all,

We are excited to announce our upcoming online course, "Shotgun Metagenomics Processing and Analysis," taking place from December 10-13. This course is designed to provide a comprehensive overview of advanced methodologies for studying microbial communities using shotgun metagenomics data.

Course website: ( https://www.physalia-courses.org/courses-workshops/course33/ )

Course Overview: Participants will engage in both lectures and hands-on lab sessions to tackle key challenges in metagenomics, including: Data preprocessing Taxonomic profiling Strain-level characterization Microbial genome reconstruction Functional potential characterization Integrative statistical data analysis By the end of the course, attendees will gain familiarity with cuttingedge bioinformatics tools and visualization techniques essential for metagenomics research.

Target Audience: This course is ideal for researchers and students looking to enhance their skills in analysing high-throughput microbiome data. A basic knowledge of the command line is recommended; we suggest completing an online tutorial if you're new to this.

Learning Outcomes: Understanding the goals and approaches in studying microbial communities Proficiency in taxonomic, gene-related, and strain-level characterization using reproducible workflows Expertise in statistical analyses and visualization tools for microbiome studies

For the full list of our courses and workshops, please visit: ( https://www.physalia-courses.org/courses-workshops/-course33/ )

Best regards,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physaliacourses.org>

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

### **Online StructuralVariants Dec2-4**

#### Dear all,

We are pleased to announce an upcoming online course titled "Structural Variant Detection and Comparison", scheduled for 2-4 December. This course will introduce biologists and bioinformaticians into the field of Structural Variant (SV) detection and comparison. Course website: (https://www.physalia-courses.org/courses-workshops/svs/)

This course will cover a broad spectrum of software and analysis workflows, from short to long-read approaches, using assembly or mapping-based methods to identify these variants. Participants will gain insights into filtering and assessing SVs, generating trio/population-level VCF files, and evaluating their functional impact. The course will also offer guidance on how to prioritize, rank, and QC these variants further.

The course is structured in modules over three days, with each day featuring an introductory lecture followed by practical, hands-on sessions. These sessions will include mirroring exercises with the instructor and individual exercises to reinforce learning. Group discussions will follow each exercise to interpret results.

This course is ideal for researchers interested in genomic comparisons and understanding the implications of genomic similarities and variations. Both beginners and advanced users will benefit, starting with general concepts of comparative genomics and progressing through all major analysis steps. Participants should have a background in biology, basic familiarity with genomic data, and some experience with Linux command line tools.

By the end of the course, participants will be able to:

- Identify Structural Variants using mapping or assembly approach - Identify Structural Variants from long and short read data. - Compare and filtering Structural Variants. - Annotate of Structural Variants (gene overlap, Population frequency) - Generate a trio / population VCF file for Structural Variants - Identify mosaic / somatic Structural Variants

For the full list of our courses and workshops, please visit: (https://www.physalia-courses.org/courses-workshops)

Best regards,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physaliacourses.org>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

## Online UsingChatGPTandCopilot-ForDataAnalysisR Aug29-30

#### Hi everyone

Instats is offering a 2-day workshop on Using ChatGPT and Copilot for Data Analysis in R < https://instats.org/seminar/using-chatgpt-andcopilot-for-data-analy2 >, running August 29 - 30, by professor Peter Gruber (who holds dual PhDs in physics and economics). This workshop provides a 21st-century introduction to Statistical Analysis with R, focusing on the efficient use of AI assistants including ChatGPT and Github Copilot to automate R coding with plain language requests. Because R is free, this revolution will help democratize access to basic and advanced analysis tools without having to suffer the learning curve of coding in R, including for qualitative and mixed methods research. Participants will learn step by step how to install AI tools and how to harness their power for efficient data analysis in R, making them many times more efficient. They will be able to create R code in the blink of an eye and with unprecedented ease of use.

Professor Gruber also have two separate 2-day workshopson how to use ChatGPT's newly updated Advanced Data Analysis tool to natively analyze data using ChatGPT. These workshops are timed for the EU and US time zones, with the first one Using ChatGPT for Advanced Data Analysis 3.0 (EU) < https://instats.org/seminar/using-chatgpt-foradvanced-data-analysis10-1 > on September 16 - 17, and the second Using ChatGPT for Advanced Data Analysis 3.0 (US) < https://instats.org/seminar/usingchatgpt-for-advanced-data-analysis10-2 > on October 19 and 22.

Don't miss out on this unique opportunity to learn how to easily and rapidly analyze your data in R < https://instats.org/seminar/using-chatgpt-andcopilot-for-data-analy2 > and/or ChatGPT, and pleasefeel free to tell your friends and colleagues!

Best wishes

Michael Zyphur Director Institute for Statistical and Data Science \*instats.org\* < http://instats.org >

Michael Zyphur <mzyphur@instats.org>

(to subscribe/unsubscribe the EvolDir send mail to golding@mcmaster.ca)

# 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 LATEX files, Excel files, etc. ... plain old

ASCII will work great and can be read by everyone. Add a subject header that contains the correct category "Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:" and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formated) the message will be send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

# Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformating is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by IATEX do not try to embed IATEX or TEX in your message (or other formats) since my program will strip these from the message.