
E v o l D i r

December 1, 2024

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

Foreword

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

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

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Bonn AvianCellsChromosomesCollections Dec09-10

Dear colleagues,

I am thrilled to announce the Avian Cells/Chromosomes/Collections Symposium 2024 (ACCCS 2024) in the lecture hall of Museum Koenig Bonn from December 09 morning until December 10 noon 2024. Registration is free of charge and will include coffee/tea/snacks during breaks. Lunch and dinner options will be arranged at student-friendly prices and with the aim to maximize opportunities for networking among all participants.

The aim of the ACCCS 2024 is to connect researchers working on avian model systems with researchers working on non-model bird species to discuss important obstacles that need to be overcome when studying avian development, avian chromosome evolution, as well as when developing museum collections towards cryopreservation of avian cells. A special focus of this meeting will be on cell culture and germline editing of birds through cutting-edge research presented by the invited speakers. Researchers studying germline-restricted chromosomes, microchromosomes or sex chromosomes of birds are especially encouraged to submit an abstract because their fields will strongly benefit from the incorporation of cell culture and gene editing.

Invited speakers: - Mike McGrew (The Roslin Institute, Edinburgh, UK) - Marie Manceau (Collège de France, Paris, France) - Manfred Gahr (MPI for Bi-

ological Intelligence, Seewiesen, Germany) - Andrea Münsterberg (University of East Anglia, Norwich, UK) - Jérôme Fuchs & Bertrand Bed'Hom (Muséum national d'Histoire, Paris, France) - Jonas Astrin & Camilla Di Nizo (Biobank, LIB, Germany)

Every submitted abstract on the topics of avian development, avian cell biology, avian collections/biobanking, and avian evolutionary genomics will receive a contributed presentation. Depending on the number of submitted abstracts, each contributed presentation will either be a regular talk (12+3 minutes) or a lightning talk + poster.

You can find practical information and the link for registration + abstract submission here: <https://-genomicocosm.wordpress.com/acccs-2024/> Abstract submission deadline is November 24 at 23:59 CET.

Best wishes, Alex

— Prof. Dr. Alexander Suh Centre Head Centre for Molecular Biodiversity Research Museum Koenig Bonn Leibniz Institute for the Analysis of Biodiversity Change Adenauerallee 127, 53113 Bonn, Germany phone: +49 228 9122 - 289 email: a.suh@leibniz-lib.de scheduling: zmb.assistant@leibniz-lib.de

Professor Bonn Institute for Organismal Biology (BIOB) - Animal Biodiversity University of Bonn An der Immenburg 1, D-53121 Bonn, Germany

Group Leader Department of Organismal Biology - Systematic Biology Evolutionary Biology Centre (EBC), Uppsala University Norbyvägen 18D, 75236 Uppsala, Sweden

– Stiftung Leibniz-Institut zur Analyse des Biodiversitätswandels Postanschrift: Adenauerallee 127, 53113 Bonn, Germany

Stiftung des öffentlichen Rechts; Generaldirektion: Prof. Dr. Bernhard Misof (Generaldirektor), Adrian Grüter (Kaufm. Geschäftsführer) Sitz der Stiftung: Adenauerallee 160 in Bonn Vorsitzender des Stiftungsrates: Dr. Michael Wappelhorst

Alexander Sang-Jae Suh <A.Suh@leibniz-lib.de>

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Mexico AncientPathogens Apr12-13

Registration is now open for the first Ancient Pathogens Genomics International Symposium !

Ancient Pathogens Genomics International Symposium liigh.unam.mx

The Ancient Pathogens Genomics Symposium will take place at UNAM Juriquilla, México between the 12 the 13 of April 2025. The event aims to bring together early-career and established researchers in ancient pathogen genomics, promote the exchange of ideas and strengthen the network of professionals in this field across countries. Original work can be presented as contributed talks or posters. Registration will close on March 31st 2025 or when 120 participants are confirmed.

For question please email apg2025.contact@gmail.com As a joint event of this symposium, a two-day workshop on Paleoproteomics will be held on April 10 and 11, 2025. You can indicate your interest during registration for the symposium. Looking forward to seeing you in Juriquilla !

The organizing committee Mariela C. Avila Arcos LIIGH-UNAM Daniel Blanco Melo FHCC Miriam Bravo López LIIGH-UNAM Miguel Alejandro Navarro LIIGH-UNAM Anahí Sánchez LIIGH-UNAM

mavila@liigh.unam.mx

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NewZealand InvasionGenomics Feb17

Kia ora & Hello!

We are thrilled to announce that we will be hosting the second instalment of the highly successful Invasion Genomics meeting -INVASOMICS 2.0, in Whanganui-a-Tara Wellington, New Zealand on the 17th February 2025.

We will have two International Keynotes, and have limited spaces available. For further details visit us at <https://www.invasomics.com/invasomics2> Registration: INVASOMICS2.0, Deadline: 15 January 2025

Abstract submission: Abstracts, Deadline: 10 December 2024 **note the short time frame for abstract submission**.

We have kept registration fees low, thanks to our generous support from the Royal Society Teapurangi Catalyst Fund & the Society for Molecular Biology & Evolution.

** Travel Support is available for ECRS **

Please help us to advertise the conference by forwarding this invite through your networks!

Ngā mihi maioha, Many thanks, Manpreet & Ang

Invasomics Hub invasomics@gmail.com

Please consider the environment before printing this email The views expressed in this email may not be those of Landcare Research New Zealand Limited. <http://www.landcareresearch.co.nz> Manpreet Dhami <DhamiM@landcareresearch.co.nz>

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Online ESEB STN Speciation Nov12

Dear colleagues,

The next instalment of the online seminar series organised by the ESEB-funded STN network « Integration of Speciation research » ([

network.pages.ist.ac.at/) will be held on 12 November 2024 at ** 5pm CET **

The upcoming session addresses the topic of “Learning and imprinting in speciation”. We welcome speakers Maria Servedio (University of North Carolina, USA) and Gabriel Jamie (University of Cape Town, South Africa).

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

To attend the session live, please use the following link: <https://gu-se.zoom.us/j/61468909155> Talks (but not the discussion session) are recorded and made available here: https://www.youtube.com/channel/UCIEkDdE_5sDw70SQq78DIAA . The IOS network aims to promote scientific integration and also integration of the community. A main objective is to foster diversity and inclusion across the field. The seminar series and subsequent discussion is open to everyone, from students to established researchers and non-scientists alike. To maximise the geographic diversity of attendees we alternate time slots every month. Please share this email with anyone who may be interested, especially those in countries that are typically underrepresented in scientific discourse.

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

We look forward to seeing you there!

The STN IOS organising committee:

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

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

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PacificGrove California AmerSocNaturalists Jan3-7

The American Society of Naturalists is hosting our stand-alone conference at the beautiful and intimate Asilomar conference center in Pacific Grove, California from 3-7 January, 2025! There is still time to get your abstract in for a presentation (Due Dec 1). This meeting is a unique opportunity to discuss your science in a smaller setting with lots of opportunities to meet scientists across the range of career stages. There will also be presentations from NSF and Am Nat editors. More information can be found here: <https://asnasilomar2025.org> Stephen Proulx Professor Ecology, Evolution, and Marine Biology UC Santa Barbara sproul@ucsb.edu

Stephen Proulx <stephen.proulx@gmail.com>

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Pomona California PlantHerbivoreCoevolution

The next Plant-Herbivore Interaction (PHI) Gordon Research Conference will take place Feb. 9-14, 2025 at the Sheraton Fairplex Hotel and Conference Center in Pomona, California (near the San Gabriel Mountains in the LA metro area). The theme this year is Unraveling the Threads of Plant-Herbivore Coevolution.

The deadline for the PHI GRC application and registration is January 12, 2025: <https://www.grc.org/plant-herbivore-interaction-conference/2025/> . The Gordon Research Symposium for trainees will take place the day before the event on Feb. 8, 2025 (note that the deadline for that is Dec. 2, 2024): <https://www.grc.org/-plant-herbivore-interaction-grs-conference/2025/> Noah Whiteman whiteman@berkeley.edu

Noah Whiteman, Ph.D.

Email: whiteman@berkeley.edu

Laboratory webpage: www.whitemanlab.org Author webpage: www.mostdeliciouspoison.com Professor, Molecular and Cell Biology (GGED Division) Pro-

fessor, Integrative Biology

Director, Essig Museum of Entomology Co-Director, Genetic Dissection of Cells and Organisms T32 Training Program Special Advisor to the Provost on Climate and Mentoring (Faculty Link)

University of California, Berkeley

Order my new book: MOST DELICIOUS POISON

Noah K Whiteman whiteman@berkeley.edu

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San Diego
PAGPopConservationGenomics
Jan10-15

Call for Abstracts - Deadline Extended Population and Conservation Genomics Workshop Plant and Animal Genome 32 (PAG 32) International Conference <https://www.intlpag.org/2025/> January 10-15, 2025 Town and Country Convention Centre, San Diego, California

The annual Population and Conservation Genomics workshop will be held at the Plant and Animal Genome 32 (PAG 32) International conference. You are invited to attend this Workshop and submit abstracts for oral presentations on any population and conservation genomics aspect of both plants and animals. The topics may include (but not limited to): population genomic diversity and structure; molecular evolution; pangenomes; phylogeography; landscape genomics; seascape genomics; natural selection and local adaptation; ecological and evolutionary genomics; population epigenomics; paleogenomics; eDNA; bioinformatics in population and conservation genomics; population genomics of speciation; metapopulation genomics; application of genomics in breeding, forensics, biogeography, demography inferences, and conservation and management of genetic resources; genomic effects of domestication, management practices, fragmentation, bottlenecks, climate and environment change, and transgenic deployment; and gene conservation; etc.

The Workshop will have 2 sessions (11 and 13 January) with a provision for 12 invited speakers. Most of the invited presentations will be selected from the submitted abstracts. There are still a few spots available. The deadline to submit abstracts extended to November 12. Please send your abstract of no more than 250 words

by e-mail to Om Rajora (Om.Rajora@unb.ca) as an attached Word file. Please make sure to include complete affiliations of all authors and email address of the corresponding author. You will be notified by November 15, 2024 whether your abstract has been selected for an oral presentation. Thereafter, the selected presenters will need to submit their abstract to the PAG website.

Inquiries and Abstract Submission

For information and questions regarding the Population and Conservation Genomics workshop, please contact Om Rajora at the following coordinates.

Dr. Om P. Rajora University of New Brunswick Fredericton, NB E3B 5A3, Canada. E-mail: Om.Rajora@unb.ca Tel: (506) 458-7477

Om Rajora <om.rajora@unb.ca>

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Sheffield UK
PopulationGeneticsGroup Jan7-9

We will be hosting the 58th UK Population Genetics Group Conference (PopGroup) on the 7th-9th of January 2025 in Sheffield. PopGroup is an annual meeting of population and evolutionary geneticists held in the UK since 1968. The meeting showcases population and evolutionary genetics from across the world, and has a reputation for being a collegiate, welcoming and inspiring event.

Registration is now open: <https://mlindner0.github.io/-PopulationGenetics58Website/registration/> Nicola Nadeau <n.nadeau@sheffield.ac.uk>

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Tromso Norway SedaDNA Jun23-26
Newsletter

2nd SedaDNA Society meeting

Save the date for the 2nd SedaDNA Society Conference, held from June 24th-25th, 2025, in Tromsø $\frac{1}{2}$, Norway.

Pre-conference Workshops: June 23rd Post-conference
Excursions: June 26th

Stay tuned! Early bird registration opens in early December 2024. For the latest updates register here for our newsletter <https://forms.office.com/e/a1jH6wzNF3>
Nichola Ann Strandberg <nichola.strandberg@uit.no>
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ing@mcmaster.ca)

vividly encourage you to submit your best abstract on selfish genetic elements and genetic conflict!

Looking forward to meeting you, Afra Salazar & Luca Soldini

Luca Soldini <luca.soldini@unil.ch>

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ing@mcmaster.ca)

Tuscany EcolEvolutionaryGenomics Jul13-18

This year's Gordon Research Conference on Ecological and Evolutionary Genomics will be held in Tuscany, Italy, from July 13-18th, 2025. Registration is now open:

<https://www.grc.org/ecological-and-evolutionary-genomics-conference/2025/> Samuel Yeaman
<samuel.yeaman@ucalgary.ca>

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ing@mcmaster.ca)

ULausanne SelfishGenes Feb12

Dear all,

We are organising a one-day conference on Selfish genetic elements and within-organism conflicts :seven invited speakers will present their latest discovery, with expertise ranging from prokaryotes to eukaryotes and extending to philosophy of sciences and theoretical biology. These presentations will be followed by discussions, as well as ample occasions for networking (coffee breaks, social lunch, and aperitif).

The one-day conference will be held at the University of Lausanne(Switzerland), the 12th of February 2025. It is organised as a satellite event of the main annual Swiss conference on evolution and ecology, namely Biology25.Following this link, you can register to our one-day conference, to the main conference, or both.

The main conference,Biology25, will be held the two days following our one-day symposium (13-14th February), and it accepts abstract for talks and posters. We

UMuenster Germany Evolution Mar17-20

Muenster Evolution Meeting 2025

Dates: 17-20 of March 2025

The abstract submission has been extended since the DZG Evolutionary Biology Section has joined the organization team recently.

New abstract submission deadline: 29 November 2024

Abstract submission link: <https://indico.uni-muenster.de/event/2834/> MEM aims at bringing together Evolutionary Biologists working across different fields in German-speaking countries in a smaller setting, to allow for intensive networking and discussion.

For the third iteration of MEM, we will have a special Graduate Excellence Symposium. This symposium provides a forum for current PhD students to present their research. A committee will select up to 8 graduate students from different subfields of evolutionary biology. We also have a novelty for our poster presenters. You will have the opportunity to present your poster in a flash talk before the poster session

Regarding the conference fee, the final budget is not clear yet, but we are planning with the following registration fees (subject to change!) 150 euro for PhD or MSc students 200 euro for postdocs, PIs, etc.

The list of invited speakers and further information can be found on the MEM website: <https://www.uni-muenster.de/Evolution/MEM/main.shtml> Please spread the word and feel free to forward it to your colleagues!

We are looking forward to seeing you next spring in Münster, Dhevi Kalyanaraman, Jürgen Gadau, Katja Nowick, Bahar Patlar, Taina Conrad and Pete Czuppon (MEM organizers)

“Czuppon, Peter” <p.czuppon@uni-muenster.de>

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Ventura California Speciation Mar2-7

Researchers interested in speciation are encouraged to attend the Speciation Gordon Research Conference (Ventura California March 2-7, 2025). This is the premier speciation-focused conference, which happens approximately every two years. The previous Speciation GRC's led to the recent publication of an edited volume, Speciation < <https://www.cshlpress.com/default.tpl?action=full&-eqskudatarq=1412> >, by Cold Springs Harbor Press.

Please consider attending, or bring this to the attention of colleagues studying speciation or adjacent topics. The meeting welcomes graduate students, postdocs, researchers, and faculty. You can register here: <https://www.grc.org/speciation-conference/2025/> The scientific program for the meeting is now posted on that website. If you wish to attend, there are opportunities to present a poster, and there are a limited number of open talk slots to be selected from the set of poster abstracts.

To support student and postdoc attendees, the GRC can offer a limited number of need-based partial fee waivers. After registering, if you require assistance with financial support please email the GRC Chair (Daniel Bolnick, daniel.bolnick@uconn.edu) to be considered for one of the waivers. We can offer \$500 for international student/postdoc attendees, and \$300 for North American attendees. We can offer up to 19 waivers, to be distributed by lottery from those who send a request. You must have applied for the conference before November 24 to be considered for a waiver.

Registration for, and information about, the student- and postdoc-only Speciation Gordon Research Seminar (March 1-2 2025) can be found here: <https://www.grc.org/speciation-grs-conference/2025/> We hope to see many of you there!

Dr. Daniel I. Bolnick Professor, Ecology and Evolutionary Biology & Institute for Systems Genomics

daniel.bolnick@uconn.edu

MAIL TO: Department of Ecology and Evolutionary Biology Affiliate Professor, Molecular & Cellular Biol-

ogy; Institute for Systems Genomics 75 N. Eagleville Road, Unit 3043 University of Connecticut Storrs, CT 06269-3043, USA

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Office:PBB 305C Lab: PBB 317&319; ATW 232, 234, 236 Lab website: <https://bolnicklab.wordpress.com>
“Bolnick, Daniel” <daniel.bolnick@uconn.edu>

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Wellcome UK HumanEvolution Apr28-30

Human Evolution - From Fossils to Ancient and Modern Genomes Hybrid conference

Dates and location: 28-30 April 2025, Wellcome Genome Campus, UK (near Cambridge)

Our 4th conference on human evolution will highlight emerging archaeological discoveries and advances in genetic tools that are transforming the field. This event is aimed at population and evolutionary geneticists, archaeologists, palaeontologists, primatologists and medical geneticists with an interest in human evolution.

This year's meeting will feature sessions on the deepest roots of human history, highlighting methodological advances in studying human evolution and showcasing the latest tools and techniques in genomic analysis and ancient DNA.

The programme will focus on the population structure of ancient humans and will explore how early human populations migrated, adapted to diverse environments, and interacted with other hominin species. We will also delve into past human diseases, discussing the host-pathogen co-evolution and their impact on genetic diversity.

The attendees will participate in a dynamic programme that includes invited talks, short oral presentations, poster pitch talks and posters selected from abstracts. This setting will foster high-level discussions and networking opportunities, encouraging new collaborations across disciplines.

Scientific Programme Committee: Alice Leplongeon (University of Connecticut, USA), Marta Mirazón Lahr (University of Cambridge, UK), Lluís Quintana-Murci (Institut Pasteur & Collège de France, France) and Ca-

rina Schlebusch (Uppsala University, Sweden)

Keynote speakers: María Martín-Torres (CENIEH, Spain) and Mark Stoneking (LBBE, France)

Registration bursaries are available for students and other early-career researchers. Bursary deadline: 4 February 2025 Abstract deadline: 18 February 2025 In-person registration deadline: 31 March 2025

For more details on programme, registration and further information: <https://coursesandconferences.wellcomeconnectingscience.org/event/human-evolution-from-fossils-to-ancient-and-modern-genomes-20250428/> Contact email: confer-

ences@wellcomeconnectingscience.org

Nagehan Bahadır, PhD Programme developer - scientific meetings (She/her)

Learning and Training

Wellcome Connecting Science | Wellcome Genome Campus | Hinxton | Cambridgeshire | CB10 1RQ | UK

Nagehan Ramazanoglu Bahadır
<nagehan.bahadir@wellcomeconnectingscience.org>

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GradStudentPositions

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CharlesU EvolSexDetermination	10	UEdinburgh PrimateGenomics	27
CzechAcadSci PlantHerbivoreDiversity	10	UExeter UK AnimalCellTypeEvolution	28
Czechia AlgaeMolecularEvolution	11	UExeter WildlifeDisease EcoEvo	28
GlasgowU EvoDevoThermalAdaptations	12	UGeorgia EvolutionaryBiology	29
Hamburg Germany PopulationGenomics	13	UGlasgow MitePopulationGenetics	30
HeidelbergU MammalianGeneRegulation	13	UGroningen GenomicsPolygenicAdaptation	30
KarlstadU Two FruitFlyEvolution	14	UHawaii WastewaterMicrobialEvolution	31
MasseyU NewZealand AlpineInsectEvolution	14	UKentucky EvolutionaryEntomology	32
MedUVienna TransposonEvolution	15	ULausanne EvolutionBeeGutMicrobiome	32
NorthernMichiganU SquirrelClimateAdaptation	15	ULEicester eDNA monitoring	33
OklahomaStateU EnvironmentalDNA	16	UMadrid MicrobialEvolution	33
QueenMaryLondon HostMicrobeVirusEvol	16	UNebraska Lincoln AvianGenomics	34
TuftsU Speciation	17	UOxford BdelloidEvoAntimicrobials	34
UALaska Fairbanks ArcticGraylingEvolution	18	UppsalaU EvolutionaryGenomics	35
UBern RodentPopGenomics	19	UQuebecOutaouais InvertebrateDerivedDNA	35
UBonn Germany EvoDevoPopGenetics	20	USheffield Two Speciation Colour	36
UBristol Two EvolutionSocialBees	21	UTexasArlington EvolBiology	37
UCalifornia Berkeley PlantClimateAdaptation	21	UZurich EvolutionFreshwaterFish	38
UCentralFlorida EvolutionParasiticWasps	22	WashingtonStateU PlantMicrobeSymbiosis	39
UCollegeDublin Two EvolAnimalImmuneSystems	22	WesternConnecticutStateU MarineCoevolution	40
UConnecticut PopGenofGeneticInteractions	23	WesternWashingtonU EvolutionaryBiology	40
UDayton AmphibianEvoDevo	24		
UEastAnglia UK Two InsectFertility	24		

Academia Sinica Taiwan Ecology Evolution

PhD positions in Ecology and Evolution available The Taiwan International Graduate Program, Biodiversity Program, Taipei, Taiwan

The Taiwan International Graduate Program Biodiversity Program (TIGP-BIODIV) is recruiting graduate students for Fall 2025. The application deadline is February 1, 2025.

TIGP-BIODIV is composed of >60 faculty from Academia Sinica, National Taiwan Normal University, and Tunghai University whose research spans diverse topics across ecology, biogeography, evolutionary genetics and genomics, marine biology, and systematics. In addition to modern lab facilities, researchers have access to a marine research station at Green Island, the Biodiversity Research Museum, and a next generation genomics core facility.

Potential students are encouraged to explore the research underway at TIGP-BIODIV and contact individual faculty mentors about opportunities in their group, see Faculty List: <https://tigp-biodiv.biodiv.tw/-index.php/faculty/> Successful applicants receive graduate fellowships for at least 3 years, as long as program requirements are met. During the first year in the program, graduate students can choose rotations among all TIGP-BIODIV laboratories. All courses are offered in English. For additional details, please visit our website: <https://tigp-biodiv.biodiv.tw/> Academia Sinica and National Taiwan Normal University are located in Taipei, Taiwan. Tunghai University is located in Taichung, a big city in the middle of Taiwan. Both Taipei and Taichung are vibrant, global cities, rich in cultural and near to both oceans and mountains for both research and pleasure.

For all enquiries, please contact: Email: tigpbiodiv@gate.sinica.edu.tw TIGP BIODIVERSITY Program Biodiversity Research Center, Academia Sinica [johnwang <johnwang@gate.sinica.edu.tw>](mailto:johnwang@gate.sinica.edu.tw)

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AuburnU EvoDevo

Graduate students needed:

The Range lab at Auburn University is recruiting graduate students interested in evolutionary and developmental biology (www.therangelab.com). Research in the lab focuses on understanding the evolution of developmental mechanisms that control early axis formation as well as developmental timing using the comparative models of temperate and Antarctic echinoderm sea urchins as well as temperate hemichordate acorn worms.

A current NIH-funded research project uses sea urchin embryos to explore how an interconnected network of three different Wnt signaling pathways (Wnt/Beta-catenin, Wnt/JNK, and Wnt/Ca²⁺) coordinate the specification and patterning of the anterior-posterior axis during early embryogenesis. We also use hemichordate embryos to compare and contrast early anterior-posterior axis formation between these phyla to provide insight into anterior-posterior axis formation in the common deuterostome ancestor.

Another project funded by the NSF focuses on uncovering adaptations to the early gene regulatory networks used by the cold-water sea urchin species *Sterechinus neumayeri* that allow them to develop at sub-freezing temperatures. We anticipate that this study will not only inform our understanding of the molecular mechanisms required for adaptation to an extreme environment but also will provide insight into how early embryonic developmental rate is controlled in sea urchins as well as other metazoans.

The positions are for master's and PhD students beginning in the Fall of 2025. Students will have the choice to work on any number of projects in the lab. The positions offer training in a combination of molecular manipulations, high-throughput genome-wide assays and bioinformatics, gene regulatory network analysis as well as classical embryology.

Auburn is a Tier 1 research institution with great facilities and research support. The university is situated in the quintessential college town of Auburn, Alabama and is located close to several major cities (e.g., Atlanta [1.25 hrs] and Birmingham [2 hrs]), the beaches along the Gulf and Atlantic coasts, and the Appalachian Mountains. You can learn more about the Department of Biological Sciences at Auburn University at <http://>

[/www.auburn.edu/cosam/departments/biology/](http://www.auburn.edu/cosam/departments/biology/) . Interested applicants should contact Dr. Ryan Range at range@auburn.edu. With your inquiry, please include a CV and a brief description of your research interests and experience. GRE scores are not required by the Department of Biological Sciences at Auburn.

Applications for Fall 2025 are accepted until February 1st, 2025.

rangeurp@gmail.com

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CharlesU EvolSexDetermination

Project description: The aim of the project is to examine the evolution of sex determination across amniotes, a species-rich group which includes reptiles, birds and mammals. Amniotes include distinct lineages with either XX/XY, ZZ/ZW or temperature-dependent sex determination. Sex chromosomes evolved from a pair of autosomes, where the emergence of a sex-determining locus triggered gradual structural changes such as accumulation of sexual antagonistic alleles, recombination arrest, accumulation of repeats, loss of functional genes and heterochromatinization. This model represents the classical paradigm for decades. Recently, large variability in sex chromosomes was documented in non-model species, questioning the role of previously assumed evolutionary drivers and other aspects of sex chromosome differentiation. It remains unclear why amniote lineages differ so substantially in the degree of differentiation of sex chromosomes. Using advanced genetic and genomic methods, the PhD candidate will attempt to solve long standing enigmas concerning the role of sexual antagonism, chromosome rearrangements, repetitive elements and gene dose regulatory mechanisms in the differentiation rate of sex chromosomes in selected lineages of amniote vertebrates.

Qualifications: The applicant should possess Master degree (or equivalent title) and a proven expertise in a related field of biology. A previous experience in molecular genetics, cytogenetics or bioinformatics (genomics/transcriptomics) is essential for a successful PhD candidate. Good knowledge of the English language is required.

Financial support: The PhD position will be financially supported by scholarship for maximum time of 4 years.

Additional support will be provided from projects financed from Grant Agency of Czech Republic.

Application: Please send by email to Dr. Michail Rovatsos (rovatsom@natur.cuni.cz) the following: - Motivation letter to present why you fit to the advertised position (max. 1 page). - A detailed CV (max. 2 pages). - Contact details of two potential academic referees.

Deadline for applications until Sunday 8/12/2024. Suitable candidates will be interviewed until 15/12/2024. Position starts on April 2025.

For any additional information, do not hesitate to write an email to Dr. Michail Rovatsos (rovatsom@natur.cuni.cz). Info about the team's activities in our website: <https://mirovatsos.wordpress.com/> Michail Rovatsos

Assistant Professor Department of Ecology Faculty of Science Charles University Vinicna 7, 12844 Prague Czech Republic

“Michail Rovatsos, Ph.D.”
<michail.rovatsos@natur.cuni.cz>

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CzechAcadSci PlantHerbivoreDiversity

Graduate position: Biology.Centre.CZ.Global.trends.phytochemical.diversity

PhD Studentship in Plant-Herbivore Ecology Global trends in phytochemical diversity and plant-herbivore interactions

We are seeking enthusiastic candidates to join the prestigious JUNIOR STAR project funded by the Czech Science Foundation, aimed at exploring the global drivers of phytochemical diversity. This project investigates the fascinating diversity of plant metabolites by analysing how various aspects of chemical diversity correlate with biotic and abiotic stress factors. This highly interdisciplinary research combines fieldwork in diverse locations worldwide (Europe, USA, Panama, Cameroon, Japan) with advanced laboratory work using advanced techniques in metabolomics, biostatistics, and bioinformatics. Through these methods, the successful candidate will help reveal global trends in plant chemical strategies and their effects on multitrophic interactions and chemical communication among plants, insect herbivores, and

their natural enemies.

We are looking for candidates that have

* A MSc degree (non-negotiable requirement for PhD program eligibility) * A strong interest in chemical and community ecology of plants and insects * Ability to work in demanding field conditions * Basic experience working in molecular biology or analytical chemistry laboratories * Excellent biostatistical skills * Experience in bioinformatics (optional) * Fluent spoken and written English * Ability to work independently * A driver's license (optional but highly recommended)

The successful applicant will join the Ecology Department at the Institute of Entomology, Biology Center of the Czech Academy of Science and the Zoology Department of the University of South Bohemia. The PhD study will be supervised by Dr. Martin Volf, leader of the Evolutionary Ecology team. The candidate will live in Ceske Budejovice (Czech Republic) where the studies will take place and conduct fieldwork and research stays in Europe and overseas. Our department is a diverse, international team studying ecology, evolution and biogeography, and a world-class centre for interaction network research with regular publications in leading journals.

The deadline for applications is December 9th 2024. The best candidates will be interviewed in mid-December. The successful applicant is expected to start on April 1st 2025 (later start date negotiable). This five-year project offers a scholarship fully covering living expenses in the Czech Republic for the full standard duration of the PhD studies. Applicants from all countries are eligible. To apply, please send a CV, contact details for three references, and a cover letter stating qualifications, previous work and motivation to Dr. Martin Volf (volf@entu.cas.cz) where you can also send any queries.

External Links Volf lab: <https://www.volflab.com/> - Czech Academy of Science : <https://www.entu.cas.cz/en/homepage/> Zoology Department of the University of South Bohemia: <http://zoo.prf.jcu.cz/?lang=en> Ceske Budejovice : https://en.wikipedia.org/wiki/%C4%8Cesk%C3%A9_Bud%C4%9Bjovice Volf Martin <volf@entu.cas.cz>

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Czechia AlgaeMolecularEvolution

Algal Evolution and Ecology *group* < <https://www.alga.cz/en/c-874-jan-janouskovec-s-group.html> > at Centre Algatech, Czechia, is hiring a Ph.D. student with a background in molecular biology to study the biology and evolution of microalgae. We are specifically interested in candidates motivated to work with model phototrophs such as *Chlamydomonas,* *Phaeodactylum* and *Synechocystis* and on topics involving algal pigment metabolism, nutrient cycling, bioluminescence and/or chloroplast biology.

The group is led by Jan Janouskovec and Eva Horakova and studies evolution, ecology, and molecular biology of microalgae and heterotrophic protists (*PNAS 114:E171?i:E180 < <https://www.pnas.org/doi/full/10.1073/pnas.1614842114> >**;* *Curr Biol 27(23) < <https://www.sciencedirect.com/science/article/pii/S096098221731388X?via%3Dihub> >*, *eLife 8:e49662 < <https://elifesciences.org/articles/49662> >**; **Nat Commun 13:7075 < <https://www.nature.com/articles/s41467-022-34501-4> >*). We are located at Centre Algatech, Institute of Microbiology, Trebon, Czech Republic. The degree will be conferred by the Department of Molecular Biology and Genetics at the University of South Bohemia.

We seek motivated candidates with:

- a Master's degree in molecular biology or related field - experience in cloning, cell transformation, DNA and protein analysis and/or biochemistry - independent thinking
- strong communication skills

You will receive:

- individual mentorship and comprehensive training in laboratory methods - opportunities to network and present data at regional and/or international meetings - a 4-year Ph.D. stipend with full health and dental insurance coverage - international work environment and collaboration with universities in the EU and UK

Centre Algatech < <https://www.alga.cz/en/> >, Czechia (alga.cz) hosts several internationally recognized groups in algal research. We have high number of foreign researchers, friendly, collegial atmosphere and English as working language. We have been funded by prestigious awards (ERC, EXPRO), have outstanding equipment for molecular biology and biochemistry. We have strong ties with the University of South Bohemia

and Czech Academy of Sciences.

Department of Molecular Biology and Genetics < <https://www.prf.jcu.cz/en/faculty/departments/-department-of-molecular-biology-and-genetics> > at the University of South Bohemia is located in the city of Ceske Budejovice. Research activities are focused on functional analysis of genes using various model organisms. Ph.D. students are trained in modern methods of molecular genetics, including mutagenesis, transgenesis, and cell culture techniques. The department offers a Ph.D. programme in Integrative Biology.

To apply:

Please send a single PDF document in English containing the following information to Eva Horakova (*horakova@alga.cz*) by November 30, 2024. Applications will be reviewed through December 20, 2024, and university-led interviews will take place in mid-January 2025.

- Motivation letter detailing your fit for the position (max. 1 page) - Curriculum vitae with a complete list of peer-reviewed publications (max. 2 pages) - Contact information for 2 academic referees (do not include letters with your application)

janjan.cz@gmail.com

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GlasgowU EvoDevoThermalAdaptations

A Phd project is available for students interested in the evolution of adaptive divergence, in this case how fish adapt to geothermally-warmed habitats in Iceland. While the project is multidisciplinary we do not require previous experience in all areas. The most important aspect is that you are keenly interested in doing good science within an evolutionary context.

How organisms respond to changing environmental conditions is of pressing concern. While whole organism responses have been well studied there is currently a knowledge gap at the cellular level. This prevents us from making informed predictions for populations in response to environmental change, and an understanding of the mechanisms of plastic responses. Therefore, this project will aim to close this gap by examining whole organisms, tissues, and cells in response to temperature

and mechanical stimulation. This will leverage natural populations of stickleback from Iceland which have adapted to geothermally-warmed conditions. These populations possess differences in ecology reflected in morphology, behaviour, and physiology. The project will use these adaptations to understand how environmental responses contribute. Specifically the student will establish cell lines from these populations and perform tests of their response to mechanical stimulation under different temperature conditions. This will also occur in vivo to determine how these different levels reflect each other. Cutting-edge techniques will be used including biomechanical stress assays, molecular biology, and functional tests. The student will benefit from labs fully outfitted for this work, and fish holding facilities. They will also join a group of peers with regular meetings and discussions in a supportive and encouraging atmosphere.

Mid December - applicant webinar (date will be communicated when confirmed) - likely to w/c 9th December.

12th January - deadline for student applications.

Prospective students should contact Kevin Parsons (kevin.parsons@glasgow.ac.uk)

Formal processes for applying can be found here:

<https://www.gla.ac.uk/colleges/mvls/graduateschool/-phd-research-opportunities/futures-programme/-projects/fundamentals-of-life/10kevinparsons/-#d.en.1117938>

Dr. Kevin Parsons Editor in Chief - Evolutionary Biology School of Biodiversity, One Health, and Veterinary Medicine University of Glasgow

Phone: +44 (0) 0141 330 5974

<https://sites.google.com/site/kevinparsonslab/-home> <http://www.gla.ac.uk/researchinstitutes/-bahcm/staff/kevinparsons/>

Kevin Parsons <Kevin.Parsons@glasgow.ac.uk>

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Hamburg Germany PopulationGenomics

University of Hamburg, Germany: Research Associate (PhD Student) in Population Genomics - Rapid adaptation to environmental change

Become a member of our newly established and dynamic evolutionary biology team! We are interested in the effect of environmental change on populations and ecosystems and study it with the help of the ecological aquatic model organism *Daphnia*, the water flea. We study adaptation at the genomic as well as phenotypic level and combine population genomics, experimental evolution, molecular tools, high-throughput phenotyping and evolutionary simulations. You can expect a cute model system, big data, the opportunity to steer your PhD project in the direction of your interests, and a supportive working environment.

Find more information and apply under the following link:

<https://www.uni-hamburg.de/stellenangebote/ausschreibung.html?jobID=f4392cc8964c86b2865fa5b59d538376bf1b32d4>

For informal inquiries please contact Kathrin Otte: kathrin.otte@uni-hamburg.de

Prof. Dr. Kathrin Otte Research Unit of Population Genomics

University of Hamburg Biology Department Institute of Cell and Systems Biology of Animals Martin-Luther-King-Pl. 3 20146 Hamburg Germany

“Otte, Prof. Dr. Kathrin” <kathrin.otte@uni-hamburg.de>

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HeidelbergU MammalianGeneRegulation

PhD or postdoc position (bioinformatics):

Deep learning models and the evolution of mammalian gene regulation

Center for Molecular Biology (ZMBH), Heidelberg University, Germany

We are looking for a highly motivated PhD candidate or postdoctoral fellow, holding a Master’s or a PhD degree in computer science, computational biology, bioinformatics, or similar. A strong background in computational biology, machine Learning with pytorch or similar deep learning libraries is required.

The candidate will be co-supervised between the labs of Henrik Kaessmann (evo-devo single-cell genomic analyses) and Alexander Sasse (S2F models for synthetic genomics). The Kaessmann lab generates and analyzes single-cell data covering different aspects of gene regulation across mammals and other vertebrates to improve our understanding of their evolution and development. Dr. Sasse’s junior research group develops Deep Genomic Sequence-to-Function (S2F) models to explore how genomic sequences encode gene regulatory functions (Sasse lab).

This project aims at understanding the evolution of the cis-regulatory grammar across the development of humans and other primates/mammals. The candidate will develop and apply new S2F models on single-cell (or cell type specific) genomic data from different species to learn the cis-regulatory sequence elements that orchestrate development. Through multi-species training, the candidate will use these models to perform functional and evolutionary analyses across species and cell types to uncover regulatory changes that underlie phenotypic innovations.

The junior research group is part of the newly founded Carl-Zeiss Center for Synthetic Genomics (CZS Center SynGen, <https://www.syn-gen.de/>) and the Center for Molecular Biology (Zentrum für Molekulare Biologie Heidelberg, ZMBH, <https://www.zmbh.uni-heidelberg.de/>) at the renowned Heidelberg University. The CZS Center SynGen is supported by the Carl-Zeiss-Stiftung to promote research and development at the participating Universities in Heidelberg, Karlsruhe and Mainz to develop an internationally visible research focus on

synthetic genomics. The Kaessmann lab is part of the ZMBH, which has a long tradition of conducting cutting-edge research in molecular and cell biology, as well as biomedicine.

Heidelberg is a picturesque international city next to the large Odenwald forest and Neckar river. It offers a very stimulating, diverse and collaborative research environment, with the European Molecular Biology Laboratory (EMBL), German Cancer Research Center (DKFZ), Heidelberg Institute of Theoretical Studies (HITS), and the Max Planck Institute for Medical Research located in close proximity to the University.

Joining the two groups offers a collaborative and international work environment where you can gain hands-on experience and develop crucial research skills. The roles provide invaluable opportunities for professional growth, equipping you with technical expertise at the intersection of AI/ML, genomics, and evolution. The positions come with flexible working hours, company pension scheme, annual special payments, 30 days of vacation, and a subsidized job ticket for public transport.

The salary of these positions will be based on the German public standard table TV-L E13. Applications should be sent to Dr. Alexander Sasse (office-sasse@zmbh.uni-heidelberg.de). The application should contain a short letter of motivation, a CV with a short description of prior research experience, copy of transcripts, and contact information for 2-3 references. Closing date for applications: January 10th, 2025.

Heidelberg University stands for equal opportunities and diversity. Qualified female candidates are especially invited to apply. Disabled persons will be given preference if they are equally qualified. Information on the application process and the collection of personal data is available at www.uni-heidelberg.de/stellenmarkt. Henrik Kaessmann <henrik.kaessmann@gmx.ch>

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KarlstadU Two FruitFlyEvolution

PhD opportunities in Sweden. I am recruiting two PhD students (fully funded) here at Karlstad University to start in 2025, to work on questions related to the evolutionary ecology and population demography of sex differences, preferably using fruit flies. There is substantial scope for a student to take the project in directions

of their interest, and start date is flexible.

link to the job add: <https://kau.varbi.com/en/what:job/jobID:767050/iframeEmbedded:0/where:4> For questions contact Stephen De Lisle: stephen.de.lisle@kau.se

Ni $\frac{1}{2}$ r du skickar e-post till Karlstads universitet behandlar vi dina personuppgifter. When you send an e-mail to Karlstad University, we will process your personal data.

Miguel Gomez <miguel.gomez@kau.se>

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

MasseyU NewZealand AlpineInsectEvolution

Two fully-funded PhD scholarships are available to study the evolution of freeze-tolerant alpine insects at Massey University Manawatū >> New Zealand.

Many different alpine insects in Aotearoa/New Zealand have converged on the same unusual evolutionary strategy for surviving the cold; they freeze solid and survive. Eating the right microbes can change how and when insects freeze, potentially providing benefits that are shared by unrelated host species. These projects will determine whether three NZ alpine insect species have independently arrived at the same solution by each producing their own unique species-specific ice nucleating agent (classical convergent evolution), or whether they all employ the same gut microbes to do the job (horizontal transfer). Some further information is available in this review paper: <https://www.mdpi.com/2075-4450/14/1/89> The research will require collecting alpine insects, manipulating natural gut microbes, measuring temperature of crystallisation, and generating and analysing DNA and RNA sequences.

The scholarship: A tax-free living allowance stipend of NZ\$30,000 per annum for 3 years, plus tuition fees paid for 3 years.

Start date: March 2025 or soon after.

Location: The successful applicant will join the School of Food Technology and Natural Sciences on the Manawatū >> campus of Massey University, Palmerston North, NEW ZEALAND. Massey University is a smoke-free work environment.

Research Group: Te Taha Tawhiti [<https://evolves.massey.ac.nz>] resides within the Wildlife & Ecology Group. Lead researchers are Mary Morgan-Richards and Steve Trewick.

Admission criteria & candidate requirements: You'll need a good first degree from an internationally recognised university; minimum upper second class Hons or a Master's degree in an appropriate subject. You should have a background in Ecology/Biology/Evolution/Entomology, good statistics skills (preferably R) and an interest in evolution and microbiomes.

How to Apply In the first instance we encourage you to contact us by email to discuss your interest: m.morgan-richards@massey.ac.nz

M.Morgan-Richards@massey.ac.nz

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English, so the candidate should be proficient in spoken and written English. The initial appointment will be made for one year, with a possible extension to up to three years. The position is available from February 2025.

To apply, please send a single pdf file including: (1) a cover letter explaining why you would like to join our group, (2) your Curriculum Vitae (including a description of your skills), (3) your publication list, (4) a statement of research interests, and (5) contact details for 2-3 references who are willing to write a reference letter on your behalf to the following e-mail address: wolfgang.miller@meduniwien.ac.at

Application Deadline: November 30, 2024

Miller Wolfgang <wolfgang.miller@meduniwien.ac.at>

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MedU Vienna Transposon Evolution

PHD POSITION IN TRANSPOSON BIOLOGY AND EVOLUTION at the Medical University of Vienna, Austria

A PhD position in "Germ line regulation and evolution of Transposons in the model system Drosophila" is available in the group of Wolfgang J. Miller at the Medical University of Vienna (Department of Cell and Developmental Biology, Lab Genome Dynamics), Vienna, Austria. The PhD position is funded for at least three years, and an extension of the contract is very likely.

This research project is funded by the Austrian Science Fund (FWF) in close collaboration with two labs in Paris (Univ. Sorbonne and Saclay), France, and will focus on the regulatory and evolutionary dynamics of P-element transposons in different Drosophila species with emphasis on neotropical fruit flies from nature.

We are seeking a highly talented, independent, hard-working and self-motivated young biologist with excellent social skills. The successful candidate needs to have a strong background in genetics, molecular and cellular biology, preferentially in the Drosophila system. Some background in population and evolutionary biology, genomics, and/or microbiology would be ideal, but is not required. The working language in the laboratory is

Northern Michigan U Squirrel Climate Adaptation

Dear everyone -

Interested in a Graduate Assistantship?

The Energetics Lab <<https://www.energetics-lab.com/>> (Giroud) is now accepting applications for a motivated individual interested in obtaining a Master in Biology at Northern Michigan University starting in the Fall of 2025. The project aims at studying the effects of microclimates on hibernation and life-history traits in the Thirteen-Lined Ground Squirrel. More information about the Laboratory and about the position can be found at: <https://www.energetics-lab.com/in-the-news>
Looking forward to your motivated applications!

Sylvain GIROUD, PhD Habil Assistant Professor of Animal Physiology

Northern Michigan University Department of Biology | Weston 2107

+1 (906) 227-2145 sgiroud@nmu.edu

<https://nmu.edu/biology/sylvain-giroud> <https://www.energetics-lab.com> International Hibernation Society Board Member <https://hibsoc.com> Sylvain Giroud <sgiroud@nmu.edu>

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OklahomaStateU EnvironmentalDNA

MS Position in Environmental DNA (eDNA) Research at Castilla Lab, Oklahoma State University

The Castilla Lab (www.arcastilla.com) in the Department of Plant Biology, Ecology, and Evolution at Oklahoma State University invites applications for an MS position in an interdisciplinary research project, in collaboration with the United States Geological Survey (USGS), focused on using eDNA and remote sensing to monitor aquatic invasive plants in the Upper Mississippi River Basin.

Position Overview: This MS opportunity offers hands-on experience with cutting-edge eDNA methods for detecting and monitoring invasive aquatic plants. The project is highly collaborative, involving partners at OSU's Departments of Integrative Biology and Geography, the University of Montana, and the USGS.

Key Responsibilities:

- Conduct fieldwork across the Upper Mississippi River Basin to collect eDNA samples.
- Lead lab-based eDNA work and data analysis.
- Collaborate with an interdisciplinary team in plant ecology, conservation genomics, and geography.
- Contribute to publications and presentations for academic and public audiences.

Ideal Candidate:

- Prior experience with eDNA analysis is preferred; proficiency in laboratory techniques related to genetic analysis is required.
- Comfortable conducting fieldwork in remote aquatic environments.
- Strong interest in invasive species management, eDNA, and aquatic ecosystems.
- Excellent teamwork and communication skills.

Start Date: August 2025

Application Instructions: Interested applicants should send a single PDF containing the following documents to Dr. Antonio Castilla (arcastilla@okstate.edu):

- A cover letter detailing relevant experience and alignment with career goals.
- Curriculum Vitae (CV)
- Contact information for 2 references

Application Review: Applications will be reviewed starting December 11th.

Antonio R. Castilla (Pronouns: he/him/el)

Assistant Professor Oklahoma State University College of Arts and Sciences Department of Plant Biology, Ecology, and Evolution

Website: www.arcastilla.com Twitter: https://twitter.com/AR_Castilla Antonio Castilla Alvarez <acastillaalva@gmail.com>

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QueenMaryLondon HostMicrobeVirusEvol

Subject Heading: QueenMaryLondon.Host-microbe-virusEvolution

PhD position: Harnessing symbionts for control of vector borne disease in agriculture

Henry Lab - <https://www.henry-lab.co.uk/> Details

*Lab located at Queen Mary University of London, London, England E1 4NS

*Fully funded PhD includes home tuition fee PhD is fully funded at standard UK rates.

*PhD is research focused with some paid teaching assistant.

* National and international applicants welcome.

* Deadline date: 11 December 2024

*Disciplines and Techniques: Molecular biology, synthetic microbiology, genomics, experimental manipulations.

*Supervisors: Dr. Lee Henry (<https://www.henry-lab.co.uk/people>)

Project Details

Insects vector globally important diseases in agriculture, posing significant economic burdens and threatening food security. Virus transmission by sap-sucking insects account for nearly half of all plant pathogens, leading to 24 billion in global annual costs. Since the 2018 ban on neonicotinoid pesticides, Europe has seen a rise in insect vectored viruses threatening crop industries. The UK's sugar beet industry lost 25% of its crop in 2020 due to Virus Yellows (VY), at a loss of 67M, and Potato Leafroll Virus (PLRV), which causes 20M tonnes of annual yield loss globally, is rising. Climate change is increasing insect-vectored diseases in temperate regions, as milder winters boost disease-carrying insect

populations. Insecticides are the primary method of control sap-feeding insects, but these are becoming ineffective and undesirable due to insecticide resistance and pollution.

Heritable bacterial symbionts offer promising solutions to control insect-vectored disease by making insects less susceptible to transmitting diseases, while also spreading through insect populations via maternal transmission. For example, the introduction of the *Wolbachia* symbiont into *A. aegypti* mosquitoes has reduced dengue virus incidence by 77% in field trials. Heritable symbionts are also common in sap-sucking insect pests, but symbiont-based control strategies have yet to be developed for virus transmission in agriculture. Recent studies show the symbiont *Regiella insecticola* LSR can eliminate viruses of pea aphids, suggesting that symbionts may also suppress plant viruses in aphid pests, but this remains to be tested.

Aim:The aim of this project is to develop aphids as a model for understanding symbiont-plant virus interactions with the goal of identifying symbiotic microbes and anti-pathogen factors that can be used to reduce virus transmission by hemipteran pests in agriculture.

System and Objectives:The project will focus on the world's most destructive agricultural pests, the green-peach aphid, *Myzus persicae*, and several economically important crop viruses vectored by this aphid (e.g. Virus Yellows, Potato Leafroll Virus).

The study will address the following objectives:

- 1) Assess the impact of aphid symbionts on plant viral titre or vectoring capacity in aphids, or whether they generate aphid phenotypes that affect virus transmission, e.g., reducing fecundity or inducing dispersal morphs.
- 2) Identify gene regulatory networks in bacteria that suppress plant virus transmission in aphids.
- 3) Create transgenic symbiont lines that express anti-pathogen factors to suppress virus replication and transmission in *Myzus persicae*.

Research Environment: The successful applicant will join a vibrant research environment under the supervision of Dr. Lee Henry. His lab offers world-class facilities in genomics, synthetic microbiology, and molecular biology, providing the student with comprehensive training and professional development. The student will have access to ample funds to facilitate the research through Prof. Henry's external funding. He currently supervises 4 PhD students, 1 PDRA, and a technician, with an outstanding track record of guiding students toward high-impact first-author publications (e.g., Wu et al.

2022, Proc Soc B; Jackson et al. 2022, ISME Journal).

Impact:The project will identify symbiotic microbes and anti-viral factors to suppress globally important agricultural pathogens. It will also develop novel transgenic symbiont strains for integrated pest management, thereby reducing the need for pesticides and offering a sustainable solution for controlling a wide range of insect pests.

Contact & application:

For more research details, visit: <https://www.henry-lab.co.uk> Find out more about the School of Biological and Behavioural Sciences on our website.

Informal enquiries about the project can be sent to Dr. Henry at l.henry@qmul.ac.uk.

APPLY HERE:

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TuftsU Speciation

*** Initial Review of PhD Applications Begins Dec. 1 ***

KEY WORDS: Later-stage speciation, molecular/population genetics, insect behavior

POSITION: I am seeking to recruit two PhD students for NSF-funded research on speciation, and specifically, on the processes that explain why distinct barriers to gene flow accumulate between populations and lead to stronger overall reproductive isolation. The specific barriers under study are behavioral (mate choice) and ecological (seasonal phenology), and the relevant genes underlying both barriers have been identified. Please see the references listed below for studies our lab has published on this topic. My lab group is in the Department of Biology (<https://as.tufts.edu/biology/>) at Tufts University, located in Medford, MA. We use a combination of field studies, laboratory experimentation, and bioinformatics analyses to study the genetic, environmental, and demographic factors shaping diversity.

SUPPORT: Our department is committed to supporting students throughout their dissertation research. Students admitted to the PhD program receive full tuition

scholarships, a competitive stipend that includes summer pay, and health coverage, all guaranteed for six years.

ELIGIBILITY: Most critically, you will have a curious mind and a willingness to seek answers to questions that lack adequate explanations. Students must also have an ability to work with others and a strong sense of humor, both of which are needed to make science fun and worthwhile. A background or experience in molecular biology, evolution, or ecology is preferred, as is prior research experience. Highly relevant experience includes the application of molecular techniques or the collection/analysis of genome data. Enthusiasm for insects and field work is a big plus. Positions are open to domestic and international students. Students from diverse backgrounds are strongly encouraged to apply, including students with disabilities, from geographically underserved jurisdictions, and BIPOC and LGBTQ+ people.

CAREER DEVELOPMENT: PhD training with me has facilitated multiple career directions. Students will be mentored to understand jobs in private industry, academia (research/teaching intensive), non-profit organizations, and governmental sectors. I have ties to each of these different groups, allowing for exploration through informal interviews and networking. Tufts has numerous existing activities and resources to support a vibrant environment for training and development, including programming on grant writing, academic and industrial career development, mentoring, and responsible research.

APPLICATION: More information about applications, including due dates and aid, can be found here: <https://as.tufts.edu/biology/prospective-students/graduate-admissions-and-aid>. Review of applications begins on Dec. 1, but applications will continue to be reviewed as they arrive.

REFERENCES:

1) Dopman, E. B., Shaw, K. L., Servedio, M., Butlin, R. K. and Smadja, C., 2024. Coupling of barriers to gene exchange: Causes and consequences. *Cold Spring Harbor Perspectives in Biology*, pp.1-28. doi: <https://doi.org/10.1101/cshperspect.a041432> 2) Kunerth, H.D., Bogdanowicz, S.M., Searle, J.B., Harrison, R.G., Coates, B.S., Kozak, G.M. and Dopman, E.B., 2022. Consequences of coupled barriers to gene flow for the build-up of genomic differentiation. *Evolution*, 76(5), pp.985-1002. <https://doi.org/10.1111/evo.14466> 3) Unbehend, M., Kozak, G.M., Koutroumpa, F., Coates, B.S., Dekker, T., Groot, A.T., Heckel, D.G. and Dopman, E.B., 2021. *bric* $\frac{1}{2}$ *brac* controls sex pheromone choice by male European corn borer

moths. *Nature Communications*, 12(1), p.2818. <https://doi.org/10.1038/s41467-021-23026-x> 4) Kozak, G.M., Wadsworth, C.B., Kahne, S.C., Bogdanowicz, S.M., Harrison, R.G., Coates, B.S. and Dopman, E.B., 2019. Genomic basis of circannual rhythm in the European corn borer moth. *Current Biology*, 29(20), pp.3501-3509. <https://doi.org/10.1016/j.cub.2019.08.053> 5) Dopman, E.B., Robbins, P.S. and Seaman, A., 2010. Components of reproductive isolation between North American pheromone strains of the European corn borer. *Evolution*, 64(4), pp.881-902. <https://doi.org/10.1111/j.1558-5646.2009.00883.x> CONTACT: Erik Dopman with questions at erik.dopman (at) tufts.edu

Erik Dopman, PhD Department of Biology Tufts University 200 Boston Avenue, Suite 4700 Medford, MA 02155

“Dopman, Erik” <Erik.Dopman@tufts.edu>

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UAlaska Fairbanks ArcticGraylingEvolution

We are seeking highly motivated candidates for two Ph.D. assistantships in Fisheries at the University of Alaska Fairbanks, College of Fisheries and Ocean Sciences, in affiliation with the International Arctic Research Center and Institute of Arctic Biology. Successful candidates will work closely together as part of our interdisciplinary team investigating how Arctic grayling are responding to rapid climate change in northern Alaska. One student will focus on questions of trophic interactions and growth. Another student will focus on the evolutionary ecology of grayling through measurement of fitness-related traits such as metabolism and timing of key life history events like spawning and juvenile emergence. Both students will assess contributions of the environment (phenotypic plasticity) and evolution (heritability) to thermal performance through fieldwork along a 300 km latitudinal gradient and through common garden and streamside experiments.

This work on Arctic grayling is closely coordinated with collaborators studying plants, insects, and birds and

how species interactions may change in a warming future, contributing to community resilience or collapse. The Evolving Meta-Ecosystems (EvoME) Institute (pronounced E-VOME) is bridging disciplines to address two broad questions: Can organisms 'keep up' with rapid climate change? And does evolution of organisms keep ecosystems connected and productive? Benefits of participation in EvoME include well-supported training and leadership opportunities within a tiered mentoring structure, the ability to participate in synthesis efforts, and networking with a fun and hardworking team of researchers. Field research will be conducted across an array of sites centered around Toolik Field Station.

UAF is committed to building a culturally diverse and inclusive organization. We welcome applicants to bring their unique perspectives and identities through their culture, national origin, ethnicity, race, gender, sexual orientation, veteran status, disability, age, religion and beliefs. Individuals in chronically underrepresented groups in STEM are highly encouraged to apply.

Start Date: Early May 2025 with ability to perform Arctic fieldwork this coming summer is ideal; earlier or later start dates may be possible.

Salary and Benefits: Each student will receive 3 years of Research Assistantship support, including stipend (\$40,528 per year), tuition, and health insurance. We will encourage and assist students in securing additional funding through internal and external graduate fellowships or TA-ships.

Qualifications: A M.S. in fisheries, aquatic ecology, biology, or a related discipline and a record of publication (at least one published or submitted journal manuscript) strongly preferred. Prior experience with Arctic or boreal field research, physiological experiments, and/or strong geospatial and quantitative skills are desirable. A willingness to learn, attention to detail, and a strong work ethic are essential.

Contact: For more information about the project, please email Erik Schoen (eschoen@alaska.edu), Peter Westley (pwestley@alaska.edu) or Matt Gilbert (mjgilbert@alaska.edu).

To apply, email 1) cover letter describing your interest in the position, skills, and goals 2) CV or resumé, 3) unofficial transcripts, and 4) contact information for 3 references. For full consideration, apply by December 1, 2024. Applications will be accepted until the positions are filled.

Wakefield Chair of Fisheries and Ocean Sciences Salmonid Evolutionary Ecology & Conservation Lab Department of Fisheries, College of Fisheries and Ocean Sciences University of Alaska Fairbanks, Troth Yed-

dha' campus I am a humble guest on the traditional homelands of the Lower Tanana and Dene' people.

Web: *www.seec-lab.com* Phone: 907-474-7458
Email: pwestley@alaska.edu <https://orcid.org/0000-0003-4190-7314> Email when in field: *westleypeter@inreach.garmin.com

"If you're not prepared to be wrong, you'll never come up with anything original." - Sir Ken Robinson

Peter Westley <pwestley@alaska.edu>

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UBern RodentPopGenomics

PhD position: Population genomics of wild rodents and their microbes

A PhD position is available for research on the genomic consequences of population isolation, speciation and hybridization and their feedback on associated microbes. This will contribute to answering fundamental questions such as: What is the importance of adaptive and neutral processes during evolutionary divergence? How tight is the association between microorganisms and their hosts? We will address this through analyses of existing and new genomic data sets of *Microtus voles* and their microbes. The project can be adjusted in part to your specific interests but I expect to build on our recent publications below. You will also have the opportunity to contribute to other projects in the group.

I am looking for a skilled, creative and highly-motivated candidate who is able to work independently and in a team. You must have a solid background in evolutionary biology, and practical experience with bioinformatics and population genomics. If you have no experience in this field, this is not the right project for you. You should enjoy the processing and analysis of large genomic data sets. Experience with molecular laboratory work or fieldwork on small mammals is a plus but not essential. A Master degree in a relevant field is required. The project may include short periods of fieldwork, so a valid driver's license is beneficial. Obtaining a PhD from the University of Bern will require the writing of several manuscripts for leading scientific journals.

The position is fully funded for three to four years with an anticipated starting date of March 2025. My group is part of the Institute of Ecology and Evolution with a

stimulating, multi-national research community and excellent infrastructure. English is the working language. Some knowledge of German or French is beneficial for living in Switzerland but it is not essential for the PhD project.

Please send your application as a single (!!!) pdf file to Prof. Dr. Gerald Heckel gerald.heckel@unibe.ch. To be considered, the pdf must include a letter describing your particular skills and motivation for the position and which past research experience makes you a suitable candidate (max. 2 pages), the abstract of your Master thesis, a CV, and contact details of 2-3 referees. Review of applications will begin December 16 2024.

References:

Labutin & Heckel 2024. Genome-wide support for incipient Tula hantavirus species within a single rodent host lineage. *Virus Evolution* 10:1-14.

Saxenhofer, Labutin, White, Heckel 2022. Host genetic factors associated with the range limit of a European hantavirus. *Molecular Ecology* 31:252-265.

Wang, Peischl, Heckel. 2023. Demographic history and genomic consequences of 10,000 generations of isolation in a wild mammal. *Current Biology* 33:2051-2062.

Wang & Heckel 2024. Genome-wide relaxation of selection and the evolution of the island syndrome in Orkney voles. *Genome Research* 34:851-862.

Prof. Dr. Gerald Heckel

Institute of Ecology and Evolution University of Bern
Baltzerstrasse 6 CH-3012 Bern, Switzerland Email: gerald.heckel@unibe.ch

“gerald.heckel@unibe.ch” <gerald.heckel@unibe.ch>

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UBonn Germany EvoDevoPopGenetics

PhD Student in Evolutionary Developmental Biology and Population Genetics Gompel lab - Bonn Institute for Organismic Biology, University of Bonn, Germany

Our lab is interested in the genetic bases of morphological evolution. We are looking for a PhD student to work on a new project at the crossroads of Evolutionary Developmental Biology and Population Genetics. The project

aims at identifying genetic determinants in a population of flies (*Drosophila*), underlying variation in wing pigmentation. The approach will combine advanced and quantitative phenotypic analysis, genome-wide association study, as well as molecular and genetic dissection using transgenesis. The DFG-funded project will be done in collaboration with quantitative and population geneticists in Montpellier, France, and will involve reciprocal visits between both labs. The ultimate goal of the project is to compare among-species genetic variation explaining phenotypic evolution (past work from the Gompel lab), to within-species determinants of comparable variation.

Recent relevant publications: Bachem K, Li X, et al. (2024) *Science Advances*, 10(4):eadl2616. doi: 10.1126/sciadv.adl2616. Ling L et al. (2023) *Science Advances*, 17:9(7):eade6529. doi: 10.1126/sciadv.ade6529. Xin Y, Le Poul Y, et al. (2020) *Proc Natl Acad Sci U S A*, 10:202004003. doi: 10.1073/pnas.2004003117

What we offer: A 3-year PhD student position starting in spring/summer 2025 Competitive salary based on 13 TV-L (65%) of German pay scale. Extensive research opportunities in a dynamic and collaborative environment at the Bonn Institute for Organismic Biology of the University of Bonn.

Your profile: A Master's degree in life sciences, with a strong emphasis on molecular biology and genetics Experience in genomics and data analysis Experience working in a wet lab Excellent written and spoken English

The research environment: The University of Bonn is one of the most distinguished and well-networked research universities in the world and conducts research in fields defined by the Excellence Strategy. It is one of the eleven German Universities of Excellence, with the most Clusters of Excellence. It combines an international and intercultural environment with a strong emphasis on transdisciplinary research, creating a rich environment for PhD students.

Please send the following materials to apply: - Your Master's degree and transcripts. - A detailed CV and contact details of two academic referees. - A one-page cover letter highlighting your motivation and summarising your research expertise

Send your application by e-mail to Nicolas Gompel (gompel@uni-bonn.de) Applications will be evaluated on a rolling basis, until the position is filled.

Prof. Dr. Nicolas Gompel

University of Bonn Bonn Institute for Organismic Biology (BIOB)

Meckenheimer Allee 169, 53115 Bonn, Germany

Tel.: +49 (0)228 734784 ngompel@uni-bonn.de Lab page
 Nicolas Gompel <ngompel@uni-bonn.de>
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 ing@mcmaster.ca)

UBristol Two EvolutionSocialBees

We invite applications for two 4-year PhD opportunities to investigate the impacts of environmental change on bee foraging strategies and decision making at the University of Bristol, UK. The projects focus on flower constancy, a behaviour with implications for bee fitness and plant evolution. With changing climates and habitat alterations leading to changing bee foraging landscapes, this project aims to study how environmental change impacts flower constancy and bee diet.

Note that for one project the application deadline is already on the 11 December 2024, for the second project it is early January 2025.

Please find more details about the two projects here.

For informal enquiries, please contact Dr. Christoph Grueter (c.grueter@bristol.ac.uk).

Dr. Christoph Grueter (he/him)

Associate Professor in Animal Behaviour & Ecology
 School of Biological Sciences University of Bristol 24
 Tyndall Avenue | BS8 1TQ | UK Tel: 0117 455 6234 Of-
 fice: 302 Virtual Office: <https://tinyurl.com/55a2zdhy>
 Web: www.socialinsect-research.com Christoph Grueter
 <c.grueter@bristol.ac.uk>

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UCalifornia Berkeley PlantClimateAdaptation

PhD positions: Rapid evolutionary genomics in plants

Moi Exposito-Alonso Lab - www.moilab.science Assistant Professor, Department of Integrative Biology, University of California Berkeley

Freeman Hrabowski Scholar, Howard Hughes Medical

Institutes (HHMI)

Details

* Lab located in Valley Life Sciences Building, University of California Berkeley campus, CA 94720, USA

* Starting annual salary guaranteed minimum \$46,000 with yearly rises, for 5 years (this pay scale is set up by the lab, not the program)

* This PhD is research focused. Requirement of teaching assistance is to two classes.

* National and international applicants welcome.

* Deadline date: Dec 1 2024

* Starting date: Fall 2025

Description

Our lab asks the fundamental question: Are plants evolving to global climate change? We tackle this from a core population evolutionary genomics angle, integrating molecular biology and macroecology approaches.

We aim to recruit highly motivated PhD students into our lab with undergraduate background in plant biology, evolutionary biology, and/or genomics. Research experience is advantageous but not required. We are a highly interactive, interdisciplinary, and diverse lab. We target scientific excellence as well as building a positive community for growth. You can read our value statement here: www.moilab.science/our-values. We provide support and freedom for PhD students to design their thesis with input and help from their advisor and peers. As an example, some possible PhD projects could be: How fast can rapid genetic adaptation be? (This would be an evolutionary genetics and bioinformatics project, which may require whole-genome sequencing and experimental evolution, and popgen bioinformatics data analysis. Example publication www.GRENE-net.org). What are the phenotypes involved in plant adaptation? (This is a more evolutionary ecology direction, will require field experimental ecology work, and data analyses, experiments at nature.berkeley.edu/oxford-facility along the lines of moilab.science/climate-change-evo-experiments < <https://www.moilab.science/climate-change-evo-experiments> >. Example publication < <https://www.nature.com/articles/s41586-019-1520-9> >). How do population biogeography/history and admixture interact with local adaptation? (An evolutionary genetics and experimental ecology, and bioinformatics direction. Example publication < <https://www.nature.com/articles/s41559-017-0423-0> >). Can we re-create rapid adaptation? (This has a more molecular biology component, which requires laboratory work with CRISPR constructs, gRNAs design, genotyping, and at its core answers basic evolution and genetics questions. Ex-

ample publication < <https://www.biorxiv.org/content/10.1101/2023.10.16.562583v2> >). How are diverse plant communities in temperate or tropical regions changing? (This requires a field ecology background, statistical analyses, and/or genome assembly and population genomics work. Example publication < <https://www.science.org/doi/10.1126/science.abn5642> >).

Contact & application

Link to all Berkeley programs and how to apply ??? <https://grad.berkeley.edu/admissions/steps-to-apply-apply/> Informal form for MOILAB pre-submission interests ??? <https://forms.gle/T1MN75iYn8MKdnBZA> moisesexpositoalonso@gmail.com

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UCentralFlorida EvolutionParasiticWasps

University of Central Florida (UCF)

The Sharanowski lab at the University of Central Florida is seeking a Ph.D. student to work on comparative genomics and evolutionary genomics projects, focusing on parasitic wasps in the superfamily Ichneumonoidea. This research will be largely computational, working on full genomes, and thus a strong background in programming would be ideal, as well as course work in genomics, genetics, evolution, molecular biology, and several courses that would provide a strong statistical background. Students with a biology, math, or a computer science degree are highly encouraged. Students with Masters degrees and previous publications are preferred.

PhD students are supported via a graduate teaching assistantship (GTA) from the Biology Department and are supplemented with summer salary from the Sharanowski Lab for full support including health insurance benefits. Interested applicants are encouraged to email Dr. Sharanowski by November 15th with a

a CV outlining research experience with 3 names of references included please include your GPA on your CV

and a short description of research interests including why you want to join the Sharanowski Lab.

Dr. Sharanowski will only contact suitable applicants for a zoom interview to assess a good fit between the

project and student and advisor. Applications to UCF are due Dec 1st, 2024. International applicants are welcome. The University of Central Florida is a large university and a designated Hispanic serving institution. Students from all backgrounds are encouraged to apply. Orlando is a diverse and beautiful city and the department, campus and city have supportive communities.

Dr. Barbara Sharanowski Professor, Department of Biology University of Central Florida barb.sharanowski[at]ucf.edu

Barbara Sharanowski <Barb.Sharanowski@ucf.edu>

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UCollegeDublin Two EvolAnimalImmuneSystems

2x PhD studentships in animal immune system origins and evolution

Applications are welcomed for two fully funded, four-year, full-time PhD positions at University College Dublin, Ireland.

PhD Project area: Reconstructing animal immune system evolution.

PhD supervisor: Dr Anthony Redmond

Proposed Start Date: Early 2025

Location: School of Medicine, University College Dublin, Ireland

Positions: 2x 4-year, Full-time PhD studentships (One University College Dublin Ad Astra PhD

Studentship and one Royal Society-Research Ireland PhD studentship).

*Stipend: * euro 22,000 per annum plus tuition fee waiver.

Summary of Project(s): The immune system is a complex evolutionary marvel. Although the system is very well studied in humans, and in some key model organisms, the early formation of the animal immune system is poorly understood. This has been complicated by a combination of issues, including: i) poor availability of high-quality genomes for some of our most distantly related animal relatives, ii) the fast-evolving nature of immune genes rendering homology difficult to identify across large periods of time, and iii) uncertainty in the

relationships of the major animal lineages. Fortunately, high-quality genome sequences are now available for representatives of the major animal lineages, while combining wet lab and 'omics' approaches means that genes responding to immune challenges can be more readily identified, providing an unprecedented opportunity to counteract the key issues outlined above.

Both studentships will involve collection and maintenance of phylogenetically important marine invertebrates in the lab for use in genome sequencing (where required) and analysis, and immune challenge trials and transcriptomics, to identify the array of immune-associated genes in key lineages. This will reveal both candidate novel immune genes, as well as homologs of known immune genes found in traditional model species. This approach will be paired with phylogenetic investigation of immune genes from across animal diversity to guide reconstruction of the key steps in immune system evolution.

The proposed projects are intertwined in approach and share the overarching aim of understanding the origins and evolution of the animal immune system, but diverge in that one studentship will focus on the early evolution of the bilaterian immune system and the other on immune evolution in non-bilaterian animals.

These interdisciplinary projects intersect evolutionary genetics, invertebrate zoology, immunology, and bioinformatics. Appropriate training and/or opportunities to gain experience will be provided in skills spanning these areas, including in fieldwork and husbandry of marine invertebrates, wet-lab immune challenges trials, as well as in phylogenetics, bioinformatics and 'omics' techniques. The student will have the opportunity to publish in leading scientific journals and to attend international conferences.

***Research Team and Environment*:** The successful candidates will join the newly established Redmond lab in University College Dublin's School of Medicine. The group focuses primarily on understanding the evolutionary history of animals, with particular interests in genome evolution, immune systems, and resolving the tree of life, as well as the development of new methodological approaches that this research agenda calls for. Both studentships will benefit from opportunities to contribute to other projects as well as from planned local and international collaborations to ensure the success of this project.

***Requirements Qualifications/Expertise*:** Applications are sought from inquisitive and dedicated candidates with interest in scientific methodology and discovery. Candidates should have, or expect to soon be awarded, a BSc (grade 2.1 or above), or an MSc in the area of

biology (especially: genetics, immunology, zoology or related fields) and/or computer science.

***To apply for these positions*:** Please send your CV, a cover letter, and the contact details of at least two referees to anthony.redmond@ucd.ie by 30th November 2024. Informal enquiries in relation to the position are welcome and encouraged and should also be sent to this address. Applicants will be considered for both studentships unless otherwise stated in the cover letter.

***Relevant publications*:**

Redmond, A.K., 2024. Acoelomorph flatworm monophyly is a long-branch attraction artefact obscuring a clade of Acoela and Xenoturbellida. *Proceedings of the Royal Society B: Biological Sciences*, 291 (2031).

Matz, H., Taylor, R.S., Redmond, A.K., Hill, T.M., Daniels, R.R., Beltran, M., Henderson, N.C., Macqueen, D.J. and Dooley, H., 2023. Organized B cell sites in cartilaginous fishes reveal the evolutionary foundation of germinal centers. *Cell reports*, 42(7).

Redmond, A.K., Pettinello, R., Bakke, F.K. and Dooley, H., 2022. Sharks provide evidence for a highly complex TNFSF repertoire in the jawed

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UConnecticut PopGenofGeneticInteractions

The recently sprouted Dagilis lab at the University of Connecticut is looking for PhD students interested in looking at how genetic interactions can be detected, or how such interactions impact speciation, hybridization and the evolution of genome structure as a whole. The lab primarily uses publicly available data-sets, but has some exciting collaborations in a variety of systems, from fungi to humans.

The lab is currently creating a suite of approaches to detect pairs of genes that co-evolve, co-introgress and are maintained together during structural rearrangements. These tools will allow students to investigate how genetic interactions in different organisms have shaped their evolutionary trajectories. Students will learn to develop

bioinformatic pipelines, will be encouraged to develop mathematical modeling and simulation skills, and will have many opportunities for collaboration across the wonderful EEB community at UConn.

Applications will begin to be evaluated in mid-December, but contact with PI is required for applications, so email adagilis@uconn.edu if you are interested!

Further information on the EEB PhD program can be found at <https://eeb.uconn.edu/gradapply/>. See more about the lab at: <https://dagilislab.github.io/-DagilisLab/> Andrius J. Dagilis, PhD Assistant Professor, Department of Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT

“Dagilis, Andrius” <adagilis@uconn.edu>

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U Dayton AmphibianEvoDevo

The recently established Paluh Lab (paluhlab.com), located in the Department of Biology at the University of Dayton, is recruiting a fully-funded PhD student with a start date of Fall 2025 (August).

Our lab aims to understand the evolutionary processes, developmental mechanisms, and ecological contexts that generate morphological diversity in vertebrates. As integrative biologists, we incorporate evolutionary developmental biology, comparative anatomy, phylogenetic comparative methods, and natural history to investigate organismal traits across several scales of biological organization.

We are recruiting a PhD student to work on the evo-devo of embryos, tadpoles, and froglets of non-model and model anuran species. Tadpoles possess a highly modified feeding apparatus, which typically includes keratinized mouthparts composed of a beak and several rows of labial teeth. These complex structures play an important role in feeding and can vary dramatically in shape and size across living frog species. The feeding apparatus of tadpoles is thought to be an evolutionary novelty and key innovation, yet the origin and development of these morphological structures are poorly understood. We are beginning to characterize the developmental genetics of the complex feeding apparatus in tadpoles by examining whole specimens, tissues, and cells and using a variety of techniques, including RNAseq, in situ hybridization assays, and chemical inhi-

bition experiments. Results of this work will provide key insights into the processes of phenotypic convergence, the mechanisms of trait loss, and the origin of evolutionary novelties. The PhD student will be encouraged to develop independent projects that align with these research themes.

Preferred qualifications include a MSc degree in Biology, some molecular lab experience (e.g., DNA and RNA extractions, PCRs, etc.), and enthusiasm for integrative & organismal biology.

The University of Dayton is a mid-size institution, located in the city, and has a low cost of living. There are several local metroparks and state parks in the area. The position is fully-funded through a teaching assistantship. The salary is set at ~\$22,000/year for PhD students. There are also competitive fellowships through the university that can increase the stipend, provide summer support, and sponsor research and conference travel.

All interested applicants are encouraged to email Dr. Paluh (daniel.j.paluh@gmail.com) with a statement that includes previous research experience, current interests, and motivation for joining a graduate program. Please also attach a CV.

The Paluh Lab and the Department of Biology at UD is committed to creating a safe, inclusive, and supportive working environment for all members.

Daniel J. Paluh

Assistant Professor

Department of Biology

University of Dayton

paluhlab.com

daniel.j.paluh@gmail.com

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UEastAnglia UK Two InsectFertility

More than one route to fertility (CHAPMAN_U25DTP2)

Male sexual traits are notoriously variable, which is puzzling, as traits essential for fitness are expected to exhibit low variation due to strong directional selection. Though many solutions have been proposed, we still

lack satisfactory, general explanations. A good example is found in *Drosophila melanogaster* fruitflies, in which there are over 250 seminal fluid compounds that have essential functions, but which also exhibit substantial diversity. It remains unclear why some seminal fluid proteins have multiple functions, some only one, and why there is so much apparent functional redundancy. An exciting hypothesis is that this abundant variation is maintained because there are multiple ways in which males can achieve reproductive success. This challenge forms the focus of this PhD project, which the student will tackle in three major aims, testing whether males (i) exhibit distinct seminal fluid protein profiles, (ii) respond in a consistent manner to sexual competition, and (iii) have seminal fluid protein profiles that are associated with distinct sperm phenotypes.

Led by Professor Tracey Chapman and Professor Simone Immler (UEA) and by Dr Jen Perry (St Francis Xavier, Nova Scotia) this project will be based in the School of Biological Sciences at the University of East Anglia (UEA). The student will receive expert training in leading 'omics analyses from Dr Wilfried Haerty at the Earlham Institute, and undertake two training visits to the laboratory of Professor Mariana Wolfner at Cornell University (USA). This will equip the student with state-of-the-art skills in evolutionary genomics and bioinformatics, giving a strong set of varied skills for future career development. The impacts are expected to be new explanations for the maintenance of diversity and new understanding of fertility mechanisms and how they might be improved.

Contact for more information:
tracey.chapman@uea.ac.uk

To apply:

<https://biodtp.norwichresearchpark.ac.uk/projects/-more-than-one-route-to-fertility/> New strategies for pest insect control by population suppression. (CHAPMAN_U25DTP1)

Pioneering solutions for pest insect control are urgently needed, as climate change is increasingly driving pests into new geographic areas. The student will address this critical challenge by developing new methods for managing key insect pests. The focus will be the Mediterranean fruit fly (*Ceratitis capitata*, medfly), which is moving into new environments including the UK, and poses a growing threat to agriculture and food security. The student will harness the potential for insect control of merging CRISPR/Cas9 'homing' gene drives with genetic sex conversion. This strategy can achieve reductions in pest population sizes by driving into a population the means to transform harmful (crop-damaging) females into harmless fertile males. However, a key gap

is the absence of any systematic investigation of the relative fitness or effect of competition between XX versus XY males. This challenge forms the focus of this PhD project, which the student will tackle in two major aims: (i) Compare the fertility and reproductive success of gene-edited and non-edited XX versus XY males. (ii) Analyse the detailed courtship and behavioural effects of sex conversion. The student will receive training in the use of cutting-edge genetic engineering and gene drive technologies to create novel population suppression strategies, with the potential to be applied across multiple pest species.

Led by Professor Tracey Chapman and Dr Phil Leftwich, this project will be based in the School of Biological Sciences at the University of East Anglia (UEA) and the student will work collaboratively with Dr Tim Harvey Samuel at Keele University and Dr Angela Meccariello at Imperial College London.

Contact for more information:
tracey.chapman@uea.ac.uk

To apply:

<https://biodtp.norwichresearchpark.ac.uk/projects/-new-strategies-for-pest-insect-control-by-population-suppression/> "Tracey Chapman (BIO - Staff)" <Tracey.Chapman@uea.ac.uk>

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UEdinburgh Comparative Genomics

Evolution following whole genome duplication - a comparative investigation of plant and animal genomes

University of Edinburgh

Background: Whole genome duplication (WGD), also known as polyploidy, is an extreme mutation that can be inherited by future generations with major evolutionary impacts. WGD events have been proposed in many different eukaryote lineages, including at important time-points of plant and animal evolution (e.g. the ancestors to all seed plants and vertebrates). Duplicated genomes always return to a more stable state during evolution in a process called 'rediploidisation'. During rediploidisation, duplicated genes created by WGD are often lost, but some evolve new functions, contributing to changes in phenotypes and species diversity. While the importance of WGD in evolution is accepted, much remains

to be learnt about rediploidisation, including the genetic processes involved, its drivers and outcomes for evolutionary diversification. To date, there has been a strong division separating researchers working on WGDs in either plants or animals, leading to different concepts and scientific interpretations. This project seeks to improve our understanding of evolution after WGD by investigating both plant and animal systems; integrating and standardising concepts, methods, and interpretations from both fields.

Broader framing: This PhD contributes to a 4-year BBSRC consortium project (starting in 2025) with an ambitious mission to understand the evolutionary importance of WGD events and rediploidisation processes across the eukaryotic tree. This BBSRC project, led by Edinburgh, partners with leading UK research organisations, including the Universities of Bath, Bristol, and Oxford, Royal Botanic Gardens Kew, and the Wellcome Sanger Institute, as well as international collaborators. It is anticipated that the PhD student will fully integrate into this exciting new project, with broad opportunities to collaborate with researchers across the consortium and to participate in leading international conferences. Training will be provided in advanced genomics, phylogenetics and bioinformatics methodologies.

Candidates: We seek an accomplished student with proven interests in genetics or evolutionary biology and existing bioinformatics experience.

Applications

A statement of interest and full CV with names and addresses (including email addresses) of two academic referees, should be emailed to RDSVS.Studentship.Applications@ed.ac.uk.

When applying for the studentship please state clearly the project title and the supervisor in your covering letter.

For informal enquiries, please contact Dan Macqueen by email (daniel.macqueen@roslin.ed.ac.uk).

Closing date for applications: Monday 16th December 2024 at 12 noon.

Full project advert here: Evolution following whole genome duplication - a comparative investigation of plant and animal genomes at University of Edinburgh on FindAPhD.com.

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'n ?ideann, cl?raichte an Alba, ?ireamh cl?raidh SC005336.

Alex Twyford <Alex.Twyford@ed.ac.uk>

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UEdinburgh PopulationGenetics

PhD Position available at the Institute of Ecology and Evolution, University of Edinburgh, UK.

Understanding selfish genes and selfish self-fertilisation
Supervisors: Matthew Hartfield, Ceil Abreu-Goodger, Laura Ross, Lewis Stevens (Wellcome Sanger Institute)

Toxin-antidote (TA) gene pairs are a form of selfish genes that ensure their transmission by causing host lethality if not inherited together. Historically, these were mostly known in bacteria, but recent sequencing and experimental studies are finding examples of these gene systems in multicellular species. One intriguing finding arising from these studies is that toxin-antidote systems are seemingly prevalent in species that self-fertilise, where individuals uniparentally reproduce through producing and fusing both male and female gametes. Subsequent work has shown how this reproductive mode favours the spread of these selfish genes as it ensures they are co-inherited between parent and offspring. Given these findings, it raises the question as to whether there are other TA pairs that have yet to be detected; whether they are widespread across other selfing species; and what genetics properties they exhibit that enable them to spread? The goal of this project is to harness genetic, theoretical, and bioinformatic analysis to understand how toxin-antidote systems can be determined from genome data and seek out new cases of them. Specifically, we will take advantage of a massive genome dataset covering several free-living self-fertilising nematodes (*C. elegans*, *C. briggsae*, and *C. tropicalis*).

Further details and application instructions, with a deadline of 6th January 2025: <https://e4-dtp.ed.ac.uk/e5-dtp/supervisor-led-projects/project?item=1670> I am also happy to sponsor non-UK student applications for Darwin Trust scholarships (<https://darwintrust.bio.ed.ac.uk/>); please contact me if interested. Deadline for enquiries is the 3rd January 2025.

The expected start date for the project is October 2025. Interested students can contact me to ask for more details.

Matthew Hartfield m.hartfield@ed.ac.uk hartfield-lab.com

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Matthew Hartfield <m.hartfield@ed.ac.uk>

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UEdinburgh PrimateGenomics

Genomic architecture of speciation and gene flow in an exceptionally diverse primate group

Funding Status:

Funding is in competition with other projects and students through Doctoral Training Programs (NERC and BBSRC DTPs, Darwin Trust)

Project Description

The chromosomal theory of speciation stipulates that differences in karyotypes, consisting of fissions and fusions, and intrachromosomal structural variants, are strong barriers to gene flow. This is supported by the observations that closely related species often differ in karyotype. Guenons, the most genetically diverse African primates, seem to defy many of the general rules of speciation. Despite the presence of pronounced karyotypic differences, with diploid chromosome numbers ranging from 48 to 72, guenons hybridise in captivity and the wild, producing viable and at least partially fertile offspring between species that have diverged millions of years ago. This is not a new phenomenon, as guenons hybridised extensively throughout their 10 million years of evolutionary history, despite the presence of chromosomal differences.

The aim of this project is to study the genomic mechanisms underlying the rapid karyotypic evolution and preservation of genetic compatibilities despite deep evolutionary divergence. Karyotypic differences have been proposed to be both the driver of speciation and the consequence of gene flow, but we have very limited understanding of how they emerge, from the evolution of chromosomal breakpoints to the emergence of novel centromeres. In this project, we will use long-read sequencing and chromosome-resolved genome assemblies to study these fundamental evolutionary processes in a unique system of close human relatives.

Key research questions

- Are certain chromosomes or chromosomal regions more prone to breaking and are some genomic features, e.g., the presence of specific repeats, a prerequisite for chromosomal fissions and fusions?

- How do novel centromeres emerge on newly generated chromosomes and what are their precursors on the ancestral chromosomes?

- What consequences do chromosome fissions and fusions have on the landscape of recombination and evolutionary processes that depend on it?

- Given extensive ancestral hybridisation in guenons, how does genomic architecture influence the exchange of genetic material? Which specific genomic features facilitate or hinder gene flow?

- What explains the difference in the rate of evolution, including rearrangements, across guenon chromosomes?.

The project relies on newly generated long-read PacBio HiFi and Hi-C data for up to 14 guenon species (8 are already available and another 6 are currently being produced). The focal species span the entire breadth of guenon chromosomal diversity, with representatives of all genera and species groups, including all major participants in ancient gene flow events and karyotypic extremes. We will also include publicly available genome assemblies from closely related primates. This is a computational project and it will be conducted in collaboration with researchers in the UK, Sweden, and France.

Candidate requirements

To be eligible for a PhD-student position, the applicant should have at least an upper 2.1 degree in evolutionary biology, bioinformatics, or a related field. In the British system, candidates who have successfully finished their undergraduate degree (Honours) are eligible to apply. The technical skills of the candidates will be evaluated based on the experience with large-scale sequencing analyses and bioinformatics proficiency. Experience with genome assembly will be an advantage. The ideal candidate will have a strong interest and documented knowledge in evolutionary biology, with a drive to understand processes involved in speciation. Perseverance and high intrinsic motivation are necessary to successfully complete a PhD project and overcome the unavoidable obstacles with data and analyses. You will be highly reliable, driven and well-organised, curious and willing to think outside the box, with the ability to quickly acquire new skills, and enjoy working both independently and as part of a team.

The position will begin Fall 2025. The deadlines for the DTPs are in early January, but supervisors have to propose candidates to be considered, particularly

for candidates applying from outside of the UK. Interested students should send a CV and a brief letter of interest to Dr. Katerina Guschanski (Katerina.Guschanski@ed.ac.uk). Please also reach out with informal questions.

E5 DTP (NERC), deadline January 6, 2025

<https://e4-dtp.ed.ac.uk/e5-dtp/supervisor-led-projects/project?item=1679> Darwin Trust, deadline January 3, 2025

<https://darwintrust.bio.ed.ac.uk/edinburgh> The University of Edinburgh is a charitable body, registered in Scotland,

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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>

UExeter UK AnimalCellTypeEvolution

PhD opportunity at the University of Exeter: deadline on 11 Dec! <https://www.exeter.ac.uk/study/funding/-award/?id=5337> Cell types are the fundamental building blocks of multicellular organisms and are central to understanding the biosciences. While many cell types, such as neurons and muscle cells, are shared across animal lineages, others appear specific to certain groups, like vertebrate immune cells or cnidarian cnidocytes. This raises important questions: How did this vast diversity of cell types emerge? Are new cell types frequently created during evolution, or are they conserved across groups? Answering these questions is crucial for understanding the evolution of cell types and, consequently, multicellular organisms.

Recent advances in single-cell technologies have enabled the detailed investigation of cell types within species, yet comparing these cell types across species remains challenging. The evolution of cell types is deeply tied to the genomic history of each gene and its expression patterns. However, there is a lack of methods that integrate single-cell analyses with comparative genomics comparisons to reveal these evolutionary relationships.

Our project aims to reconstruct the ancestral cell types and their evolution within an animal group by combining single-cell analysis with phylogenomic data. We will

develop innovative algorithms and data analysis tools that build upon established computational methods to map the evolutionary history of genes and their associated cell type expression patterns. To validate our hypotheses, we will generate single-cell data from key evolutionary nodes. Additionally, we will incorporate advanced artificial intelligence and machine learning techniques to classify genes based on shared expression profiles.

The tools and algorithms developed will allow us to trace the evolutionary trajectory of each cell type and reconstruct the ancestral cell types within the chosen animal group, Platyhelminthes. This group is particularly suitable due to its well-studied cell types and evolutionary history. Moreover, Platyhelminthes, such as planarians, possess stem cells that continuously differentiate into all cell types, providing a unique opportunity to profile the entire cell type repertoire from adult samples.

Understanding the evolution of cell types is a critical yet enigmatic area of study. This project will address fundamental questions, shedding light on cell type evolution in multicellular organisms and offering insights valuable to a broad range of fields, from developmental biology to evolutionary biology.

Jordi Paps <jordipaps@gmail.com>

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UExeter WildlifeDisease EcoEvo

We are excited to offer a 4-year SWBio DTP-funded PhD position at the University of Exeter Cornwall, UK to work on

Autoimmunity gone wild: understanding the interactive effects of environmental stress and genetic risk in the development of autoimmune disease in a wild rodent

Supervised by Dr Barbara Tschirren & Dr Sarah Richardson, University of Exeter; Dr Anna Long, University of Bristol & international project partners

Autoimmune diseases occur when the immune system mistakenly attacks own tissues. These conditions are prevalent among humans and non-human animals, and they cause significant morbidity and mortality. Autoimmune diseases often have a genetic basis, but environmental factors play a key role in their development too. To date, it is poorly understood how environmental

and genetic risk factors interact in shaping the development and severity of autoimmunity. This project will use a wild rodent (bank vole *Myodes glareolus*) that is susceptible to autoimmune diabetes, to tackle these open questions. Using a highly integrative and cross-disciplinary approach that incorporates characterisation of immunogenetic variation using next-generation sequencing, manipulation of ecologically relevant environmental stress in in vivo experiments, and state-of-the-art approaches from immunology, immunohistology and digital pathology to quantify the development and severity of autoimmunity over an animal's life course.

The project will provide fundamental insights into autoimmune disease ecology and evolution and the impact of environmental stress in modifying disease development.

Apply here: <https://tinyurl.com/42ypjpdtd> Both UK and international students are eligible.

Deadline: 11th Dec 2024, with project start in Sept 2025

For more information please contact Barbara Tschirren b.tschirren@exeter.ac.uk

“Tschirren, Barbara” <B.Tschirren@exeter.ac.uk>

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UGeorgia EvolutionaryBiology

Evolutionary Biologists at the University of Georgia welcome applicants for our PhD program to start Fall 2025. We are a vibrant group, studying a wide spectrum of research areas including Behavior, Conservation Biology, Ecological & Evolutionary Genetics, Evo-Devo, Genome Evolution, Phylogenetics, and Theory. Our research organisms span the tree of life including microbes, fungi, wild & crop plants, insects, fish, reptiles, and humans.

You can find out more about our research here: <https://ils.uga.edu/faculty/by-interdisciplinary-groups/evolution-ecology-faculty/> Apply by Dec. 1 here: <https://ils.uga.edu/>. Our group includes:

Dr. Jill Anderson: Evolutionary ecology of natural plant populations, especially in the context of global change

Dr. Justin Bahl: Ecology, evolution and epidemiology of RNA viruses

Dr. Douda Bensasson: Evolutionary and ecological

genomics of yeast

Dr. Casey Bergman: Genome evolution

Dr. Holly Bik: Ecology and Evolution of deep-sea species and invertebrate-associated microbiomes

Dr. Blake Billmyre: Evolution of virulence/genome evolution in fungal pathogens

Dr. Robin Buell: Evolution of tuber formation in angiosperms; evolution of specialized metabolism in angiosperms

Dr. John Burke: Evolution of crop plants, adaptation to abiotic stress, floral developmental evolution

Dr. Gaelen Burke: Function and evolution of beneficial insect microbes

Dr. Shumei Chang: Evolution of natural plant populations, plant mating systems

Dr. Megan DeMarche: Evolutionary ecology of natural plant populations

Dr. Kelly Dyer: Evolutionary genetics, genetic conflict, speciation in *Drosophila*

Dr. Spencer Fox: Ecological and evolutionary dynamics of co-circulating pathogens in humans

Dr. Mandev Gill: Statistical and computational methods for molecular evolution

Dr. Brendan Hunt: Evolutionary genetics of social insects

Dr. Jim Leebens-Mack: Comparative genomic investigations of evolutionary innovations including separate sexes, storage roots, and CAM photosynthesis

Dr. Liang Liu: Statistical phylogenetics

Dr. Douglas Menke: Evolution of vertebrate morphology

Dr. Tatum Mortimer: Evolution and population genomics of pathogenic bacteria

Dr. Kerry Oliver: Defensive symbiosis in insects

Dr. Benjamin Parrott: Mechanisms of life history evolution in fish and reptiles

Dr. Jaclyn Saunders: Evolution of marine microbes, focus on Cyanobacteria & marine microbial ecology

Dr. Kathrin Stanger-Hall: Phylogenetics and evolution of fireflies

Dr. Andrea Sweigart: Evolutionary genetics of natural plant populations, speciation

Dr. Kevin Vogel: Evolution of host-microbe interactions in insects

Dr. John Wares: Biogeography and gene flow in natural populations

Dr. Mike White: Sex chromosome evolution, genetic sex determination, and meiosis

Dr. Kaixiong Ye: Gene-environment interactions in human evolution and complex traits

We span several Departments at UGA, but the ILS program (<https://ils.uga.edu/>) allows students to rotate in and join any of our labs.

UGA is located in Athens, GA. We are 65 miles east of Atlanta, less than two hours from the southern Appalachian Mountains, and within easy driving distance of the Atlantic coast. Athens is a wonderful college town and is home to a thriving arts and music community.

Andrea L. Sweigart Professor Department of Genetics University of Georgia sweigart@uga.edu
<http://sweigartlab.genetics.uga.edu> Andrea Sweigart <sweigart@uga.edu>

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UGlasgow MitePopulationGenetics

We have a funded PhD project on population genetics of the sheep scab mite, *Psoroptes ovis*, using genomic data to understand the population structure of mites in UK populations in the context of ongoing control and eradication programs, and following these populations to assess the impact of these control methods on these populations.

It will be supervised by Jenni McIntyre (<https://www.gla.ac.uk/schools/bohvm/staff/-jennifermcintyre/>), Roz Laing (<https://www.gla.ac.uk/schools/bohvm/staff/rozlaing/>), Barbara Mable (<https://www.gla.ac.uk/schools/bohvm/staff/barbaramable/>) and James Cotton (<https://www.gla.ac.uk/schools/bohvm/staff/jamescotton/>) in the School of Biodiversity, One Health and Veterinary Medicine, at the University of Glasgow, and Stewart Burgess (<https://moredun.org.uk/people/staff-directory/-stewart-burgess>) at the Moredun Research Institute. More details at <https://tinyurl.com/a873cvb4>. The project will benefit from close links with a collaborative project on drug resistance in *Psoroptes* recently funded by the Biotechnology and Biological Sciences Research Council (BBSRC). The PhD

is fully funded at UK Research and Innovation (UKRI) rates by the NorthWestBio Doctoral Training Programme (<https://www.gla.ac.uk/postgraduate/-doctoraltraining/northwestbio/>).

Applications are due by the 6th January, 2025, with instructions at <https://tinyurl.com/hxjh7fn7>. Barbara Mable <Barbara.Mable@glasgow.ac.uk>

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UGroningen GenomicsPolygenicAdaptation

PHD POSITION IN GENOMICS OF POLYGENIC ADAPTATION

Groningen Institute for Evolutionary Life Sciences (GEFLIES), Univ. of Groningen, The Netherlands

A fully-funded PhD position is available in the Chan Lab to work on projects related to tracking selection response in pedigrees at the haplotype level, with the aim of understanding the how rapid polygenic selection in a population genetics and quantitative genetics framework, with the possibility of a double-degree option with Prof. David FIELD at Macquarie University, Sydney, Australia (more below).

We're looking for a PhD student with a population and/or statistical genetics background to take on the analysis of a number of large population datasets. Our group has recently developed haplotagging, a "linked-read" sequencing technique that extends Illumina sequencing with haplotype long-read information. We have a number of datasets ranging from mice (both artificially selected like "Longshanks" mice and wild island mice), humans, birds, flowering plants, fishes and more. We are interested in detecting the signatures of (polygenic) selection response and developing and using new concepts, e.g., large-scale ancestral recombination graphs (ARGs) in characterising the selected loci and haplotypes.

You will work in close coordination with Prof. Nick BARTON (IST Austria) and/or Prof. Gerton LUNTER (Univ. Medical Centre Groningen). Our overarching goal is to link theory with empirical genomic data. The ideal candidates will have a strong background in bioinformatics, including experience with genomic data analysis and strong quantitative and programming skills.

Further background in population genetics and modelling will be an advantage.

Among the projects on offer, there is an attractive option to pursue a cotutelle/double-degree together with our partner laboratories and/or Universities such as with Prof. David FIELD at Macquarie University in Sydney, Australia.

You will enjoy excellent computational and sequencing support, as well as the opportunity to design and conduct functional tests in mice together with our wet-bench team members.

GELIFES at the University of Groningen, the Netherlands is a unique institute dedicated to evolutionary biology. Its members' research covers the span from ecosystems through organismal biology to neurobehaviour. Our group members enjoy close interactions with the labs of Felicity JONES (molecular genetics of adaptations in sticklebacks) and Leo BEUKEBOOM (sex determination systems). The Chan Lab is embedded in a network of researchers with multiple ERC-funded projects from within GELIFES, in Groningen and beyond. We have access to state-of-the-art research and computational facilities. All seminars and communications are in English.

Groningen is vibrant and lively; it is the youngest city in the Netherlands. It ranks among the highest for living standards, happiness and student satisfaction.

For informal enquiries and applications (cover letter, CV, and two reference contacts), please email frank.chan@rug.nl. Consideration of applications will begin on 31 Dec, 2024 and remain open until the position is filled, with a target start date in March 2025.

Frank Chan Associate Professor in Quantitative Genetics and Genomics Groningen Institute for Evolutionary Life Sciences (GELIFES) Linnaeusborg Nijenborgh 7 9747AG Groningen The Netherlands

Frank Chan <frank.chan@rug.nl>

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UHawaii WastewaterMicrobialEvolution

Position Overview:

The Pipes Lab (<https://pipes-lab.pbrc.hawaii.edu>) at the Pacific Biosciences Research Center (PBRC) at the University of Hawai'i at Manoa is seeking a highly motivated Ph.D. student to join our team. The successful candidate will be accepted through the Department of Information and Computer Sciences (ICS) at the University of Hawai'i at Manoa. This position will focus on developing computational and statistical methods to analyze large-scale sequencing data, aiming to uncover evolutionary patterns in environmental and public health studies, including microbial evolution in wastewater surveillance and microbial ecology.

Program Details:

The student will be enrolled in the PhD program in the ICS Department at the University of Hawai'i at Manoa. The application deadline to start in the 2025 fall semester is January 15, 2025.

Funding:

The position is fully funded through a Research Assistantship, including a stipend at a competitive rate and tuition coverage for the duration of the Ph.D. program. Additional funding opportunities may be available through departmental Teaching Assistantships.

Minimum Qualifications Required (by the time of start date):

- Bachelor's or Master's degree. Applicants with Bachelor's degrees in non-STEM fields (other than computer science, engineering, mathematics, or a natural science) should demonstrate significant programming experience through coursework or employment for their application to be competitive.
- Proficiency in programming languages such as C/C++, Python, or R
- Strong communication skills, both written and verbal
- Ability to work independently and as part of a collaborative team

For more information on minimum requirements see ICS' prospective Ph.D. Students page: <https://www.ics.hawaii.edu/academics/graduate-programs/phd/prospective-phd-students> Preferred Qualifications:

- Experience with the development of computational methods
- Experience working with Next-Generation

Sequencing data, and/or environmental data - Expertise in phylogenetic methods and evolutionary modeling

Application Process:

Interested applicants should send the following materials to Lenore Pipes with the subject line “PhD application” to lpipes@hawaii.edu:

- One-page cover letter detailing your interest in the position - CV - Unofficial transcripts - Writing sample (if possible) - Contact information for three professional references

Informal inquiries prior to application are welcome and can be directed to Lenore Pipes (lpipes@hawaii.edu).

The University of Hawai'i is an equal opportunity/affirmative action institution and is committed to a policy of nondiscrimination on the basis of race, sex, gender identity and expression, age, religion, color, national origin, ancestry, citizenship, disability, genetic information, marital status, breastfeeding, income assignment for child support, arrest and court record (except as permissible under State law), sexual orientation, domestic or sexual violence victim status, national guard absence, or status as a covered veteran. For more information about our non-discrimination policies, please visit <https://manoa.hawaii.edu/policies/m1.000general/index.html>. Lenore Pipes <lpipes@hawaii.edu>

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UKentucky EvolutionaryEntomology

The Department of Entomology at the University of Kentucky is inviting applications for Graduate Research Assistants (MS and PhD) to join our program. Our vibrant graduate program features cutting-edge research in diverse areas of entomology, and our lab groups fall under one or more of the following categories: 1) Insect Molecular Biology, Physiology, and Genetics, 2) Insect Behavior, Ecology, Evolution, and Systematics, and 3) Pest Management and Applied Entomology. For a complete list of faculty and their research interests, please visit: <https://entomology.ca.uky.edu/-directory/faculty> Students with all interests related to entomology are welcome to apply, and the following research areas have been particular areas of growth in recent years: 1) urban entomology, 2) insect genomics, 3) insect behavior and neurobiology, 4) insect ecology

agroecology, 5) social insects, 6) forest entomology, 7) insect physiology and molecular biology, 8) insect symbionts. Students who are interested in applying are encouraged to reach out to faculty of interest and discuss possible openings. Join our award-winning programs to pursue innovative research addressing complex issues and challenges in entomology!

To apply: For information and instructions on how to apply, please visit: <https://entomology.ca.uky.edu/-graduate-program-how-apply> About: The Department of Entomology is located in the Martin-Gatton College of Food, Agriculture and Environment at the University of Kentucky. As a land-grant institution, the University of Kentucky is committed to providing high quality research, education, and extension to the Commonwealth of Kentucky and beyond. With 19 faculty and approximately 50 graduate students, we are one of the largest entomology programs in the nation and pride ourselves in training high-quality students for a variety of career tracks. For more information on our graduate program, please visit: <https://entomology.ca.uky.edu/academics/graduate-program> “Teets, Nicholas M.” <n.teets@uky.edu>

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ULausanne EvolutionBeeGutMicrobiome

A fully funded PhD position is available the Engel lab at University of Lausanne (Suisse, <https://engelbeelab.com/>) The prospective student will use shotgun metagenomics (and other approaches) to study gut microbiota ecology and evolution across a wide range of social bee species. Check out the full job description here: <https://shorturl.at/swHf1> Florent Mazel Research Manager Dpt. of Fundamental Microbiology Univ. of Lausanne & NCCR Microbiomes Biophore Building CH-1015 Lausanne Switzerland

<https://florentmazel.weebly.com/> <https://nccr-microbiomes.ch/> Florent Mazel
<florent.mazel@unil.ch>

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ULeicester eDNA monitoring

Graduate position: Development of eDNA approaches for monitoring ecosystems by citizen scientists Host: University of Leicester, UK Project investigator: Dr Celia A May (cam5@le.ac.uk) For further details of project and how to apply: <https://centa.ac.uk/-studentship/2025-111-development-of-edna-approaches-for-monitoring-ecosystems-by-citizen-scientists/> Applications must be submitted by 23:59 GMT on Wednesday 8th January 2025.

Dr Celia A May

Department of Genetics, Genomics & Cancer Sciences
College of Life Sciences

University of Leicester | University Road | Leicester | LE1 7RH | UK

t: +44 (0)116 252 3032

e: cam5@leicester.ac.uk

cam5@leicester.ac.uk

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UMadrid MicrobialEvolution

PhD Scholarship in Computational Biology at the Polytechnic University of Madrid

We are looking for an outstanding, enthusiastic candidate to apply for the upcoming PhD IN-PhINIT scholarship call 2025 granted by laCaixa Foundation (<https://lacaixafoundation.org/en/doctoral-inphinit-fellowships-incoming-call>). This prestigious grant supports early-career researchers with outstanding academic records who wish to pursue a doctorate at certified research centres of excellence in Spain or Portugal. The successful candidate will use advanced experimental and/or computational approaches to study how mutation and recombination biases influence evolution in plant-associated bacteria, addressing both fundamental and applied questions. Based on the candidate's background and interests, the proposal may focus on one of

two primary areas:

- Experimental Evolution: Employing multiplexed genome engineering and bulk competition assays to analyze the fitness impacts of new genetic variations.
- Computational Evolution: Using comparative genomics and computational modeling to explore the role of mutation and recombination biases on the predictability of evolutionary outcomes.

We are seeking a candidate who can work independently and contribute actively to shaping the research direction. We will offer significant career development opportunities, including undergrad student supervision, teaching, and presenting at international conferences. The PhD candidate will be based at the Evolutionary Systems Genetics of Microbes lab at the Centre for Plant Biotechnology and Genomics (CBGP), a joint research center of the Polytechnic University of Madrid (UPM) and the Spanish National Research Council (CSIC). The scholarship is a 4-year position that includes a competitive salary and full benefits under the Spanish National Social Security System, offering generous leave policies along with comprehensive health, unemployment, and retirement coverage. Additionally, it provides a budget for professional development (i.e., training, tuition fees, attending conferences). The call closes on January 23, 2025. Shortlisting results and interview invitations will be announced on April 11, 2025, with selection interviews scheduled for May 28 and 29, 2025. Final results will be released on June 6, 2025. The start date is flexible but preferably no later than January 2026.

Eligibility and Requirements for a PhD INPhINIT scholarship Support:

- Experience: candidates must not have carried out more than four years of research activity before the closing date of the call. At the time of recruitment, candidates must have completed the studies that allow them to enrol in an official PhD programme in Spain/Portugal (MSc level).
- Mobility: candidates must not have resided or carried out their main activity (work, studies, etc.) in Spain/Portugal for more than twelve months in the three years immediately preceding the closing date of the call.
- Level of English: candidates must accredit their proficiency in the English language by submitting any of the certificates mentioned in the guidelines.
- Qualifications: An excellent academic record is essential, first class honours or its equivalent. Peer-reviewed publications, international mobility, conference presentations, and outreach experience are desirable.

How to Apply: Please send a single PDF containing a motivation letter and CV to Alex Couce (a.couce@upm.es). Shortlisted candidates will be asked to provide contact information for two references. In-

clude “INPhINIT.MicrobialEvolution” in the subject line.

Dr Alejandro Couce Evolutionary Systems Genetics of Microbes Lab Centre for Plant Biotechnology and Genomics (CBGP, UPM-INIA) Polytechnic University of Madrid, Spain

phone: +34 910679195 | website:
short.upm.es/EvolSysGen

A Couce <a.couce@upm.es>

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ing@mcmaster.ca)

UNebraska Lincoln AvianGenomics

Ph.D. Assistantship: Conservation Genomics in Grass-
land Avian Systems

We are seeking a candidate for Doctor of Philosophy assistantship at the University of Nebraska-Lincoln. The students will develop large multi-locus genomic datasets to conduct analyses to evaluate the influence of grass-land conservation efforts, specifically the Conservation Reserve Program (CRP), on greater prairie-chicken populations in Kansas and Nebraska. The US Department of Agriculture’s CRP is considered the most effective large-scale conservation effort to increase the utility of working landscapes for wildlife. As with many grassland birds, greater prairie chickens are in decline with Kansas and Nebraska supporting the majority of extant populations. The project will produce actionable science with the results of this multi-faceted study informing CRP enrollment as well as Greater Prairie Chicken management in the region. The successful candidate will be involved in field (capture, monitoring of transmitted individuals and nests, and vegetation surveys) and laboratory (genomic data collection) components. 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: January - August 2025 (flexible depending on applicant)

Salary: \$30,000/year graduate 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 “Prairie-chicken GRA last name”. If possible, please include a writing example (published manuscript, official report, etc). Review of applications will begin immediately and continue until a suitable candidate is identified.

UNL and NECFWRU values equity, diversity, and inclusion.

Sarah Sonsthagen ssonsthagen2@unl.edu

Sarah Sonsthagen <ssonsthagen2@unl.edu>

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ing@mcmaster.ca)

ssonsthagen2@unl.edu

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ing@mcmaster.ca)

UOxford BdelloidEvoAntimicrobials

Competitive funded PhD Position available in Department of Biology and Department of Pharmacology, University of Oxford

Title: Exploring fifty million years of antimicrobial ‘crowd-sourcing’ by bdelloid rotifers

Supervisors: Prof Tim Barraclough, Dr Chris Wilson (Department of Biology), Dr Thomas Lanyon-Hogg (Pharmacology)

Via successful competition for departmental scholarships or through a UKRI landscape award to cover stipend and home or international fees

Organisms risk being overwhelmed by rapidly evolving natural enemies, unless they generate new resistance variants quickly enough. Typically, animals and plants use sex to create new resistance genotypes. We recently discovered a case that challenges this paradigm. Bdelloid rotifers encode thousands of horizontally acquired genes domesticated from bacteria, fungi and plants. Hundreds of these alien genes are upregulated in response to

attack by fungal pathogens. The genes match several unprecedented functions in animals, including giant genes predicted to synthesise bioactive molecules such as antibiotics (Nowell et al. 2024 <https://www.nature.com/articles/s41467-024-49919-1>).

This project will investigate the extraordinary possibility that bdelloid rotifers are stealing biosynthetic gene clusters from microbes on an unimagined scale, repurposing them to synthesise antimicrobial secondary metabolites normally inaccessible to animals, and re-deploying these compounds against their own natural enemies. Aims will include to characterise the compounds, how they might have changed during domestication by bdelloids, and investigate mechanisms for generating variability in bdelloid populations. This unusual animal system could provide a new source of antimicrobials that function safely in animal cells, as well as insights into the genomic steps needed to repurpose prokaryotic machinery to defend animals.

The project will explore a new approach for antimicrobial discovery by exploiting a non-model clade that has 'hoovered up' genes from the environment - an analogue of artificial heterologous genetic engineering running over millions of years. Tailored to the interests of the student, the project will comprise a blend of bioinformatic analyses of genome and transcriptome data, investigation of how putative compounds changed during the domestication process, lab work to characterise the chemicals being produced and their activity against microbes, exploring how bdelloids generate variability in their chemical defences, or optimising potential use of the system to develop new antimicrobials.

Funding: Funding is available competitively either through DPhil in Biology graduate scholarships or the new BBSRC-NERC Interdisciplinary Life and Environmental Science Landscape Award (ILES LA).

Eligibility: Home or international students. For full entry requirements and eligibility information, please see <https://www.ox.ac.uk/admissions/graduate/courses/dphil-biology> How to apply: The deadline for applications for this project entry is midday 5th January 2024, selecting both DPhil in Biology and ILES LA as course options. You can find the admissions portal and further information about eligibility and the DPhil in Biology Programme at <https://www.ox.ac.uk/admissions/graduate/courses/dphil-biology> Queries and advice on applying: Prof Tim Barraclough tim.barraclough@biology.ox.ac.uk

Prof Tim Barraclough Professor of Evolutionary Biology, Department of Biology, University of Oxford, Tutorial Fellow, Magdalen College, <https://www.biology.ox.ac.uk/people/professor-tim->

barraclough The Evolutionary Biology of Species Timothy G. Barraclough Available from Oxford University Press: <http://ukcatalogue.oup.com/product/9780198749752.do> Timothy Barraclough <tim.barraclough@biology.ox.ac.uk>

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UppsalaU Evolutionary Genomics

A PhD student position in evolutionary genomics, with specific focus on biology and evolution of lichen photobionts is now available within the Evolutionary Biology Program at IEG, Uppsala University, Sweden. For more details see below:

<https://www.uu.se/en/about-uu/join-us/jobs-and-vacancies/job-details?query=771997> Ioana Onut Brîi $\frac{1}{2}$ nnstrii $\frac{1}{2}$ m

Researcher, Evolutionary Biology Program Department of Ecology and Genetics (IEG) Norbyvägen $\frac{1}{2}$ gen 18D,752 36 Uppsala, Sweden Cell: +46(0)767-920454 Email: ioana.brannstrom@ebc.uu.se

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UQuebecOutaouais InvertebrateDerivedDNA

M.Sc. position in molecular ecology

Using invertebrates derived DNA (iDNA) to sample vertebrates diversity

Several studies conducted in tropical ecosystems have shown that sequencing DNA fragments extracted from invertebrates' meals can sample part of vertebrates diversity of a defined area. This approach has never been tested in temperate ecosystems, where vertebrates biomass and diversity is lower. Furthermore, the relationship between the biodiversity sampled via iDNA sequencing and the actual biodiversity of an ecosystem

remains poorly understood. The candidate will work on a research project aiming to use iDNA sequencing to sample terrestrial vertebrates in a Canadian deciduous forest. The candidate will (1) assess the diversity of several vertebrates (large and micromammals, birds, anoures) of a restricted region using traditional methods and (2) compare it to iDNA sequencing results, extracted from invertebrates captured concomitantly in the same region. Fieldwork will take place in the forests around Mount Kaaikop, in the Laurentides (Qu?bec, Canada). This project will assess the reliability and reproducibility of sampling vertebrates diversity using iDNA sequencing and evaluate the pertinence of this approach over larger geographical scales.

The candidate will:

- *sample vertebrate diversity at Mount Kaaikop using acoustic recorders and camera traps
- *sample flying invertebrates (hematophagous and carnivorous) using passive traps
- *extract iDNA and analyse sequencing results
- *compare both approaches, i.e., traditional and iDNA inventories

The candidate will integrate the Environmental and Ecological Genomics lab at ISFORT (Institut des sciences de la for?t temp?re, Ripon, QC, Canada), affiliated to the Universit? du Qu?bec en Outaouais (Gatineau, QC, Canada), joining a team of several M.Sc. and Ph.D. students, a postdoc and a technician. The candidate will learn using several biodiversity sampling techniques, in addition to environmental data handling, processing and statistical analyses. Additionally, the candidate will use advanced molecular biology techniques and learn how to analyze metabarcoding data. English speakers are welcome, but the working and living environments are mainly in French. The candidate will have to apply officially apply to the?Universit? du Qu?bec en Outaouais M.SC Biology program: <https://etudier.uqo.ca/programmes/3440>

This position is founded and conducted in collaboration with Coalition Conservation Mont Kaaikop and the MITACS organization. You can find more details on this project here (in French): <https://www.youtube.com/watch?v=j00Q5q0Ubd4> General Conditions:

- * MITACS grant of 48 month
- * Starting in summer or autumn 2025
- * If starting in autumn, possibility to be hired as a research assistant during summer
- * Grant : 24k\$CAD /year
- * Driver's license mandatory

*Fieldwork: Mount Kaaikop (Lantier, QC, Canada). Housing is covered by the research grant.

*Labwork and data analyses: Institut des sciences de la for?t temp?re, Ripon, QC, Canada

Please submit your application (CV, official transcript of records) to Pr. Yann Surget-Groba (yann.surget-groba@uqo.ca) before the 13th of December 2024

Baptiste Postaire <postaireb@gmail.com>

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USheffield Two Speciation Colour

Funded PhD opportunity at the University of Sheffield: deadline 8 Jan 2025 <https://www.findaphd.com/search/-ProjectDetails.aspx?PJID=6780> Understanding the link between population-level processes and broad-scale biodiversity patterns

Project Overview: Rates of species formation vary dramatically across the tree of life and contribute to profound differences in species richness among clades, regions and through time. However, our understanding of the factors promoting or constraining speciation rates over evolutionary time is still poor, with many longstanding hypotheses yet to be conclusively tested. One prominent suggestion is that taxa predisposed to forming isolated, persistent populations more readily should also form new species more readily and thus have higher long-term speciation rates. The overarching aim of this PhD project is to test how processes of population isolation and persistence are connected to speciation rates and biodiversity patterns across the Tree of Life. Specific objectives are to (i) characterise rates of population isolation and persistence rates across a broad range of animal taxa, (ii) investigate the ecological, environmental and evolutionary factors driving variation among taxa in these rates, (iii) test if variation in population-level rates predicts differences in speciation and species richness patterns among taxa and regions.

Supervisors: Dr Chris Cooney (Sheffield), Dr Nicola Nadeau (Sheffield), Dr Gavin Thomas (Sheffield), Prof Kanchon Dasmahapatra (York)

Eligibility and Funding Information: Competition-funded via NERC ACCE+ DLA programme starting from October 2025. UK or International students eligible to apply.

UKRI provide the following funding for 3.5 years: - Stipend (2024/25 UKRI rate $\dot{i}_i \frac{1}{2} 19,237$) - Tuition Fees at UK fee rate (2024/25 rate $\dot{i}_i \frac{1}{2} 4,786$) - Research support and training grant (RTSG)

Note - Successful international candidates do not need to find any additional funding for fees.

Closing date for applications is Wednesday 8th January 2025 <https://www.findaphd.com/search/-ProjectDetails.aspx?PJID=6780> NERC Research Fellow School of Biosciences University of Sheffield www.cooneylab.co.uk —

Funded PhD opportunity at the University of Sheffield: deadline 6 Jan 2025 <https://www.findaphd.com/search/-ProjectDetails.aspx?PJID=7713> Using Artificial Intelligence to Reveal the Signature of Development in Organismal Colour Pattern Designs

Project Overview: Animal colour patterns arise as a result of developmental processes governing the distribution, differentiation and interaction of colour producing mechanisms on the surface of an organism. Traditional approaches for studying the role of development in colouration typically make use of genetic and experimental approaches, but recent advances in image analysis and artificial intelligence (AI) present a novel opportunity test for the signature of development on colour patterns at larger, more comprehensive scales. This project will make use of these new approaches to explore the developmental pathways shaping colour pattern design in multiple animal groups (e.g. birds, butterflies, fish, mammals), thereby providing insight into the factors promoting and constraining colour pattern diversity across the animal tree of life.

Supervisors: Dr Chris Cooney (Sheffield), Dr Nicola Nadeau (Sheffield), Dr Gavin Thomas (Sheffield), Dr Nina Dethlefs (Hull)

Eligibility and Funding Information: Competition-funded via BBSRC Yorkshire Bioscience Doctoral Training Programme starting from October 2025. UK or International students eligible to apply.

Closing date for applications is Monday 6th January 2025 <https://www.findaphd.com/search/-ProjectDetails.aspx?PJID=7713> NERC Research Fellow School of Biosciences University of Sheffield www.cooneylab.co.uk Chris Cooney <c.cooney@sheffield.ac.uk>

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

UTexasArlington EvoBiology

The Department of Biology at the University of Texas at Arlington (UTA) is recruiting doctoral students for Fall 2025! All PhD students are guaranteed a full five years of funding, including salary, tuition, and healthcare.

Our department spans a wide range of cutting-edge topics and techniques in biological research, with four major research areas: genomics, microbiology, ecology and evolution, and cellular, molecular and developmental biology. Our PhD program focuses on training students to apply sophisticated quantitative techniques to solve research problems in these areas, giving our graduates a competitive advantage for careers in industry, government, or academia.

Applicants can either apply to single labs (direct entry), or apply to enter the rotation program, which gives students the opportunity to conduct research in three labs before deciding which to join. Applications are due on December 1, 2024. Applicants should contact faculty and identify potential advisors before applying - you can begin by consulting the list of recruiting labs below!

Recruiting professors include:

* Esther Betran: The Betran Lab is interested in novelty in the genomes. We focus on the origin of new genes and their functions. We try to understand their role in genome evolution, adaptation and species differences. The model organism we use for this is *Drosophila* and the current projects are on duplicated genes and genes “domesticated” from transposable elements. *

* Cara Boutte: The Boutte lab studies the molecular mechanisms of expansion and remodeling of the mycobacterial cell wall. In addition, we study how cell wall metabolism is regulated, and how that regulation contributes to antibiotic resistance and antibiotic tolerance. *

* JC Buckner: The IDER lab largely focuses on understanding the evolutionary history of terrestrial tetrapods. We integrate genetics, morphometrics and paleontological data to understand how biodiversity is generated, maintained and lost through time. Our work typically starts with molecular systematics - building comprehensive, time-calibrated phylogenies that reveal species relationships as well as the tempo and mode of diversification. From there, we explore trait evolution and the

evolution of adaptive genetic loci in the context of evolutionary ecology. Some of our current projects include signals of genetic quality and mate choice in squirrel monkeys, evolutionary immunogenetics in California newts, and the genetic basis of convergent phenotypes in waterfowl. Please visit our website, iderlab.org, to learn more. *

* Todd Castoe: Population genomics of speciation to link theory with empirical data; Population genomics of schistomiasis transmission and the impact of control measures on natural selection. Genome-wide association studies to link traits with selection in the context of speciation and hybridization. *

* Woo-Suk Chang: The Chang Lab focuses on soil microbiomes related to climate change and probiotics-related human gut microbiomes. For soil microbiomes, the lab collaborates with farmers to implement climate-smart practices aimed at reducing greenhouse gas emissions, particularly in soybean fields. In the area of human gut microbiomes, the lab studies the effects of fermented soybean products on gut health and microbiome composition. *

* Jeff Demuth: The Demuth Lab studies the evolution of sex chromosomes and molecular genetics of behavior, primarily using beetles as a model system. *

* Shane DuBay: We use natural history collections to understand environmental change and its diverse impacts. Work in the lab focuses on urban ecology and evolution, environmental health, and environmental justice. *

* Theodora Koromila: The Koromila Lab studies the regulatory mechanisms that drive cell identity over time, using cutting-edge genomics and super-resolution live imaging techniques. *

* Daniela Palmer: We are interested in understanding the genetic underpinnings of biodiversity, especially in sex-related traits. We study the evolution of sex chromosomes and other parts of the genome that contribute to sex-specific adaptation. Our research focuses on a group of insects known as treehoppers that show fascinating diversity in morphology, behavior, and beyond. *

* Alison Ravenscraft: Our ultimate goal is to understand how the bacterial symbionts of insects impact ecosystem-level processes such as plant consumption and pollination. We are currently focused on understanding when and how gut microbiota detoxify both natural plant defenses and made-made pesticides for herbivorous insects (beetles, grasshoppers and caterpillars). *

* Alicia Rogers: The Rogers Lab seeks to understand how small RNA-mediated gene regulation maintains

robust execution of cellular and

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UZH Evolution Freshwater Fish

“Open PhD position on Neotropical Fish Palaeontology and Systematics

We invite applications for a PhD position at the Evolutionary Morphology and Palaeobiology of Vertebrates group in the Department of Palaeontology of the University of Zurich. The PhD candidate will work on a Swiss National Science Foundation supported project in the research group around Prof. Dr. Marcelo Sánchez-Villagra (www.msanchezlab.net). The PhD concerns the fossil record and evolutionary history of freshwater fishes, particularly the catfish and cichlid clades. It will involve taxonomic and systematic work, as well as studies of faunal dynamics in deep time. The comparative anatomical work will involve CT- and surface scanning for 3D modelling; there are fieldwork opportunities in South America associated with the project.

The ideal candidate will be a highly motivated student of Life- or Earth Sciences with a zoological or palaeontological background. Excellent writing skills in English are required. Knowledge of at least the basics of systematics, vertebrate anatomy and statistics are much desired. The prospective student is expected to have received a master's degree or equivalent by the start of the PhD and will hopefully have published or be about to publish on her/his Masters. The student is to enrol in the evolutionary biology graduate programme (www.evobio.uzh.ch/en.html).

The University of Zurich is one of the top research institutions in Europe and offers an exceptional academic environment for research and study. The Department of Palaeontology has state-of-the-art research facilities in an international and stimulating academic environment. The Natural History Museum of the University is closely tied to our department; it offers opportunities to participate and develop skills in scientific outreach activities. The city of Zurich, in close proximity to the Alps, with a lake and river in which to swim in the summer, offers conditions for an excellent quality of

life. We offer a vibrant, collaborative work environment and high-quality supervision. All former PhD students graduated with excellent publication records and almost all have consecutively moved on to postdoc positions at renowned academic institutions. Our group has hosted PhD students from many countries across the world.

Those interested should consult our website for publications and current research projects. Find here some key publications related to the project: Albert JS et al. 2020. Diversification of Neotropical freshwater fishes. *Annual Review of Ecology, Evolution, and Systematics* 51:27-53 Ballen GA et al. 2022. A fossil fish assemblage from the middle Miocene of the Cocinetas Basin, northern Colombia. *Papers in Palaeontology* 8: e1405. Carrillo-Briceñó JD et al. 2021a. A historical vertebrate collection from the Middle Miocene of the Peruvian Amazon. *Swiss Journal of Palaeontology* 140:26.

To apply, please send a letter of motivation including information on previous scientific work and publications if available (maximum of 2 pages), a CV, and contact details of two referees. Please ensure that all those parts are combined into a single PDF-file. Together with an electronic copy of the Masters-thesis, please send your application to:

Alexandra Wegmann (alexandra.wegmann@uzh.ch).

Deadline for applications is 17th January 2025, but applications will be considered until the position is filled. Applicants should be prepared to be interviewed in February 2025 and start in the Spring (northern Hemisphere) of 2025. If you have further questions, do not hesitate to contact us (www.msanchezlab.net; m.sanchez@pim.uzh.ch).

Kind regards

Alexandra

Alexandra Wegmann <alexandra.wegmann@uzh.ch>

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WashingtonStateU PlantMicrobeSymbiosis

The Porter Lab at Washington State University, Vancouver seeks a PhD student for Fall, 2025. We study how mutualisms-cooperative interactions between species-impact evolutionary processes and ecological dynamics. We work with plants and their beneficial microbial asso-

ciates to test fundamental theory about cooperative interactions. Our research integrates evolutionary ecology, genomics, and quantitative genetics, in lab, greenhouse, and field experiments.

RESEARCH TOPICS. We use the symbiosis between nitrogen-fixing rhizobia bacteria and their plant hosts as a model system. We are investigating, (1) How do wild microbial symbioses adapt to variable and changing environments? Transmissible mobile genetic elements enable rhizobia to adapt to stresses such as heavy metal in soil (<https://doi.org/10.1073/pnas.2311127121>). Other mobile genetic islands can enable rhizobia to adapt to a symbiotic lifestyle with legumes, while prophage can parasitize, but also protect, rhizobia from other phage. With collaborators, we are investigating evolutionary dynamics for these adaptive mobile elements, as well as their ecological and agricultural impacts. We also ask, (2) How do host plants control and optimize mutualistic interactions with multiple symbionts? Legumes winnow symbionts to preferentially interact with superior rhizobia partners (<https://doi.org/10.1038/s41564-024-01762-2>). With collaborators, we are using experiments to develop models of optimal carbon allocation among multiple rhizobia symbionts. We also have an interest in, (3) How has crop domestication impacted plant-microbe symbiosis? Some crops may have abandoned beneficial microbial symbionts, while others may have evolved to enhance these mutualisms (<https://doi.org/10.1016/j.tree.2020.01.006>). We take an evolutionary perspective to enhance symbiotic nitrogen fixation, a key pillar of sustainable agriculture.

LAB DESCRIPTION. The Porter lab (<https://labs.wsu.edu/stephanie-porter/>) is housed in the School of Biological Sciences at Washington State University, Vancouver. Located on a beautiful 351-acre campus across the Columbia River from Portland, Oregon, WSU Vancouver offers an excellent quality of life. Recognized by *Insight Into Diversity Magazine* as a top college for diversity, WSUV and this collaborative project team commit to inclusive excellence by advancing equity and diversity.

HOW TO APPLY. A BS or BA in a relevant scientific field is required. Tuition, benefits, and stipend will be funded by a combination of research and teaching assistantships and guaranteed for five years. If interested, please email an informal inquiry to stephanie.porter@wsu.edu by December 7th, 2024. Later inquiries will be considered but leave less time to coordinate a time to meet. Please include the subject header, "Plant Microbe PhD 2025", a CV or resume that lists relevant experience and coursework, a copy of your academic transcript (unofficial is fine), and a short statement that explains your interest in the position.

The steps for formally applying to our graduate program for a Biology or Plant Biology PhD are described here: <https://cas.vancouver.wsu.edu/science-graduate-programs/biology-and-plant-biology-ms-and-phd>. Formal applications received by WSUV before January 10th, 2020 will be given full consideration, applications can still be considered after this date.

“Porter, Stephanie S” <stephanie.porter@wsu.edu>

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WesternConnecticutStateU MarineCoevolution

The Pinou Lab (<https://sites.wcsu.edu/pinout/>) at Western Connecticut State University (WCSU) in Danbury Connecticut is seeking a MS student to work on co-evolutionary relationships of sea turtle epibionts and hosts. The NSF funded graduate student should be prepared to spend more than half their time at the Yale Peabody Museum of Natural History where they will concentrate on sorting, identifying and photo-documenting marine turtle epibionts, primarily barnacle crustaceans. The successful candidate should have demonstrated coursework or field experience in general invertebrate zoology, and is interested in museum curation. The student will be expected to pursue a thesis focusing on barnacles and their role as epibionts. The interested candidate should be able to commute between Danbury and New Haven at least once a week, and funds to cover this commute will be provided in addition to a research stipend. Interested applicants are encouraged to email Dr. Pinou by December 15th outlining research experience and names of 3 references along with your CV. All interested candidates are encouraged to apply to the WCSU MS IB program by December 15th: <https://www.wcsu.edu/biology-msbiodiversity/>. Theodora Pinou, Professor & Chair of Biology Programs H. G. Dowling Herpetological Collection Faculty Curator Department of Biology Western Connecticut State University 181 White Street, Danbury CT 06810 E-mail: Pinout@wcsu.edu Phone: 203-837-8793 Fax: 203-837-8875 <https://sites.wcsu.edu/pinout/> Theodora Pinou <pinout@wcsu.edu>

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WesternWashingtonU EvolutionaryBiology

MS Degree Opportunities in Evolutionary Biology at Western Washington University

The Biology Department at Western Washington University has openings for evolutionary biology graduate students starting Fall 2025. Many graduate students in the Biology Department are supported by teaching assistantships, which include a stipend and tuition waiver. WWU is located in Bellingham, WA, a coastal city north of Seattle at the base of Mt. Baker in the northwestern part of the state. Interested students should contact potential advisors prior to submitting an application.

APPLICATION DUE DATE: Feb. 1, 2025

You can find more information with the following resources: - The Biology Dept: <https://biology.wwu.edu/biology-graduate-program> - The WWU Graduate School: http://www.wwu.edu/gradschool/App_Reqs_Deadlines.shtml; - Teaching assistant compensation: <https://gradschool.wwu.edu/ta-compensation> and other information: <https://gradschool.wwu.edu/teaching-assistantships> - Dr. Shawn Arellano, Biology Graduate Program Advisor: BiologGradProgram@wwu.edu.

Potential Advisors:

Jim Cooper: The Cooper lab is currently looking for students interested in working on the evolution and development of fish feeding mechanics. This research integrates experimental studies of development with evolutionary studies of form, function, and feeding ecology. Applicants should have a record of strong academic performance. Previous research experience is preferred, but not required. Inquiries should include a transcript (unofficial is fine) and a statement of interest that explains why our lab is a good fit for you. <https://biology.wwu.edu/people/cooperw5> Craig Moyer: My interests are marine microbiology and geomicrobiology focusing on molecular approaches for exploring microbial diversity, community structure and ecological interactions. Presently, my lab and I are focused on the study of iron-oxidizing Zetaproteobacteria acting as the ecosystem engineers in microbial mats found at strong redox boundaries, including seep, spring and vent habitats. We are also examining the evolutionary divergence of surface and deep subsurface Zetaproteobacteria in hy-

drothermal systems. <https://biology.wvu.edu/people/cmoyer> Dan Pollard: Evolution of gene expression and cellular aging in yeast. The Pollard lab is a collaborative research group studying the natural variation of cell biological processes with a focus on regulation of gene expression and cellular aging. We are motivated by understanding how cells vary and evolve but also how this knowledge can be applied to medicine. For example, our research on natural variation in mRNA physical properties informs questions about why some individuals make more protein in their cells but also how to optimally design mRNA vaccines. The system we use is *S. cerevisiae*, or “brewer’s yeast”. We are seeking graduate student candidates with an interest in developing statistical and bioinformatics skills. Graduate and undergraduate students typically work collaboratively in teams on projects and there are opportunities to develop new research directions. Please email me (pollard@wwu.edu) if you are interested in joining our team. <https://wp.wwu.edu/pollardlab/prospective-students/> Chris Templeton: Avian communication, cognition, and behavioral ecology. Our research group is interested in understanding animal communication and cognition from behavioral, ecological, and evolutionary

perspectives. Much of our research uses birds as model systems and ongoing work includes local field projects examining the alarm call communication networks of chickadees and other songbirds, tropical fieldwork examining duet function and learning in neotropical wrens, and local field and lab studies examining how anthropogenic noise pollution impacts animal communication and cognitive processing. Our research team is inclusive and collaborative and welcomes students wanting to work under one of these projects or develop their own related research questions or study systems. <https://biology.wvu.edu/people/templec2> Matthew Zinkgraf: Research in the Zinkgraf lab is focused on the ecological genomics of undomesticated forest trees. To accomplish this research, we apply an interdisciplinary approach that utilizes methods from computational biology, genetics/genomics, molecular biology and forest ecology. Ongoing research in the lab is concentrated around three main projects. First, investigating the

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AMNH New York Invertebrate Paleontology

Dear Colleagues,

The Division of Paleontology at the American Museum of Natural History (AMNH) seeks an Assistant Curator of Invertebrate Paleontology to start on or after July 1, 2025.

The successful candidate will be a creative scientist with an innovative program in invertebrate paleontology and the potential to develop inter-institutional collaborations. We are particularly interested in applicants working on non-arthropod groups, as well as those whose research is focused on past and current biodiversity crises and/or the impact of climate and other environmental changes.

The AMNH is a recognized leader in scientific research, graduate education, and public education about science and the natural world. The responsibilities of this position are to perform original specimen-based scientific research, oversee curation and management of the fossil invertebrate collections in alignment with their taxonomic expertise, enhance the Museum's collections through field expeditions as well as the innovative use of collections and applications of new technologies, and secure funding for the above activities. In addition, the successful candidate will serve as an Assistant Professor in the Richard Gilder Graduate School and have the opportunity to teach and advise PhD students in the RGGGS comparative biology and partner university PhD programs, mentor postdocs, and/or serve as science faculty in the Master of Arts in Teaching Earth science residency program. The successful candidate may also contribute to exhibitions, collaborate with the Museum's education department, and participate in public programs.

Resources available at the AMNH include world-class fossil collections; fossil preparation facilities; high performance computing; and a range of optical, electron beam, and X-ray analytical tools (including high resolution micro-CT scanning) in the AMNH Microscopy and Imaging Lab. The AMNH maintains active internal grant programs to support field research across many disciplines. The successful candidate will have the opportunity to build on existing relationships with nearby collaborating institutions including Columbia University and the City University of New York.

The expected salary range for the Assistant Cura-

tor/Professor of Invertebrate Paleontology is \$125,000 - 142,000.

Pay will be determined based on several factors. The hiring range for the position at commencement is based on the type of work and the scope of responsibilities. The salary and placement offered is based on a number of individualized factors, including, but not limited to, skills, knowledge, training, education, credentials, areas of specialization and depth and scope of experience.

Candidates must hold a doctoral degree in biology, geology, or related field at the time of application submission.

Application materials should include:

- * Cover letter (max. 1 page)
- * Curriculum Vitae
- * Research statement, including goals, achievements, and future plans (max. 3 pages)
- * Curatorial and service statement, addressing your vision for the role of collections and collecting in supporting scientific research and your experience and interests in teaching and public outreach (max. 3 pages)
- * PDFs of up to 5 publications and/or preprints
- * Names and contact information for three people who will provide letters of recommendation. References listed on the application will be contacted for letters at the time of application submission.

For both statements, applicants are encouraged to include relevant information about contributions to, and vision for, increasing diversity, equity, and inclusion within the AMNH and broader scientific community. Application materials should be submitted as a single PDF under "Other Document", with the exception of publication PDFs, which can be submitted under "Publications". Publications may be submitted as a file share link/folder if the size exceeds 10MB. Inquiries about the position should be directed to Melanie Hopkins (mhopkins@amnh.org). Consideration of applications will begin on December 16, 2024, but applications will continue to be accepted after this date. All materials should be submitted to <https://careers.amnh.org> <<https://careers.amnh.org/postings/TBD>>.

Direct link to job posting: <https://careers.amnh.org/postings/4301> Dr. Jessica Goodheart (she/her) Assistant Curator, Invertebrate Zoology Assistant Professor, Richard Gilder Graduate School American Museum of Natural History 200 Central Park West New York, NY 10024

Email: jgoodheart@amnh.org

Due to my own efforts to strike a work-life balance, I sometimes send emails on weekends or evenings. Responses are never expected outside working hours.

Jessica Goodheart <jgoodheart@amnh.org>



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ArizonaStateU TeachingEvolutionaryBiology

Teaching Assistant Professor - Ecology and Evolutionary Biology

School of Life Sciences

Arizona State University

The School of Life Sciences (SOLS) invites applications for one full-time, academic year (9 months), benefits-eligible Assistant Teaching Professor position with an anticipated start date of August 16, 2025. The position is 80% teaching and 20% service. Subsequent academic year renewals (Aug. 16 to May 15) are contingent upon satisfactory performance, availability of resources, and the needs of the unit. Supplementary paid summer teaching may be available.

Applicants should have a broad knowledge of evolutionary biology and ecology, and experience in college or university-level teaching and student mentoring. Ideally, applicants will also have experience teaching online courses and research experience in evolutionary biology, ecology, or a closely related field.

The successful applicants will contribute to SOLS' innovative online MS programs in Biology and Computational Life Sciences. They will be responsible for providing instruction in online master's and undergraduate-level courses in ecology, behavioral ecology, and evolution. This includes supervising coursework for Applied Projects and Capstones for the Biology MS program. Responsibilities will also include supervising graduate teaching assistants and updating/developing course materials with other faculty and staff. This person will also provide service within the school, college, and university in capacities appropriate for the position.

About the School of Life Sciences

The School of Life Sciences is a broadly interdisciplinary community of undergraduate, M.S., and Ph.D. students, staff, and faculty members. We are committed to transforming science education and research by making learning more accessible, inclusive, and impactful through

innovations in teaching and connections to nationally recognized research and education programs such as the Research in Inclusive STEM Education (RISE) Center. The School of Life Sciences is home to a large and growing Biological Sciences program for undergraduate and graduate students, including online and immersion MS students. SOLS is embedded within the larger community of ASU, a dynamic, progressive university dedicated to interdisciplinary collaborations, rethinking university education, and integrating excellence in research and teaching. The university has been ranked #1 in innovation by US News & World Report for the past ten years. We invite you to learn more about the School of Life Sciences and Arizona State University by visiting <https://sols.asu.edu>, and <https://newamericanuniversity.asu.edu>, respectively.

About The College of Liberal Arts and Sciences

The College of Liberal Arts and Sciences is the academic heart of Arizona State University, committed to improving communities on a local, national and global scale. We support the professional development and growth of our faculty and staff in their cutting-edge research to advance these aims. Within The College, our faculty engage with a large curious student body, guiding them as they grow into socially aware, critical thinkers and writers able to succeed in a wide range of careers and to address the challenges of the twenty-first century. Advancing the success of our students remains our top priority. To learn more about The College of Liberal Arts and Sciences, please visit <https://thecollege.asu.edu>. About Arizona State University

ASU exemplifies a new prototype for the American public research university. As articulated in the ASU Charter, ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.

Required Qualifications:

A PhD in evolutionary biology, ecology, or a closely related field by the time of appointment Demonstrated experience teaching university-level ecology and evolution courses Demonstrated evidence of organizational and communication skills

Desired Qualifications:

Three (3) or more years of university-level teaching experience Three (3) or more years of research experience in ecology, or a closely related field Demonstrated experience teaching university-level biology courses in alternative delivery modalities such as hybrid or on-

line Experience creating online curriculum Experience teaching both graduate and undergraduate courses online Experience in using technology to supplement and improve pedagogy

A record of using evidence-based methods of teaching that promote mastery of evolution and ecology concepts and advance higher-order critical thinking, as evidenced by instruction and assessments Demonstrated

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AuburnU AquaticOrganismalGenomics

The School of Fisheries, Aquaculture and Aquatic Sciences (SFAAS, www.sfass.auburn.edu) at Auburn University is seeking applications for a Genomicist. This is a 9-month, tenure track (80% research: 20% instruction) position and will be filled at the rank of Assistant or Associate Professor. The projected start date is August 2025.

The successful candidate will develop an externally funded research program in genomics that is directed toward applied questions in aquaculture, fisheries, or other aquatic sciences. The successful candidate will also be expected to collaborate effectively with SFAAS faculty and colleagues throughout the university. They will also be responsible for teaching courses in the application of genomics to the fields of aquaculture, fisheries, and other aquatic sciences. In addition, the successful candidate will provide academic advising and career counseling for the school; transfer results of the scholarly program through recognized and peer reviewed outlets; and provide leadership to the profession through state and national professional society participation. The successful candidate is expected to be involved in SFAAS, college, and university committee service.

Minimum qualifications include a Ph.D. in genomics or related life-sciences field at the time employment begins. Must exhibit a publication record in genomics research focused on aquatic organisms, and a record or the potential to attract extramural funding. The selected individual should be able to work cooperatively with colleagues across disciplines and develop collaborative

research programs. The selected individual must also possess excellent written and interpersonal communication skills to effectively interact with diverse audiences. The successful candidate must meet eligibility requirements to be gainfully employed in the United States at the time the appointment is scheduled to begin and to continue working legally for the term of employment.

Desired qualifications: Postdoctoral training, a research area that complements existing SFAAS faculty, and experience mentoring graduate students are also considerations.

Applicants must apply for the position by visiting the link: <https://www.auemployment.com/postings/48875> and attach the following: 1) letter of interest, 2) current Curriculum Vitae, 3) statement on teaching philosophy, and 4) statement on research philosophy. When prompted during the online process, please provide names, phone numbers, and e-mail addresses of three professional references. Only complete applications will be considered. Review of applications will begin on December 1, 2024, and may continue until the position is filled. Questions concerning the advertised position should be directed to: Dr. Ian A.E. Butts, Search Committee Chair, e-mail: iab0007@auburn.edu .

Auburn University is one of the nation's premier public land-grant institutions. In 2019, it was ranked 52nd among public universities by U.S. News and World Report. Auburn maintains high levels of research activity and high standards for teaching excellence, offering Bachelor's, Master's, Educational Specialist, and Doctoral degrees in agriculture and engineering, the professions, and the arts and sciences. Its 2018 enrollment of 30,440 students includes 24,628 undergraduates and 5,812 graduate and professional students. Organized into twelve academic colleges and schools, Auburn's 1,450 faculty members offer more than 200 educational programs. The University is nationally recognized for its commitment to academic excellence, positive work environment, student engagement, and beautiful campus.

Auburn University is understanding and sensitive to the family needs of faculty, including dual-career couples. For details, visit the following link: <http://www.auburn.edu/academic/provost/facultyjobs/>. Resources available to support faculty can be found here: <https://agriculture.auburn.edu/about/faculty-staff-resources/faculty-support/>. Auburn residents enjoy a thriving community, recognized as one of the "best small towns in America," with moderate climate and easy access to major cities or to beach and mountain recreational facilities. Situated along the rapidly developing I-85 corridor between Atlanta, Georgia, and Montgomery, Alabama, the combined Auburn-

Opelika[1]Columbus statistical area has a population of over 500,000, with excellent public school systems and regional medical centers. AUBURN UNIVERSITY IS AN EEO/VET/DISABILITY EMPLOYER

Nathan Whelan, Ph.D. Director, Southeast Conservation Genetics Lab | Assistant Research Professor U.S. Fish and Wildlife Service | Auburn University Work Cell: 706.755.0192

nwhelan@auburn.edu | nathan_whelan@fws.gov

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AuburnU MusNatHistory Analyst- GeographicalInformationSystems

Analyst, Geographical Information Systems Alabama Natural Heritage Program Auburn University Museum of Natural History

The Alabama Natural Heritage Program (ALNHP) of the Auburn University Museum of Natural History (AUMNH) is seeking an expert in Geographical Information Systems (GIS) as they apply to natural history surveys and collections. The successful candidate will have experience in building and using species occupancy models, the use of GIS to develop maps in the development and successful outcome of ALNHP and AUMNH projects, and the ability to contribute to data management plans for the Department of Biological Sciences faculty. The candidate will be responsible for the upkeep and addition of species records to the ALNHP monitored species list in the program Biotics, serve as the ALNHP point of contact with NatureServe, to direct the ALNHP pages on iNaturalist, and to interact with students on GIS-related projects. The candidate will be expected to contribute to AUMNH outreach and education efforts. The successful candidate may be asked to create a graduate/undergraduate course in the use of GIS in Natural History, and a familiarity with course management software (like Canvas) is recommended. A bachelor's degree in biology, GIS, or a related field is required, but a master's or Ph.D. is preferred. For more information on the AUMNH, please visit: <http://www.aumnh.auburn.edu>. Evaluation of applications will begin 1 December 2024. Submit a CV,

a statement describing relevant experience, and names and contact information of three references. For more information, contact Dr. Jonathan W. Armbruster, Director AUMNH, Department of Biological Sciences, 101 Life Sciences, Auburn University, AL 36849, Armbrjw@auburn.edu. See aumnh.auburn.edu for more information on the museum and natural heritage program. Auburn University is an equal opportunity/affirmative action employer and actively seeks applications from qualified women and minority candidates.

Minimum Qualifications: Level I - Bachelor's Degree in Biology, GIS, or closely related field with no relevant experience. Level II - Bachelor's Degree in Biology, GIS, or closely related field with 2 years of experience with GIS. Level III - Bachelor's Degree in Biology, GIS, or closely related field with 4 years of experience in GIS.

Desired Qualifications: A Master's or PhD in GIS, Biology, or closely related field.

Salary Range: \$38,200 - \$71,200

To apply: <https://www.auemployment.com/postings/-49634> Jonathan W. Armbruster Director and Curator of Fishes, Auburn University Museum of Natural History Professor, Department of Biological Sciences 101 Life Sciences Building Auburn, AL 36849 334-844-9261

Office: 131 Biodiversity Learning Center (M. White Smith)

"armbrjw@auburn.edu" <armbrjw@auburn.edu>

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CalAcademySci SanFrancisco AssistCuratorBotany

The California Academy of Sciences is hiring an Assistant Curator of Botany

About the Opportunity: Do you have a passion for herbaria and collections-based research? Are you interested in joining a team of scientists at a world-renowned Natural History Collection working broadly in the field of biodiversity science? The California Academy of Sciences is seeking candidates for the position of Assistant Curator of Botany. We are looking for individuals who specialize in vascular plants of the western hemisphere (especially those relating to Mexico, Central and/or South America) and/or eastern hemisphere (especially Asia), examining a wide range of topics including their

evolution, diversity, and classification. Candidates who will work with our extensive collections, as well as contribute to the strategic growth of our collection, will be especially welcome. Finally, we seek candidates passionate about science communication, engagement with broad audiences, and an interest in fostering and diversifying the next generation of botanists.

Organizational Culture: Join a team dedicated to the Academy's mission, vision and values. Currently, the Academy has a new strategic plan that leverages biodiversity science, environmental learning, and collaborative engagement to regenerate fragile ecosystems around the world. We hope you are inspired by what we do and are excited to contribute to our mission of regenerating the natural world through science, learning, and collaboration. This position is based in San Francisco, California. When not conducting fieldwork or attending other research needs, curators are expected to be onsite, where they can leverage the research collections, lab facilities, and the Academy community. Please do not apply if you are not able to work onsite. Candidates are required to have up-to-date COVID-19 vaccination as a condition of employment, absent qualifying exemptions in accordance with applicable laws. Individuals receiving a conditional offer of employment from the California Academy of Sciences will be provided the full text of the vaccination policy.

About the Botany Team: The new curator will join a friendly and enthusiastic group of botanists working to steward a collection of nearly 2.3 million specimens and investigate plant biodiversity around the world - and we all love plants! The Botany Department is part of the Institute for Biodiversity Science and Sustainability (IBSS), home to 12 additional departments/cores, their associated collections, scientific and professional staff and students. Jointly, we comprise the research division at the California Academy of Sciences. Together we work to discover, explore, and celebrate biodiversity and its evolution on our changing planet. This collective knowledge provides the foundation for preserving and regenerating life on Earth.

Key Responsibilities: - Plans and executes original research resulting in peer-reviewed scientific publications and presentations. - Plans, directs, and participates in scientific exploration including expeditions, experimental work and collaborative research as appropriate, to advance knowledge, facilitate specimen collection, conserve biodiversity and address other global issues such as climate change. - Advances the strategic growth, improvement, and mobilization of the herbarium and its collection, working closely with the Collection Manager and other Botany Curators. - Seeks extramural funding and grants to support research activities. - Par-

ticipates in collaborative efforts to maintain, improve, and increase access to Academy scientific collections, including digitization and imaging initiatives. - Actively trains and mentors the next generation of scientists using innovative and inspirational science communication and experiences, including supervision of postdoctoral fellows, graduate students and undergraduates. - Dedicated to training scientists, building capacity in under-resourced communities and countries, and to increasing participation of groups historically underrepresented in botany. - Participates in a spectrum of activities that engage diverse audiences in the excitement, process and importance of scientific discovery ?; e.g., participation in the development of exhibitions; presentations to non-science audiences; community science programs; mentoring of youth; participation in Academy education and outreach programs; maintenance of a creative portfolio of social media activities designed to convey scientific discoveries. - Works closely with Academy marketing staff to leverage scientific discoveries into popular media and to elevate the visibility and impact of the Academy's research activities. - Collaborates with the Academy's Development team and the Dean of Science and Research Collections in fundraising, cultivation, and stewardship of donors.

Qualifications: A successful candidate will have the following:

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EdinburghU ResTech aDNAgenomics

A 2-year Research Technician in Genomics and Metagenomics of Population Declines

We are looking for a reliable and experienced person to work on the interactions of host and microbiome during population declines, by generating temporal host genomic and metagenomic data from museum specimens of several mammalian species using ancient DNA techniques.

The project is based at the University of Edinburgh, UK, Institute of Ecology and Evolution, in the group of Dr. Katerina Guschanski.

Your task We are seeking an experienced research technician who will plan and carry out molecular work on museum specimens from various mammals and their associated microbiomes, as well as contribute to the efficient day-to-day running of the ancient DNA lab. This will involve extracting DNA from historical samples using ancient DNA techniques in the specialised environment of the ancient DNA lab, constructing next generation sequencing libraries, and performing quality checks. The post-holder will also contribute to sampling in the natural history museums and, if interested, have the opportunity to contribute to data analysis and run own research projects within the broader framework of the study. We therefore require a candidate with a graduate or postgraduate degree in a relevant field.

Requirements - Molecular wet lab experience, in particular with DNA extraction and next generation library preparation. Experience working with degraded samples or ancient DNA will be a huge asset. - Excellent time management and organisational skills, great attention to detail. - Willingness to provide training and supervision to students and other lab members and support their experimental work. - Strong communication skills.

Application More information on the post and the link to the application portal is here: https://elxw.fa.em3.oraclecloud.com/hcmUI/-CandidateExperience/en/sites/CX_1001/job/11528
Application deadline: November 21st, 2024 Expected interview dates: Mid December Expected starting date: March 1st, 2025 or soon thereafter

Contact: Please reach out to kate.rina.guschanski@ed.ac.uk for more information and informal inquiries about the post.

Katerina Guschanski Senior Lecturer Institute of Ecology and Evolution School of Biological Sciences

The University of Edinburgh Ashworth Laboratories Charlotte Auerbach Road Edinburgh, EH9 3FL UK Office: +44 (0)131 650 7489 Email: Katerina.Guschanski@ed.ac.uk 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?n ?ideann, cl?raichte an Alba, ?ireamh cl?raidh SC005336.

Katerina Guschanski <Katerina.Guschanski@ed.ac.uk>
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FloridaIntlU PlantEvolution

Open Rank Tenure-Track Faculty in Plant Biology The Department of Biological Sciences at Florida International University (<https://biology.fiu.edu>) invites qualified candidates for an Open Rank, (Assistant, Associate, or Full Professor) position in Plant Biology. Scientists working in plant population genetics/conservation genetics, plant chemical ecology, or plant physiology/physiological ecology are especially encouraged to apply. The successful candidate will be expected to have a solid publication record; to bring and maintain an active, externally-funded research program; to supervise graduate students in our Ph.D. program; and to teach undergraduate and graduate courses in their area of expertise and in the general plant sciences curriculum. Successful candidates could also become affiliated with several preeminent research institutes and centers relevant to tropical plant biology, including the Agroecology Program (<https://case.fiu.edu/earth-environment/agroecology/>) and the International Center for Tropical Botany (<https://environment.fiu.edu/-ictb/>), within the Institute of Environment (<https://-environment.fiu.edu/>).

The minimum requirements are a Doctoral degree in a related field from an accredited institution, a demonstrated record of achievement in teaching and service, and active academic research. To maximize opportunity and experience for our diverse student population, we value and seek diversity in applicants for this position. Qualified candidates are encouraged to apply to Job Opening ID 533785 at <https://facultycareers.fiu.edu/> and attach a cover letter, curriculum vitae, and statements of mentoring, teaching, and research. Candidates will be requested to provide names and contact information for at least three references who will be contacted as determined by the search committee. Applications will be accepted until the position is filled, but to receive full consideration, applications and required materials should be received by December 6, 2024. Please direct any questions to Dr. Chris Baraloto at atcbaraloto@fiu.edu.

Nichole M. Tiernan, Ph.D. Program Director Institute of Environment, Florida International University International Center for Tropical Botany (ICTB) at The Kampong of the National Tropical Botanical Garden 3959 South Douglas Road Coconut Grove, Florida 33133 www.nicholetiernan.com Nichole Tiernan <ntier001@fiu.edu>

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IGB Berlin Two EvolutionaryEcol

In both positions we would welcome candidates with evolutionary thinking!

We have two group leader positions at IGB Berlin:

- 1) Tenure track group leader position (f/m/x) in Fish Movement Ecology <https://karriere-igb.softgarden.io/job/49631758/Tenure-track-group-leader-position-f-m-x-in-Fish-Movement-Ecology?jobDbPVID=158218998&l>
 - 2) Tenure track group leader position (f/m/x) in Fish Ecophysiology <https://karriere-igb.softgarden.io/job/49631378/-Tenure-track-group-leader-position-f-m-x-in-Fish-Ecophysiology?jobDbPVID=158206498&l>
- On behalf of Prof. Jens Krause IGB Berlin

Matthias Stjck <matthias.stoeck@igb-berlin.de>

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MaxPlanckInstBioIntelligence Germany FieldAssist NorthernLapwing

The Max Planck Institute for Biological Intelligence (MPI-BI) is located in the southwest of Munich, with its two locations in Martinsried and Seewiesen. It is one of more than 80 independent research institutes of the Max Planck Society. With around 500 employees from more than 50 nations, we investigate the fundamentals of “biological intelligence”. We aim to understand how, in the course of evolution, animals developed abilities to cope with a constantly changing environment and to find ever new solutions to problems.

As support for an ongoing study on the reproductive biology of a population of northern lapwings (*Vanellus vanellus*) at a site in Northern Germany, the Department of Ornithology led by Prof. Dr. Bart Kempnaers is looking for a full-time

Field assistant (m/f/div)

Work will include:

Catching adult birds on or near nests and at foraging sites using traps or mist nets

Measuring and banding of adult birds and chicks

Behavioural observations and resightings of individual birds and pairs

Nest searching and monitoring

Setting up and maintenance of scientific equipment

Data collection, entry, and management

What we are looking for:

Extensive and demonstrable experience in the activities outlined above

High degree of reliability and organizational talent as well as the ability to work in an international team, strong communication skills, initiative and independence

Flexibility, motivation, and commitment to working in all types of weather conditions at any time (including some night work, weekends, and holidays)

Excellent written and spoken English language skills (knowledge of German is not required, but is a plus)

Possession of a full clean driver’s licence, along with experience driving vehicles with manual transmission

Eligibility to remain in Germany for the duration of the work contract

The position is limited to a period of 4.5 months, from 17th February to 30th June 2025.

The Max Planck Society strives for gender equality and diversity. Furthermore, the Max Planck Society wants to increase the proportion of women in areas in which they are underrepresented. Women are therefore expressly encouraged to apply. The Max Planck Society has set itself the goal of employing more disabled people who are thus explicitly encouraged to apply.

If you have any questions, please contact Carol Gilnsen at sekretariat.kempnaers@bi.mpg.de

Have we aroused your interest? Please apply by November 29th, 2024 with your complete application documents in English in one PDF document via our online application portal reached through <https://www.mpg.de/-23666097/field-assistant-m-f-div> For more information, visit our homepages at ornithology.bi.mpg.de and www.bi.mpg.de “MPI-BI Seewiesen, Sekretariat Kempnaers” <sekretariat.kempnaers@bi.mpg.de>

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MichiganStateU FunctionalGenomics

Tenure System Assistant Professor in Functional Genomics

Michigan State University

Position Summary

The Department of Integrative Biology at Michigan State University (MSU) invites applicants for the position of Tenure System Assistant Professor in Functional Genomics. We are seeking applicants who apply state-of-the-art experimental techniques in traditional or non-traditional animal model systems to understand the genetic mechanisms of genotype-to-phenotype interactions, genome function, developmental or physiological evolution, comparative animal evolution, adaptation, and/or biodiversity. Computational and theoretical approaches are welcomed when combined with experimental validation. The successful applicant will be an investigator with a proven record of research accomplishments in the targeted areas and the ability to build an extramurally funded, independent research program in Functional Genomics. While the particular research focus within Functional Genomics is open, preference will be given to applicants that can contribute to MSU IBIO's strengths in comparative studies of biodiversity across evolutionary and ecological scales. The future faculty member will contribute to undergraduate and/or graduate teaching according to candidate strengths, and participate in undergraduate, graduate, and postdoctoral training. The successful applicant will also be expected to contribute to the highly interactive, diverse, and collaborative MSU Department of Integrative Biology (MSU IBIO; <https://integrativebiology.natsci.msu.edu/>).

The new faculty will strengthen the core mission of the MSU IBIO Department to advance understanding of the function, stability, resilience, and adaptation of complex biological systems via research, teaching, and service. We use cutting-edge tools to address important questions about genetics, genomics, development, physiology, behavior, ecology, and evolution in a wide array of species and model systems, over temporal and spatial scales. The department includes more than 30 faculty members and strong graduate and undergraduate programs. Many faculty members are also affiliated with the MSU Ecology, Evolution and Behavior Program (<https://eeb.msu.edu/>), the MSU BioMolecular Science Program

(<https://biomolecular.natsci.msu.edu/>), and numerous other cross-college units and interdisciplinary graduate programs. MSU IBIO is committed to fostering a diverse, equitable, and inclusive workplace that enriches our learning environment and innovative research and seek colleagues driven by the same motivation.

Qualifications

Required Qualifications: - Ph.D. or equivalent degree in biology or a related field in the life sciences - At least one year of postdoctoral experience - Demonstration of expertise in animal functional genomics - Strong record of research productivity including lead author publications in peer-reviewed journals - Clear plan to build an independent, competitive, and externally funded research program in animal functional genomics - Clear knowledge of and interest in dimensions of diversity that result from different lived experiences, such as ethnic, socioeconomic, racial, gender, sexual orientation, disability, and cultures

Desired Qualifications: - Prior stage-appropriate external funding support such as research fellowships and grants - Experience with undergraduate research training and mentorship - Evidence of instructional experience at the undergraduate and/or graduate level - Prior contributions to initiatives fostering diversity, equity, and inclusions in research and/or teaching

Application Materials

Interested applicants should submit a single PDF file with required application materials to the MSU Applicant Page (MAP) for faculty positions (online at <https://jobs.msu.edu>). <https://careers.msu.edu/en-us/job/521081/assistant-professortenure-system-functional-genomics> The single, concatenated PDF document will include the following documents, each labeled with the appropriate title:

- 1) A Cover Letter that frames the application in context of this ad and the IBIO Department at Michigan State University.
- 2) A Curriculum Vitae listing publications, awarded and pending grant proposals and/or fellowships, contributed or invited presentations and talks, teaching and mentoring experiences, leadership positions, contributions to the academic community, and public outreach efforts. Other professional information may also be included, as the applicant sees fit.
- 3) A 3-page Research Statement highlighting the relevance of the research, research accomplishments, and future plans for independent research and funding.

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MichiganStateU VertebrateCurator

Tenure System Assistant Professor and Curator of Vertebrate Collections at Michigan State University

The Michigan State University (MSU)â€™Department of Integrative Biology (IBIO) and MSU Museum invite applications for the position ofâ€™Tenure System Assistant Professor and Curator of Vertebrate Collections. Exceptional, early-stage associate professors will also be considered. Theâ€™IBIO Department’sâ€™core mission is to advance understanding of the function, stability, resilience, and adaptation of complex biological systems via research, teaching, and outreach while striving to recruit and retain a diverse, vibrant, and inclusive community of scholars (<https://integrativebiology.msu.edu>).

This tenure-stream position entails research,â€™teaching, and curation. The applicant is expected to have an independent, specimen-based research program with strong potential for external funding. Theâ€™successful candidate will contribute to the growth of vertebrate collections, provide research opportunities for students, and teach an upper-level course in their area of expertise.â€™As Curator of Vertebrates, the successful candidate will work with the Collections Manager to facilitate use of collections for research and education, oversee growth of the collections, write proposals to support collections care and digitization, and provide expertise to the campus community and to state and local authorities.

We will consider applicants with active specimen-based research programs focused on a vertebrate taxon and with expertise in any of a variety of fields, including global change, phylogenomics, functional morphology, macroevolution, conservation biology, and evolutionary biology.â€™A complete list of required qualifications, desired qualifications, and other information about this position can be found through the official job posting:

<https://careers.msu.edu/en-us/job/521070/assistant-professortenure-system> . Review of applications with begin on 27 November 2024.

Send questions to the Search Committee Chair (Dr. Catherine Lindell lindellc@msu.edu).

Grace Smith-Vidaurre, PhD (she/her)

1855 Assistant Professor Department of Integrative Biology Department of Computational Mathematics, Science, and Engineering Michigan State University <https://smith-vidaurrelab.github.io/>|Zoom: <https://msu.zoom.us/j/6599648175> Last name pronunciation: Smith-“vid-AH-ray”

“Smith Vidaurre, Grace” <smithvid@msu.edu>

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PurdueU ComputationalBiology

Job Title: Asst Professors in Computational Biology, Statistical Genomics Structural Proteomics, Bioinformatics City: West Lafayette

Job Description

The College of Science at Purdue University seeks applications for multiple tenure-track Assistant Professor positions in all areas of Computational Biology, Computational/Statistical Genomics, Structural Proteomics, and Bioinformatics. Examples of areas of interest include but are not limited to computational, statistical, or experimental advancements in genomics, proteomics, metabolomics, multi-omics integration, computational neuroscience, computational modeling and analysis of brain function, neural systems and behavior, biological imaging, biomolecular structure modeling and design, bioinformatics or health informatics, and biomedical and biological applications of artificial intelligence (AI).

Application Areas

Application areas may include but are not limited to Neuroscience, Cellular and Molecular Biology, Microbiology, Infectious Disease, Drug Discovery, Cancer, Ecology and Evolutionary Biology. Successful candidates may focus on purely computational/statistical research or experimental “wet lab” research, or a combination of both. We welcome applicants whose work bridges these areas to address critical challenges in biology.

The departments participating in this search include Biological Sciences, Computer Science and Statistics. We are especially interested in fostering interdisciplinary collaboration and we anticipate appointments either in a single department or joint appointments across these

departments, with tenure homes as appropriate for each candidate based on their interests.

Major Strategic Initiatives

The search is motivated by two major strategic initiatives recently launched at Purdue University that will connect faculty and students from across the institution and enable the university to advance to the forefront with unparalleled excellence at scale: Purdue Computes (<https://www.purdue.edu/computes/>), consisting of three dimensions (Computing, Physical Artificial Intelligence, and Semiconductors); and Purdue One Health expanding knowledge of animal, human and environmental well-being (<https://www.purdue.edu/onehealth/>).

Purdue Biological Sciences, Computer Sciences, and Statistics

Purdue is one of the nation's leading land-grant universities (top 10 most innovative for six years in a row according to US News & World Report), with an enrollment of over 50,000 students primarily focused on STEM subjects. The three departments participating in this search (Biological Sciences, Computer Science, and Statistics) offer a stimulating academic environment with active research programs in almost all areas related to Computational Biology. For more information, see Purdue Biological Sciences: <https://www.bio.purdue.edu/>; Purdue Computer Science: <https://www.cs.purdue.edu>, Purdue Statistics: <https://www.stat.purdue.edu/>).

Opportunities for Collaboration Opportunities for collaboration exist across all colleges in the university. The Life Sciences Institutes and the Institute for Physical AI provide additional opportunities and resources for collaboration across the entire Purdue campus (Purdue Discovery Park: <https://discoveryparkdistrict.com/>, Purdue Institute for Physical AI: <https://www.purdue.edu/computes/institute-for-physical-artificial-intelligence/>).

Purdue's main campus is located in West Lafayette, Indiana, a rapidly growing, welcoming, and diverse community with a wide variety of cultural activities, events, and industries. With the new Purdue Indy campus (<https://www.purdue.edu/campuses/indianapolis/>), there may also be an opportunity to be based in Indianapolis. Purdue also offers a Concierge Program that provides dual career assistance and relocation services.

Qualifications Candidates must hold a Ph.D. degree in a field related to the Life Sciences, Computer Science, Statistics, or any related discipline by the employment start date and demonstrate potential to build an independent research program, as well as the potential to educate and mentor students. A successful candidate will

conduct externally funded original research, advise graduate students, teach undergraduate and graduate-level courses, and offer service at the Department, College, and University levels.

Application Process Applications need to be submitted to

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StonyBrookU NewYork HumanClimateAdaptation

Stony Brook University invites applications for a tenure-track position in the Department of Anthropology at the level of Assistant Professor, beginning in the fall of 2025. We seek candidates specializing in human biology with a focus on climate change.

Human responses to novel environmental circumstances can be understood as integrated cultural and biological systems, in which genetics, physiology, social structure, economy, technology, and reproductive and parenting norms interactively respond to changes in climate. We welcome applications from biological anthropologists or scholars in closely related fields whose research any of these topics in human populations facing extreme climatic challenges. Areas of particular interest include, but are not limited to, the impacts of climate change on human health and the biocultural and physiological responses (e.g., to extreme temperatures, aridity, and seasonality) that might adaptively buffer or mitigate these effects. This hire would build on the department's existing strengths in interdisciplinary research, and we are interested in candidates who are excited to take advantage of unique Stony Brook University affiliated research institutes - the Turkana Basin Institute and the Institute for the Conservation of Tropical Environments - both of which offer fieldwork opportunities in areas of the world where humans and other organisms face extreme climatic challenges.

Required qualifications include a PhD in Anthropology or related fields by the position start date. Preferred qualifications include a proven track record of obtaining external research funding from major grant sponsors

(e.g., NSF, NIH), the ability to provide research opportunities to undergraduate and graduate students, and a demonstrated commitment to inclusion and a respectful, positive work environment. The successful candidate will be prepared to teach 3 courses, including existing undergraduate courses in our departmental majors (Anthropology B.A. and Human Evolutionary Biology B.S.) such as Introduction to Biological Anthropology and Human Biology, per academic year. In addition, the successful candidate will develop more advanced courses in their areas of expertise.

Applicants should apply via Interfolio (<https://apply.interfolio.com/159431>). Application documents include a cover letter (which includes research and teaching interests), teaching statement, diversity, equity and inclusion statement, curriculum vitae, up to three examples of relevant publications, and the names and email addresses of three potential references. Application reviews will occur in two stages. Letters of reference will be sought for applicants who make it past the first stage, and these applicants will also participate in Zoom interviews with members of the search committee at this stage. Applicants who make it past the second stage will be invited for on-campus interviews, likely to occur mid-spring. For full consideration applications should be submitted before January 15, 2025.

Questions about the search should be directed to the Search Committee at anthropology@stonybrook.edu. Stony Brook University is an Equal Opportunity/Affirmative Action Employer.

Gabrielle Antoinette Russo (she/her) Associate Professor | Anthropology | Russo Lab Associate Vice Provost for Academic Affairs | Office of the Provost

Deputy Director | Turkana Basin Institute Stony Brook University

Stony Brook, NY 11794-4364
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Associate Editor |

Journal of Human Evolution

(My work day may look different than your work day. Please note that if I send this email on Saturday or Sunday, it does not mean that I expect to be answered on the weekend)

“Gabrielle A. Russo” <gabrielle.russo@stonybrook.edu>
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TexasAMU MarineClimateAdaptation

Tenure-Track: Assistant Professor in Marine Biology
 Location: Galveston, Texas Position URL: <http://apply.interfolio.com/157002> Position Description The Department of Marine Biology, College of Marine Sciences & Maritime Studies at Texas A&M University located at the Galveston campus is hiring one full-time, tenure-track faculty position with a 9-month academic appointment beginning August 1, 2025. Applicants will be considered for the faculty title of Assistant Professor.

We seek to fill a tenure-track faculty position with a marine biologist whose research focuses on climate change and the marine environment. The area of research is open, and any level of organization (from subcellular to organismal to ecosystems) will be considered. A suitable applicant for this position will complement the existing expertise in the department and will have the potential for collaborations extending to other departments on the Galveston and College Station campuses, e.g., the Departments of Marine and Coastal Environmental Science, Oceanography, Ecology and Conservation Biology, or Biology.

The successful candidate will enhance the department and university’s teaching and research missions and will be expected to 1) develop an extramurally-funded and productive research program that is sustainable and identifiable to the person filling this position. The program will support undergraduate research scholars, graduate students, and postdocs; 2) Teach in the department’s undergraduate curricula and offer a graduate class specific to the person’s expertise, with a teaching load of one course per semester (fall, spring); 3) Provide service to the department and the college through committee memberships, while remaining engaged with discipline-specific scientific activities.

Texas A&M University at Galveston is the dedicated marine and maritime branch campus of Texas A&M University. The campus houses several institutions that are critical contributors to Texas A&M’s land-, sea-, and space-grant mission and drive the development of the blue economy on the Gulf Coast through education, innovation, scholarship, and research.

Home to the Texas A&M College of Marine Sciences & Maritime Studies (marine.tamu.edu), students can earn

undergraduate and graduate degrees in marine sciences, business, blue humanities, marine engineering and maritime transportation. Students may also pursue select Galveston-specific Texas A&M College of Engineering degrees, including computer science, ocean engineering, and interdisciplinary engineering.

Texas A&M-Galveston is also home to the Texas A&M Maritime Academy, one of six state maritime academies in the U.S. and the only one embedded within a Tier I research institution. Offering hands-on training to over 400 cadets annually, the academy prepares students to earn a U.S. Coast Guard License and serve as maritime professionals, afloat and ashore, or enter military service upon graduation. Ideally situated in Galveston Bay, the island campus is surrounded by marine life, estuarine and ocean ecosystems, and one of the largest maritime industrial hubs in the world, allowing Galveston Aggies to live, learn and work in the heart of the industries they will soon serve. Whether their careers take them shoreside or on the water, Aggies are ready for anything above, on, and below the waves. Texas A&M University is committed to enriching the learning and working environments for all visitors, students, faculty, and staff, which is vital to accomplishing our mission and living our core values.

Qualifications Candidates must have earned a Ph.D. in biology or a related field. Preferred qualifications: postdoctoral or related job experience, and a strong publication record.

Application Instructions Applicants must submit electronic PDF copies of 1) cover letter, 2) curriculum vitae, 3) a personal statement to include philosophy and plans for research (1-3 pages), teaching (1-2 pages), and service (1 page), and 4) names and contact information of three (3) professional references at <http://apply.interfolio.com/157002> For more information on the position, please contact Dr. Maria Pia Miglietta at atmiglietm@tamug.edu, chair of the search committee. Review of applications will begin November 25th, 2024. While preference will be given to applications received by this date, the position will remain open until filled.

Equal Employment Opportunity Statement: Equal Opportunity/Affirmative Action/Veterans/Disability Employer.

Maria Pia Miglietta, Ph.D. | Associate Professor Department of Marine Biology | College of Marine Sciences & Maritime Studies Texas A&M University

200 Seawolf Parkway, bldg. 3029, Galveston, TX, 77554
Office: OCSB 264; Lab: OCSB 204-206 Ph:409.740.4458
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UInnsbruck TechAssist MolBiol

TechnicalAssistant: UInnsbruck

MOLECULAR ECOLOGY, DEPARTMENT OF ECOLOGY, UNIVERSITY OF INNSBRUCK 30 h / week Technical Assistant, permanent position

We seek to hire a Technical Assistant in a permanent position for 30 h / week (https://lfoonline.uibk.ac.at/public/karriereportal.details?asg_id_in=14665). This is a position at the Molecular Ecology Group of the Department of Ecology / University of Innsbruck, starting as soon as possible. Centering on the Alpine Space, the group's mission is interdisciplinary research, embedded in international collaboration networks. A list of research topics can be found at: <https://molecular-ecology.at/research-topics/> Main tasks: Carrying out molecular biology experiments, lab maintenance and material flow coordination, laboratory organism breeding.

Required qualifications: Completed training as a technical assistant (BMA or equivalent) or completed study of biology (BSc), solid knowledge of basic molecular biology techniques (DNA extraction, PCR), IT skills (MS Office, web-based databases, simple image processing), good English, independent acquisition of knowledge from specialist literature; possibly basic microbiological knowledge and knowledge of bioinformatics programs; teamwork and organisational skills.

*****Salary***** The annual gross salary is a minimum of Euro 27,286. The contract includes health insurance and 5 weeks of holidays annually.

*****How to apply***** Please apply at: https://lfoonline.uibk.ac.at/public/karriereportal.apply_selection?asg_id_in=14665

Deadline: 26 November 2024. Please include in the application: how you meet the required qualifications, curriculum vitae. The University of Innsbruck is striving to increase the percentage of female employees and therefore invites qualified women to apply. In the case of equivalent qualifications, women will be given

preference. An offer of employment is contingent on a satisfactory pre-employment background check.

The research institution and its environment Detailed information about the Molecular Ecology Group can be found at <https://molecular-ecology.at>. The University of Innsbruck has a long-standing and internationally renowned tradition in life sciences and offers a vibrant research atmosphere. It has close to 30,000 students and 5600 staff members. Innsbruck is situated in the Alps and very close to Switzerland, Germany, and Italy; scenery and outdoor recreation are fantastic.

More information needed? For more information, please contact: Birgit C. Schlick-Steiner, [Birgit.schlick-steiner@uibk.ac.at](mailto:birgit.schlick-steiner@uibk.ac.at)

Department of Ecology University of Innsbruck Technikerstr. 25 6020 Innsbruck, Austria <https://molecular-ecology.at/birgit-c-schlick-steiner/> “Schlick-Steiner, Birgit Christiane” <[Birgit.Schlick-Steiner@uibk.ac.at](mailto:birgit.schlick-steiner@uibk.ac.at)>

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UMassBoston MarineEcolEvolution

The Biology Department in the College of Science and Mathematics at the University of Massachusetts Boston seeks to hire an Assistant Professor in the field of Marine Ecology (or Evolutionary Biology) to begin September 1, 2025.

Successful candidates will be expected to undertake externally funded research in marine ecology defined broadly (and including marine evolutionary biology) and to satisfy important teaching needs of the Department of Biology in ecology, zoology, conservation biology, and/or evolution. Applicants must have a PhD or equivalent degree and relevant postdoctoral research experience. The Assistant Professor hired for this position will direct the research of students at the undergraduate, masters, and doctoral levels, interact with a dynamic group of ecologists and evolutionary biologists, and become an active participant in our Environmental Biology and/or Molecular, Cellular, and Organismal Biology PhD programs.

Commitment to excellence in teaching at the undergraduate and graduate levels is expected, and the application of innovative pedagogical approaches is highly valued. We seek a colleague who will support our goal of ensuring an inclusive, equitable, and diverse workplace. We

encourage individuals from underrepresented groups in science to apply.

Application instructions:

Candidates should submit: (i) a cover letter detailing how their proposed work would complement existing research within the Department, (ii) a curriculum vitae, (iii) a statement of research, and (iv) a statement of teaching philosophy (including teaching experience and preferred teaching areas). Applicants should also include contact information for three references.

UMass Boston is Boston’s only public research university. Situated on the coast of Boston Harbor at Fox Point, the campus has ready access to Boston Harbor via Marine Operations (<https://www.umb.edu/-marineops/>) and maintains a partnership with the Harbor Islands National Park (<https://www.nps.gov/boha/-index.htm>) as well as the New England Aquarium. UMass Boston also maintains an American Academy of Underwater Scientists accredited scientific diving program (<https://www.umb.edu/research/orsp/research-compliance/diving-research-safety-program/>). Scientists in Environmental Biology also frequently collaborate with the UMass Boston School for the Environment (<https://www.umb.edu/environment/>), which hosts The Stone Living Lab (<https://stonelivinglab.org/>), a multi-investigator project studying the consequences of nature-based solutions for coastal protection.

UMass Boston runs the Nantucket Field Station situated on the Folger Marsh Reserve (<https://www.umb.edu/nantucket/>). Scientists at UMass Boston also work out of the nearby Massachusetts Department of Marine Resources Cat Cove Marine Lab in Salem (<https://www.mass.gov/locations/division-of-marine-fisheries-cat-cove-marine-laboratory>), the UMass Amherst Gloucester Field Station (<https://www.umass.edu/gloucester-marine-station/>), the Plum Island Long-Term Ecological Research site in the Great Marsh (<https://pie-lter.mbl.edu/>), and the Shoals Marine Lab (<https://www.shoalsmarinelaboratory.org/>), as well as collaborating with a variety of researchers and other institutions in the region.

UMass Boston is an urban public research university with a teaching soul, whose impact is both local and global. We are the third most diverse university in the country more than 60% of our undergraduate students come from minoritized communities and groups, and more than half of our students are the first in their families to attend a college or university. Thus, our students come to us from richly diverse life experiences and backgrounds; they bring to our classrooms and research settings the robust range of perspectives growing out of the socio-cultural, economic, and historical con-

texts in which they have lived, along with the challenges they encounter, engage, and strive to overcome. We invite applications from candidates who will engage the diverse life experiences of our student body, who appreciate that students bring their holistic selves into the academic setting, and who recognize and articulate how their own life experiences and backgrounds have shaped their journeys, practices, and commitments as researchers, scholars, and educators.

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UNebraska Lincoln BotanyCurator

Botany Curator, University of Nebraska State Museum/Head of Bessey Herbarium University of Nebraska-Lincoln Lincoln, NE

Position Summary

Primary job responsibilities are to lead the Charles Bessey Herbarium, set and execute its strategic research direction in alignment with the UNSM mission, vision and strategic goals. This position is responsible for research, collection curation and Herbarium management on the UNL campus, with the purpose of enhancement and conservation of this unique set of Herbarium collections. This position manages the acquisition, preparation, organization, preservation, conservation, supervision, and promotes the research use of herbarium specimens. This position ensures that visiting researchers are assisted and supervised, and that the following are also trained and supervised: UNL students, interns and collection volunteers, student employees, nonstudent employees and other users of the collections.

The second set of responsibilities include overseeing specimen preparation, cataloguing and digitization - photography, data records, and community-based knowledge. Duties include monitoring the storage environment and security, ensure that monitoring of collection pests and taking appropriate pest management actions occurs, oversees coordinating incoming and outgoing loans, and processing new acquisitions. This position contributes to collection growth by soliciting specimen donations and actively collecting and documenting botanical diversity, conducting research and publishing results. The

position is responsible for overseeing the procurement of all relevant permits required for these activities.

The third set of responsibilities supports the museum's mission by assisting with exhibit curation (collection/selection of objects, drafting text, installing/deinstalling exhibit objects), assisting with educational programs as a content expert and speaker, and contributing to the museum's digital presence.

About the Bessey Herbarium

Founded in 1874, the Bessey Herbarium is among the oldest and largest in the Great Plains. The collection has more than 310,000 specimens of vascular plants, non-vascular plants, fungi, lichens and algae. The vascular plant collection has a regional focus of the Great Plains and Rocky Mountains, however, includes a significant number of specimens from Europe, Asia and South America. A significant paleobotany collection of approximately 10,000 specimens exists which includes rare examples of early flowering plants from the Nebraska Dakota Formation.

Minimum Required Qualifications

1. Ph.D. (or international equivalent) in Botany or related discipline (Systematics, Evolution, Ecology) with demonstrated research emphasis in phylogenetic and evolutionary research of vascular or nonvascular plants, lichens, or fungi.
2. Evidence of active involvement and experience with museum curation and standard collection operations
3. Three (3) years' experience, including knowledge of professional practices in object care, documentation, loans, exhibitions, packing and shipping.
4. Working knowledge of databases and standard MS office software proficiency (Word, Excel).
5. Experience with systematic botany, collection management, museum studies or related field
6. Demonstrated systematics expertise in a group relevant to the strengths of the Bessey Herbarium (vascular plants, non-vascular plants or mycology).
7. Demonstrated experience with research projects and publishing in peer-reviewed outlets.
8. Demonstrated museum curation skills.
9. Knowledge of professional practices in object care, object reports, archives and other documentation, loans, exhibitions, packing and shipping.
10. Ability to follow policies and procedures regarding sensitive data and maintain confidentiality.

Preferred Qualifications

1. Herbarium and botanical research training preferred.
2. Working knowledge of databases (Specify preferred)
3. Experience working with general public, amateur scientists, faculty and students.
4. Experience or knowledge of working with molecular data and other - omics data sets, as appropriate for group.
5. Demonstrated experi-

ence writing exhibit text, exhibit curation; experience collaborating with educators as a content expert and providing appropriate text or references for curriculum. 6. Experience working with professional collection managers to raise the standards of collection care through workshops and shared best practices 7. Demonstrated experience obtaining and overseeing extramural funding (grants, contracts) as PI or co-PI.

Application Materials

Interested applicants should apply through the UNL employment website (online at <https://employment.unl.edu/postings/93856>). Click on "Apply for this Job". You will then either create an application or edit your

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UNotreDame Indiana TeachingEvolutionBiol

Biology Teaching Professor

The Department of Biological Sciences at the University of Notre Dame seeks a broadly-trained and innovative teaching colleague to contribute to our Introductory Biology sequence. Candidates with a background in evolution, organismal biology, or plant biology will be particularly suited to complement the existing team.

The position is a renewable 12-month, non-tenure track appointment starting fall semester 2025, and is expected to be a long-term continuing position with opportunities for promotion. Within our Introductory Biology sequence, successful candidates would deliver a semester-long, course-based undergraduate research experience (CURE) laboratory. They will also join a team of instructors in either: 1) an integrative biology lecture course, or 2) a lab course that provides training in field/lab techniques needed to support research experimentation. The candidate must possess a graduate degree in an area of the life sciences and should be broadly trained in biology. The candidate should have an interest and commitment to teaching first-year biology students, with experience teaching at the collegiate level using student-centered, active learning strategies.

Review begins Jan. 5, 2025. Please see the interfolio advert to apply: <https://apply.interfolio.com/159088>
Contact search chair: Dr. Ryan Sensenig with questions: rsenseni@nd.edu

Ryan L. Sensenig Professor of the Practice University of Notre Dame Dept. of Biological Sciences 137 Jordan Hall of Science Notre Dame, IN 46556 rsenseni@nd.edu

Ryan Sensenig <rsenseni@nd.edu>

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UTexas Austin AI for EvolBiology

This is a cluster hire for three open-rank positions that can be appointed to either the Department of Integrative Biology or the Jackson School of Geosciences. The position is very broadly defined and includes anyone applying AI to responses to environmental challenges ranging from genes to environments. Applicants on evoldir would most likely fit under this research area:

- Advancing AI-driven methods and big-data analytics to study and model complex environmental systems, from genes to populations to landscapes, particularly in the context of ecological and evolutionary processes, climate change, and other anthropogenic pressures.

Full ad text is below.

The College of Natural Sciences (CNS) and the Jackson School of Geosciences (JSG) at the University of Texas at Austin invite applications for three tenure-track faculty positions as part of a cluster hire initiative, which aims to leverage advancements in artificial intelligence (AI) and data science (DS) to promote UT Austin's leadership in addressing the world's most pressing environmental challenges. It is broadly expected that the new faculty hires will likely be placed in the home departments of Integrative Biology (CNS) or Earth and Planetary Sciences (JSG), with the possibility of a joint appointment for Associate or Full Professor hires. We encourage applications at all levels - Assistant, Associate, and Full Professor.

We seek dynamic and collaborative scholars whose research advances or applies cutting-edge AI models and DS methods to analyze large observational data sets collected at various scales, develop predictive models of environmental systems, or develop technologies or

approaches for environmental monitoring. Applications can include the pace and impacts of global change, conservation of biodiversity, management of water resources, and human, animal, and ecosystem health. Research areas of interest include, but are not limited to:

- Advancing AI-driven methods and big-data analytics to study and model complex environmental systems, from genes to populations to landscapes, particularly in the context of ecological and evolutionary processes, climate change, and other anthropogenic pressures.
- Applying AI and DS to improve mechanistic understanding of ecosystem dynamics, nutrient cycling, the climate system, and water and carbon cycling, from local to global scales.
- Using AI to drive innovation in remote-sensing technologies and data assimilation techniques to track environmental changes, monitor organisms, and integrate multi-source data (e.g., satellite, sensor networks, field observations) for enhanced environmental or ecological modeling and forecasting.

UT Austin is home to state-of-the-art research facilities including a growing field station network, world-class collections, and unrivaled high-performance computing resources at the Texas Advanced Computing Center (TACC). Researchers benefit from collaborative opportunities in AI/DS through the UT Institute for Foundations of Machine Learning, the Machine Learning Laboratory, the new UT Center for Generative AI, and the Oden Institute for Computational Engineering and Sciences. UT's location in Austin, a growing tech and innovation hub, creates opportunities for collaboration with industry leaders in technology and AI. The Environmental Science Institute facilitates interdisciplinary research, education, and community engagement across the geosciences and biosciences.

The Department of Integrative Biology is renowned for its interdisciplinary approach, combining expertise in ecology, evolution, and behavior to address fundamental questions about organisms in their natural environments. Faculty members are leaders in diverse research areas such as biodiversity, genetics, evolution, conservation biology, disease ecology, spatial ecology, and theoretical ecology, often integrating approaches and collaborating across disciplines. Faculty in Integrative Biology supervise students in Ecology, Evolution, and Behavior (EEB), Plant Biology, Cell and Molecular Biology, Statistics, and Computational Science, Engineering, and Mathematics (CSEM) Ph.D. programs.

The Jackson School of Geosciences hosts a vibrant and innovative research community of more than 125 faculty and offers access to world-class research facilities and

support. More than 50 JSG faculty engage in cutting-edge environmental research, leveraging unique facilities. JSG is a leader in developing and using remote and in-situ sensing technologies for autonomous monitoring of environmental systems and calibration of satellites. In addition to their highly ranked undergraduate and graduate programs, the JSG offers a graduate certificate in AI and Machine Learning.

Qualifications

A Ph.D. in Earth Sciences, Ecology, Evolutionary Biology, Climate Sciences, Computer Science, Data Science, or a related field is required at the time of appointment.

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UWisconsin Madison Evolutionary Entomology

We are conducting a broad search for this faculty position and would like to include evolutionary biologists working on pest management issues in fruit crop systems. Folks interested in evolutionary ecology, insecticide resistance, applied evolutionary biology, and invasive species biology, among other evolutionary topics, would have strong research alignment with this position.

Assistant Professor - Fruit Crop Entomology

Location: Madison, Wisconsin Department: COLLEGE OF AGRICULTURAL & LIFE SCIENCES/ENTOMOLOGY Category: Faculty Employment Type: Faculty-Full Time Employment Type: Onsite Application Period Opens: Nov 6 2024 at 3:20 PM CST Job Number: 307284-FA

Job Summary:

The Department of Entomology at the University of Wisconsin - Madison is seeking to fill a tenure-track Assistant Professor position in Extension Fruit Crop Entomology to provide leadership in developing outreach and research to address the needs of stakeholders and improve management of Wisconsin's fruit-crops (i.e., apple, cranberry, grape, small fruits/berries). Wisconsin is an agriculturally and ecologically diverse state and thus an integrative approach to Extension and research

is needed, including management of fruit crop entomological pests as well as developing novel and innovative approaches.

A successful candidate will be expected to develop and lead a regionally and nationally recognized Extension program supported by a strong research program in the area of sustainable fruit crop management with emphasis on pest and beneficial arthropods. The candidate will conduct applied and basic research that will inform crop management recommendations and support fruit extension needs throughout the state. Outcomes of these efforts are intended to build resiliency and overall sustainability of fruit crop and surrounding natural systems. Recommendations will be conveyed through extension outreach avenues such as websites, social media, field days, grower meetings, and the Wisconsin Fruit newsletter. This person will be part of the existing University of Wisconsin commercial fruit Extension team, which includes a horticulturist, plant pathologist, and weed scientist. This specialization will also lend support to Extension entomology colleagues assigned to other commodities.

We are especially interested in candidates whose research interests can provide a scientific understanding of the main entomological factors influencing fruit crop production in Wisconsin. We encourage applicants with backgrounds working on fundamental biology of arthropods in fruit crop systems. This faculty position carries a commitment to research and outreach, and may include some teaching, as well as professional and university service as appropriate to faculty rank.

Responsibilities:

1. Develop an ongoing, independent, regionally and nationally recognized Extension program supported by a strong research program in the area of sustainable fruit crop management. The successful candidate will be expected to secure extramural funding. CALS Extension-funded faculty are expected to generate, translate, and apply research-based knowledge and methods to issues and problems by integrating research and educational activities into a coherent body of work. CALS Extension-funded faculty are expected to provide leadership in the design, development, and implementation of educational programs and to document the impact of these efforts.
2. Teach to students at various levels, commensurate with college expectations and consistent with the teaching loads of the department. Contribute to the department's mission through graduate student instruction and mentoring. Contribute research and instructional expertise to courses taught in the department. Mentor students and promote their development and success in a collaborative environment.
3. Contribute to service functions

4. of the department, college, and campus communities. Contribute to programs aimed at increasing diversity, equity, and inclusion within the department, college, and scientific discipline.

Institutional Statement on Diversity:

Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background - people who as students, faculty, and staff serve Wisconsin and the world.

For more information on diversity and inclusion on campus, please visit: Diversity and Inclusion

Education:

Required PhD in Entomology or a related field

Qualifications:

Successful candidates will have a record of or demonstrate

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UWyoming MammalConservation

The University of Wyoming is hiring a Mammalian Ecologist and we'd welcome applications from Evolutionary Ecologists.

https://eeik.fa.us2.oraclecloud.com/hcmUI/-CandidateExperience/en/sites/CX_1/job/243419/-?utm_medium=jobshare JOB TITLE: Assistant Professor of Mammalian Ecology JOB PURPOSE: The Department of Zoology and Physiology at University of Wyoming invites applications for a Mammalian Ecologist at the rank of Assistant Professor. We are particularly interested in candidates with a research

focus on community ecology, and/or conservation biology, with mammals as the focal taxon. The position will contribute to the maintenance and enhancement of our highly sought after Wildlife and Fisheries Biology and Management (WFBM) curriculum by designing and teaching specialized courses such as mammalogy, conservation biology, community ecology, field techniques, wildlife biology and management and/or a course in the successful applicant's specialty. The candidate will facilitate collaborations that foster cross-disciplinary projects that bridge gaps between theoretical and applied sciences. The interdisciplinary synergy brought by the position will enrich our WFBM programs and broaden the impact of our research and education on mammals across the state of Wyoming and beyond.

ESSENTIAL DUTIES AND RESPONSIBILITIES: The candidate is expected to establish a competitively- and externally- funded research program to address critical or emerging issues in the field of wildlife ecology, community ecology, or wildlife conservation and management, with a focus on mammals. Candidates will be expected to orient their program to research needs at the local (i.e., state of Wyoming), regional, and/or international levels. We seek a colleague who is committed to participating in the community by training and mentoring graduate students, teaching at the undergraduate and graduate level, advising undergraduate students, and providing service to the department, college, and university. The candidate will be responsible for teaching 2-3 courses per year. The individual will be expected to contribute to the academic missions of the Department and the interdepartmental Ph.D. Program in Ecology and Evolution.

MINIMUM QUALIFICATIONS: PhD in Ecology, Wildlife Biology, or related field Experience publishing in peer-reviewed journals Experience or demonstrated interest in teaching undergraduate and graduate level courses Demonstrated history or strong interest in conducting research with a focus on mammals

DESIRED QUALIFICATIONS: Postdoctoral research experience in a related field by the time of hire Multiple first-author publications, including in high impact journals Experience or commitment to effective teaching at the undergraduate and graduate level, with an

innovative or active-learning approach Demonstrated experience and commitment to excellence in research Evidence or demonstrated potential to attract extramural funding Demonstrated excellence in communicating science orally and through writing

REQUIRED MATERIALS: In the application, please provide a single PDF file that includes 1) a cover letter (max 2 pages), 2) research statement (max 2 pages), 3) teaching statement (max 2 pages), 4) CV, 5) three representative publications, and 5) contact information for three references. Questions may be directed to the Search Committee Chair, Dr. Jerod Merkle (jmerkle@uwyo.edu). This position will remain open until filled. Complete applications received by 12/16/2024 will receive full consideration.

Matt Carling, PhD Department of Zoology & Physiology Museum of Vertebrates

University of Wyoming Berry Biodiversity Conservation Center www.carlinglab.com mcarling@uwyo.edu
Pronouns: he, him, his

Matt Carling <mcarling@uwyo.edu>

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YorkU **EvoAnimalSocialBehaviour**

The Department of Biology, Faculty of Science at York University invites highly qualified applicants for an Assistant Professor position in Animal Social Behaviour. This is a tenure-track appointment to the Professorial Stream to commence July 1, 2025. Applications are due December 15, 2024.

Full ad can be found here:

https://www.yorku.ca/vpepc/faculty-affairs/wp-content/uploads/sites/698/2024/10/SCLBIO_ASB.pdf € emcfar@yorku.ca

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Other

<p>3DImagingAwards WesternNorthAmericaMammals DueJan8 60</p> <p>Amphibian Genomics Survey 60</p> <p>ArnoldArboretum HarvardU ResearchFunding 61</p> <p>Biodiversity Survey 61</p> <p>ESEB CongressAttendanceAidGrant DeadlineJan31 62</p> <p>ESEB OutreachInitiativeFund Mar15 62</p> <p>ESEB Three CallAwards 63</p> <p>ESEB Two Proposals 64</p>	<p>EvolutionMeeting2025 CallForProposals 65</p> <p>Fairfield CT BeeEvolutionSweden SummerJob 66</p> <p>Lille 6MnthInternship Pollinators 66</p> <p>SSE Huxley Award 67</p> <p>SSE StudentResearchGrants 68</p> <p>UWisconsin Madison EarlyCareerAward DeadlineEx- tended 68</p> <p>VirginiaMuseumNatHist VisitingScholar 68</p>
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3DImagingAwards WesternNorthAmericaMammals DueJan8

Mammal-oriented evolutionary biologists, we are pleased to share an opportunity that may be of interest for yourself, your labs, or collaborators who are conducting morphometric and/or trait-based research on mammals of Western North America. I am happy to answer any and all questions off-thread.

The Ranges Digitization Network (<https://ranges-network.org/>) is pleased to announce the *second annual call* for the *Ranges Imaging Mini-Awards*.

Ranges is an NSF-funded effort (DBI-2228385) to digitize morphological and life history traits from over one million mammal specimens from 20 natural history museums, with a focus on western North America. The project is allowing researchers to build better baselines for biodiversity, expand the utility of specimens for new trait-based knowledge and discovery, and improve predictions of how mammals respond to changing environments beyond spatial characteristics alone.

Ranges Imaging Mini-Awards are designed to fund researchers to produce images of mammal specimens which can extend their current research through collection of internal and potentially complex trait data at the intraspecific level. Preference is given to proposals and imagery that can be integrated with the other specimen-level trait data being digitized by Ranges < <https://ranges-network.org/traits/> >. Faculty, staff, postdocs, students or researchers affiliated with an U.S. institu-

tion are encouraged to apply for this award to produce imagery via ?CT scanning, diceCT, laser scanning or photogrammetry for trait-focused research. Projects focused on any aspect of morphological variation are welcome.

Applications are now being accepted. Learn more at (<http://www.ranges-network.org/awards/>).

DEADLINE: *Applications must be submitted by January 8, 2025, 11:59pm Pacific Time*.

-Bryan

bryansmclean@gmail.com

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Amphibian Genomics Survey

Dear colleagues,

The Amphibian Genomics Consortium (AGC) <https://mvs.unimelb.edu.au/amphibian-genomics-consortium> is dedicated to advancing research in amphibian genomics by sharing information and fostering collaboration across the global community.

In this spirit, we invite members of the community who have experience with High Molecular Weight DNA extraction and/or sequencing in amphibians to take a short survey.

Long-read sequencing is becoming more accessible and is particularly valuable for assembling large, repeat-rich

genomes like those of amphibians. However, uncertainties remain regarding optimal sample types, preservation methods, and strategies to maximize sequencing yield on the different platforms.

This survey seeks to pool our collective experience to identify best practices, highlight common pitfalls, and ultimately contribute to a publication that can guide future efforts in the field. If you are interested in contributing to this publication, please indicate it in the survey and provide your contact information. You can direct any questions regarding the survey to Sandra Goutte: sg5533@nyu.edu. We appreciate your participation!

Survey link: <https://tinyurl.com/32vfnxz4> Sincerely, Sandra Goutte.

Sandra Goutte, Ph.D. Research Associate New York University Abu Dhabi Saadiyat Island campus P.O. Box 129188 Abu Dhabi, United Arab Emirates

Sandra Goutte <sg5533@nyu.edu>

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Arnold Arboretum HarvardU Research Funding

Research Funding opportunities at the Arnold Arboretum of Harvard University

The Arnold Arboretum of Harvard University promotes and supports research consistent with its mission to discover and disseminate knowledge of the plant kingdom. To foster both independent and collaborative work, the Arboretum offers fellowships and awards to students, post-doctoral researchers, and professionals of the biological sciences including evolution, ecology, development, genetics and global change research. Applicants are encouraged to define and develop paths of inquiry using the Arboretum's resources, including its world-renowned living collection, herbarium, plant records, library and archives, greenhouse and laboratories, and the expertise of its staff.

There is currently one fellowship, eight awards, and an internship program. Applicants must submit a research proposal online. Please see the website for the specific requirements of each award. <https://arboretum.harvard.edu/research/-programs-and-opportunities/> Available opportunities:

Internships: Application deadline is Feb 15 annually DaRin Butz Research Internship Program of the Arnold Arboretum of Harvard University

Research Awards: Application deadline is Feb 1 annually Maria Amalia Carvi, $\frac{1}{2}$ o Research Award (NEW!) Ashton Award for Student Research Cunin / Sigal Research Award Deland Award for Student Research Shiu-Ying Hu Student/Postdoctoral Exchange Award Jewett Prize Sargent Award for Visiting Scholars Sinnott Award

Fellowship: Application deadline is Jan 11 Global Change Postdoctoral Fellowship Putnam Fellowship in Plant Science

Faye Rosin, PhD Director of Research Facilitation Arboretum of Harvard University <<https://arboretum.harvard.edu/>> 1300 Centre St | Boston, MA 02131 617.384.5095

“Rosin, Faye M” <frosin@oeb.harvard.edu>

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

Biodiversity Survey

Dear all, The European project RESPIN <<https://www.fondationbiodiversite.fr/en/the-frb-in-action/-our-involvement/respin/>> (REinforcing Science-Policy INTERfaces for integrated biodiversity and climate knowledge and policies), which is looking to improve the uptake of existing knowledge on biodiversity and climate in decision-making and to strengthen collaboration between IPBES and IPCC. To do so, RESPIN developed a survey to better understand the barriers and incentives to the engagement of knowledge holders in IPBES and the IPCC processes. We invite all contributors/potential contributors/end-users of IPBES or IPCC to complete this questionnaire - we're therefore counting on you to please complete the questionnaire and share it within your professional network. The questionnaire is available at this link <https://www.surveymonkey.com/r/respinsurvey> and links to French, Spanish and Russian versions are also available at the beginning of the questionnaire. It will be open until March 2025. Thank you very much in advance for completing the questionnaire and sharing it within your networks.

Marie-Claire Danner

SCIENCE OFFICER IN EUROPEAN AFFAIRS

RESPIN, BIODIVERSA+, IPBES

Please note that I don't work on Friday

+33 (0)6 71 66 46 58

FRB-CESAB : 5 rue de l'école de médecine, 34000
MONTPELLIER

Marie-Claire DANNER <marie-claire.danner@fondationbiodiversite.fr>

(to subscribe/unsubscribe the EvolDir send mail to gold-
ing@mcmaster.ca)

ESEB Congress Attendance Aid Grant Deadline Jan 31

****Congress Attendance Aid Grant****

The grant aims to ensure equal opportunities at the 30th European Meeting of PhD Students in Evolutionary Biology (EMPSEB) or the ESEB Congress in Barcelona, Spain.

The grant aims to achieve this by increasing the attendance of underrepresented groups, primarily, but not solely, caregiving women (who due to higher costs of childcare are often prevented from attending), through positive discrimination. The grant provides stipends of financial aid for scientists to help with the additional costs borne privately due to responsibilities for dependents when attending one of the above mentioned meetings. For example, stipends can cover dependent care or personal travel expenses. Applicants may request between 250 to 500 Euro for EMPSEB attendance and between 250 to 750 Euro for ESEB attendance. Higher amounts are awarded to those travelling further or to those from countries with less access to funding.

Please note that this grant is distinct from the ESEB Conference Travel Award (<https://eseb.org/prizes-funding/conference-travel-award/>), which is designed to help young researchers who are professionally based in low income countries with the travel costs to attend the meeting and is NOT meant for other underrepresented groups or to support additional costs due to caring for dependents when attending the meeting.

DEADLINE: 31 January 2025

ELIGIBILITY - Applicants must be ESEB members (for becoming a member of ESEB please visit our membership page: <https://eseb.org/society/membership/>).
- Applications can be submitted by scientists at any

stages of their professional career (e.g., undergraduate, Masters and PhD students, postdocs, and lecturers). - Applicants must explain explicitly how their attendance will increase equal opportunities at the society. - Applicants must present either an oral communication or a poster at the respective meeting to be eligible for the award. This will be verified before the reimbursement, but no proof that a poster or talk is accepted is necessary at the application stage. Please note that being chosen for a travel award does not guarantee acceptance of a poster or talk at the conference. - Applicants must detail how they intend to use the grant. Eligible costs include, but are not limited to: childcare on site, childcare at home, extra care at home for dependents, extra travel costs for babysitter (grandparents) etc. - The stipend will be paid out as a flat rate of 250 euro (in certain cases up to 500 euro) after the congress when confirmation of attendance & presentation is provided.

HOW TO APPLY The application should be no more than 2 pages long and include: - Name of the applicant - ESEB membership number - An explanation of how attendance at the meeting improves equal opportunities at ESEB - An explanation of how attendance at the meeting will further the attendant's professional goals - Itemised budget in Euro - CV

Please submit the application as a single PDF file by email to Ute Friedrich at the ESEB office (office@eseb.org; subject: CAA grant 2025) and take care to limit the size of attachments (total < 10 MB) in any one email.

— European Society for Evolutionary Biology (ESEB)
Email: office@eseb.org Website: <https://eseb.org> ESEB Office <office@eseb.org>

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ing@mcmaster.ca)

ESEB Outreach Initiative Fund Mar 15

****ESEB Outreach Initiative Fund****

The European Society for Evolutionary Biology (ESEB) welcomes applications to the ESEB Outreach Initiative Fund for projects that promote evolution-related activities. The goal of this initiative is to improve public knowledge about evolution globally.

Applications for funding will be accepted for educational initiatives that promote evolution, translation of evolu-

tionary material (books, films, and websites) intended for a general audience, public outreach seminars, public exhibitions, etc.

There will be a single call per year with a total budget of 12,000 Euro. A single project can be funded with up to 4,000 Euro, but smaller projects are welcome. We are requesting a report after one year, at which time the project should be completed.

Please use the ESEB application form to submit your proposal and note the word limits given herein. The form can be downloaded at the ESEB website: <https://eseb.org/prizes-funding/outreach-fund/> Proposals will be accepted until *15th March 2025**and should be submitted by email to the ESEB office (Email: office@eseb.org; Subject: Outreach 2025). We will acknowledge receipt of all applications within a week. If you have not received our confirmation by then, please contact the ESEB office again!

Please note that scientific meetings are not supported by ESEB Outreach Initiative funds. These fund also do not work as a mechanism for continual funding. Once the potential of a project has been demonstrated, this should be used as a basis to convince other funding sources on continuation funds. Hence, submissions by a group that has been successful in past calls may be penalized if the proposals are mere follow-ups of previous projects.

The applications will be evaluated by the Outreach Initiative Committee:

Florence Debarre, Chair Trine Bilde Hannah Dugdale
Andy Gardner Efe Sezgin

European Society for Evolutionary Biology Email: office@eseb.org Homepage: eseb.org

ESEB Office <office@eseb.org>

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ESEB Three CallAwards

J. Maynard Smith Prize Godfrey Hewitt Mobility Award
ESEB Conference Travel Award see below ...

ESEB JOHN MAYNARD SMITH PRIZE

Each year the European Society for Evolutionary Biology (ESEB) distinguishes an outstanding young evolu-

tionary biologist with a prize named after John Maynard Smith (1920 - 2004), eminent scientist, great mentor, author of many books on evolution, and a former President of ESEB.

NOMINATION The prize is open to any field of evolutionary biology. The candidates for the 2025 prize should have commenced their PhD study after January 1, 2018. However, nominees who started their PhD earlier than January 1, 2018 will also be considered if they have taken career breaks; an outline of the reason should be given. Self and non-self nominations are both welcome. Documents supporting a nomination should be sent as a single PDF file to Ute Friedrich at the ESEB office office@eseb.org.

Non-self nominations:

1. Letter of support. If you are nominating someone, please send a letter of support for the nomination directly to <office@eseb.org>.

- Your letter should outline the candidate's academic qualities as well as their wider diverse contributions including to EDI and Open Research

2. Candidate documentation. If you are nominating someone, ask them to send a single pdf file to <office@eseb.org>. This file should contain:

- a brief description of the candidate's contributions to the study of evolution (1 page maximum)

- the candidate's CV and a list of publications (indicating three notable papers and a description of the candidate's contributions to those three papers)

- the CV should also include information on the candidate's wider, diverse contributions including to EDI and Open Research

- a short description of current research (1 page maximum)

- a short description of future research plans (1 page maximum)

Self nominations:

1. Letter of support. Ask a colleague to write a supporting statement, as above, for your nomination. They should send this letter directly to <office@eseb.org>.

2. Candidate documentation. Send the same candidate information as outlined above directly to <office@eseb.org>.

DEADLINE

Nominations and letters of support should arrive no later than WEDNESDAY, JANUARY 15, 2025.

Please take care to limit the size of attachments (total

< 10MB) in any one email. The nomination committee, chaired by Josefa González, will evaluate the nominations and inform the winner approximately by end of March 2025.

ASSESSMENT PROCESS

The evaluation committee, after ruling out any potential conflicts of interest, will review all the material. The evaluation committee will consider the academic merit of applications. In addition, they will also consider (i) diverse contributions - /e.g./ via science outreach, teaching, mentoring, community service, EDI, mitigation of climate change impacts, etc, and (ii) engagement with Open Research, /e.g./, via sharing of research via mechanisms including Open Access, preprint servers, and sharing of data, code, protocols, etc.

The evaluation committee is also instructed to take into account potential differences in access to opportunities, and to be aware of, call out and take steps to minimize, conscious and unconscious biases in their evaluations.

AWARD DETAILS

The prize winner is expected to attend the ESEB congress in August 2025 in Barcelona, Spain, where they will deliver the 2025 John Maynard Smith Lecture. The Society will cover registration, accommodation, and travel expenses (economy fare). The JMS Prize comes with a monetary prize of 2500 euro, the invitation to write a review for the /Journal of Evolutionary Biology/, and the possibility of a Junior Fellowship of 6 months at the Institute of Advanced Study in Berlin, Germany. For more information on the Institute of Advanced Study see <https://www.wiko-berlin.de/en/>. Previous winners of the JMS Prize are listed at the ESEB web site: <https://eseb.org>. Sincerely, Josefa González ESEB Vice-President**

GODFREY HEWITT MOBILITY (GHM) Award 2024 - Call for Applications

Godfrey Hewitt (1940-2013) was President of the European Society for Evolutionary Biology (ESEB) from 1999-2001. He was exceptionally influential in evolutionary biology both through his research and through his mentoring of young scientists. He was also a great believer in seeing organisms in their environment first-hand and in exchanges of ideas between labs. Therefore, ESEB annually offers mobility grants for young scientists in his name.

DEADLINE: FRIDAY, 31 JANUARY 2025.

ELIGIBILITY

The award is open to PhD students or postdoctoral

scientists who are, at the closing date for applications, within 6 years of the start date of their PhD and ESEB members. In addition, applicants will be considered

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ESEB Two Proposals

Proposals - Two - Initiative Funds - Special Topic Networks

ESEB EO Initiative Funds - Call for Applications

Next deadline: Monday, 28 April 2025

Annual open call for proposals for activities that increase awareness of the problem and possible solutions. Such proposals can include, but are not limited to, short workshops (for instance, on unconscious bias) and/or seminars (with invited speakers) at your home organization, data collection, publication activities and similar events. It must be clear from the proposal how the activity will improve our knowledge and awareness of inequalities, or how the activity will improve equal opportunities directly, in the ESEB specifically, or Evolutionary Biology as a field in general.

ELIGIBILITY

- The main applicant must be ESEB member (to become an ESEB member or renew the ESEB membership, please visit our membership page first). - Applications can be submitted by scientists at any stage of a professional career (e.g., undergraduate, Masters and PhD students, postdocs, and lecturers). - Applicants must provide proof of support of the host institution where the activity should take place, if applicable (letter from head of department) - Applicants must explain explicitly how their activity will improve our knowledge, awareness of unequal opportunities, or how the activity will improve equal opportunities directly, in ESEB specifically, or Evolutionary Biology as a field in general. - Applicants must detail which group of people, and how many, will benefit from this activity (for instance, 50 undergraduates, 10 graduate students, 15 faculty members) - Budgets should be reasonable (usually not exceeding

1000 EUR, if more is required, please contact EO committee first), and, if applicable, detail costs per person (that benefit from this event).

HOW TO APPLY

The application should be no more than 3 pages long (excluding CV and support letter) and include:

- Name of the applicant(s), please indicate the main applicant if appropriate.
- ESEB membership number (main applicant).
- A proposal of the activity.
- A justification of how the activity will improve our knowledge, awareness of unequal opportunities, or how the activity will improve equal opportunities directly, in ESEB specifically, or Evolutionary Biology as a field in general.
- Which group of people will benefit (students, staff, general public), and how many.
- A detailed, justified budget (including cost per beneficiary).
- A time schedule.
- A short summary to be published on the website (100-150 words).
- CVs of the applicants (1-2 pages).
- A letter of support of the host institution's head of the department.

Please submit the application as a single PDF file by email to Ute Friedrich at the ESEB Office (office@eseb.org; Subject: EO Fund 2025) and take care to limit the size of attachments (total < 10 MB) in any one email.

Successful applications must hand in a report about the activity, including details of how funds were spent (receipts!), within 3 months of the event.

... European Society for Evolutionary Biology Website: ese.org ESEB Office - office@eseb.org

ESEB SPECIAL TOPIC NETWORKS - CALL FOR PROPOSALS

This is a call for proposals for new Special Topic Networks (STN), which will start in September 2025 and be funded by ESEB for up to 6 years. The deadline for the submission of a proposal is APRIL 2nd, 2025.

Background ESEB's STN Initiative supports networking activities in various specific areas of evolutionary research. Each STN is funded for up to 6 years (subject to review after 2 and 4 years of operation) with up to 10,000 Euros for each 2-year funding period. Twelve STNs have been supported since the start of the initiative, and up to four new STNs will be initiated every other year. Networking activities may include the organisation of symposia, workshops, lecture series, courses, and lab visits or joint work on review papers or databases. However, the format of an STN is up to the organisers, and innovative ideas are encouraged. All active fields of evolutionary research are eligible, provided that the topic

of the network differs from the STNs that are currently funded (see the list of currently funded STNs below).

Proposals and selection procedure Applicants should provide a proposal with the following components. (1) Topic of the network: a description of the research area to be targeted, explaining why it is timely to address the proposed topic by a networking initiative, and outlining the expected benefits of the STN to the field (max. 1000 words). (2) Network activities: a global description of the planned networking activities that includes information on the target group of researchers and a more specific description of the activities planned for the first two years of operation of the STN (max. 500 words). (3) Organisation of the STN: the names and affiliations of the

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EvolutionMeeting2025 CallForProposals

The 2025 Evolution meeting (<https://www.evolutionmeetings.org/>), the joint meeting of the Society for the Study of Evolution (SSE), the American Society of Naturalists, and the Society of Systematic Biologists, will be held in two parts: a virtual portion on May 29-30, and an in-person portion on June 20-24 in Athens, GA, USA.

SSE Council invites proposals for two sponsored symposia at the in-person meeting, and one at the virtual meeting. Symposia should highlight new topics, provide new perspectives, and/or generate new syntheses. Each in-person symposium will consist of two 75-minute sessions separated by a coffee break; the virtual symposium schedule will likely be the same or very similar. Applicants have the option to indicate whether they are willing to host their symposium in-person only, virtual only, or either.

SSE Council seriously considers the diversity of participants as a criterion for symposium funding. Symposium organizers are expected to take into account gender, seniority, nationality, and other axes of diversity traditionally underrepresented in Society symposia, and to describe their efforts to do so in the proposal.

The Society provides travel support for organizers and participants in sponsored in-person symposia, up to \$7000 USD per symposium. SSE will accept requests for additional funds for dependent care costs if this would allow a speaker to accept an invitation to speak in a sponsored symposium. For the virtual symposium, costs of speaker and organizer virtual-only registration will be covered, if necessary (those attending the in-person meeting get virtual registration included so do not need an extra virtual-only registration).

DEADLINE: January 6, 2025

Applicants will be notified by the end of January.

Learn more about how to submit a proposal here: <https://www.evolutionsociety.org/society-awards-and-prizes/sponsored-symposia.html> *Kati Moore*she/her *Communications Manager* *Society for the Study of Evolution* communications@evolutionsociety.org www.evolutionsociety.org communications@evolutionsociety.org

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Fairfield CT BeeEvolutionSweden SummerJob

The Bee Health and Ecology Research Objective (Bee-HERO), is an international research experience that will provide undergraduate students the opportunity to study bee parasites and viruses at the Centre for Honey Bee Research in Uppsala, Sweden at the Swedish University for Agricultural Sciences. Please share this unique, paid research opportunity for Summer 2025-2027 with any undergraduate students you know who may be interested.

Bee-HERO is funded by the National Science Foundation's International Research Experiences for Students (NSF-IREES) program and it provides students with a paid, eight-week international research experience studying bees and exploring causes of declining populations. The five-part program also includes personalized mentorship, a series of preparatory trainings to provide scientific background/context and develop laboratory skills, and follow-up activities to gain valuable experience in science communication.

This opportunity is aimed at students from groups that are under represented in STEM fields. This program aims to address systemic inequities in access to research

experiences, which act as barriers to the retention and success of undergraduate students from historically underrepresented groups in academic science.

Bee-HERO is primarily recruiting participants from within an approximate two-hour geographic radius of Sacred Heart University in Fairfield, CT because all travel costs are included in the program.

This program is hosted by Sacred Heart University in Fairfield, CT, USA. If you have any questions, please contact Profs Alyssa Woronik or Torrance Hanley (woronika@sacredheart.edu, hanleyt2@sacredheart.edu)

For more info, visit the Bee-HERO website (<https://www.sacredheart.edu/academics/colleges-schools/-college-of-arts-sciences/departments-schools/biology/-bee-health-and-ecology-research-objective-bee-hero/>)

Application link: <https://etap.nsf.gov/award/7315/-opportunity/9802> Thank you for helping spread the word about this great opportunity!

“Woronik, Prof. Alyssa” <woronika@sacredheart.edu>

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Lille 6MnthInternship Pollinators

Hi everyone,

We are offering a 6-month internship for a Master 2 student at the Evo-Eco-Paleo laboratory in Lille (France).

Title of the traineeship: Effects of pollinator community composition on selection patterns
Traineeship supervisor: Camille Jolivel, Isabelle De Cauwer & Nina Joffard
Laboratory: UMR 8198 C Evo-Eco-Paleo, France (Lille)
Phone number: 03 20 33 59 23
Email: camille.jolivel@univ-lille.fr, Isabelle.De-Cauwer@univ-lille.fr, nina.joffard@univ-lille.fr

SUBJECT OF THE TRAINEESHIP

The reproduction of generalist entomophilous angiosperms relies on their ability to attract different groups of pollinating insects through attractive signals (visual signals, olfactory signals, rewards for the pollinator). Phenotypic variation in these attractive signals is frequently observed within the same species, which can be explained by adaptation to the local pollination context. If phenotypic traits are heritable, selection pressures can lead to adaptation of these traits. Selection can be defined as the relationship between reproductive

success (RS) and floral traits (Lande & Arnold 1983). For females, RS corresponds to the total number of seeds produced and for males, RS corresponds to the total number of seeds sired.

Pollinator-mediated selection is considered an important part of the selection exerted on floral traits. However, when a plant is pollinated by various pollinators, these may exert different selection pressures on these traits, potentially leading to divergent evolution of floral traits within just a few generations (Gervasi & Schiestl 2017). Indeed, pollinators do not have the same sensory abilities or preferences (Fenster et al. 2004). Additionally, the morphological and behavioral characteristics of pollinators can significantly influence pollen export and deposition, and thus their pollination efficiency (Furtado et al. 2023). The optimal values of “mechanical” traits (i.e., traits related to the fit between the flower and the pollinator) should therefore differ from one group of pollinators to another.

Silene dioica is a herbaceous, perennial, and dioecious angiosperm (i.e., species with separate sexes, Kay et al. 1984). *S. dioica* is pollinated by many different types of pollinators, and the composition of pollinator communities can vary, even at a small spatial scale (10 km).

The aim of this internship is to generate genotyping data and to analyze the data collected during an experiment conducted in spring 2024, aimed at studying selection mediated by the most frequent diurnal pollinators of *S. dioica*, bumblebees and hoverflies.

For this, three pollination treatments were set up under controlled conditions: the plants were exposed to bumblebees, or hoverflies, or both bumblebees and hoverflies. The objectives are to: (1) determine which floral traits are selected and with what intensity, for each treatment, (2) determine whether the presence of both pollinators results in non-additive selection (total selection does not correspond to the sum of the selection mediated by each pollinator, terHorst 2017).

During the experiment, several floral traits were measured on each individual (corolla width, calyx height, number of open flowers, number of flowers produced, and plant height). Pollinator visit observations were conducted to study the activity of each pollinator type. To estimate the reproductive success (RS) of each individual, all the seeds produced during the experiment were collected. For female, RS will be estimated as the total number of seeds produced. For males, RS will be estimated by the total number of seeds sired. To estimate this quantity, genotyping of a subsample of seeds produced during the experiment will be performed. The DNA of each adult will be extracted from a leaf

sample, and the DNA of the offspring will be extracted directly from the seeds. Paternity analyses will then be conducted. Finally, directional selection gradients will be estimated using the method of Lande & Arnold (1983).

References : - Fenster, C. B., Armbruster, W. S., Wilson, P., Dudash, M. R., & Thomson, J. D. (2004). Pollination syndromes and floral specialization. *Annual Review of Ecology, Evolution, and Systematics*, 35(1), 375-403. - Furtado, M. T., Matias, R., Pérez Barrales, R., & Consolaro, H. (2023). Complementary roles of hummingbirds and bees: Pollen pickup, pollen deposition, and fruit production in the distylous *Palicourea rigida*. *American Journal of Botany*, 110(6), e16194. - Gervasi, D. D. L., & Schiestl, F. P. (2017). Real-time divergent evolution in plants driven by pollinators. *Nature Communications*, 8(1), 14691.

- Kay, Q. O. N., Lack, A. J., Bamber, F. C., & Davies, C. R. (1984). Differences between sexes in floral morphology, nectar production and insect visits in a dioecious species, *Silene dioica*. *New Phytologist*, 98(3), 515-529.

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SSE Huxley Award

The Society for the Study of Evolution Education and Outreach Committee is pleased to announce the call for applications for the 2025 T.H. Huxley Award, named in honor of Darwin's very public supporter: <https://shorturl.at/dziho> This award recognizes and promotes the development of high-quality evolution education resources. If you have an interesting project or educational activity to share, consider applying for this award. You must be an SSE member to apply. Graduate students and postdoctoral fellows are encouraged to apply.

This award provides funding for the recipient to present an evolution education resource at an education-focused session or conference approved by the Huxley Committee (e.g., education session at the annual Evolution meeting or the annual National Association of Biology Teachers conference).

Applications are due February 3, 2025.

Learn more and apply here: <https://shorturl.at/dziho>

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

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SSE StudentResearchGrants

The Society for the Study of Evolution is now accepting applications for the 2025 R. C. Lewontin Early Awards. These grants offer up to \$2,500 USD in research funding to assist students in the early stages of their PhD or Master's program. Applicants must be members of SSE to apply.

Read the full requirements, instructions, and evaluation criteria on our website: <https://www.evolutionsociety.org/content/society-awards-and-prizes/graduate-research-excellence-grants/rc-lewontin-early-award.html> Deadline: February 19, 2025

*Kati Moore*she/her *Communications Manager*
 Society for the Study of Evolution communications@evolutionsociety.org www.evolutionsociety.org
 communications@evolutionsociety.org

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UWisconsin Madison EarlyCareerAward DeadlineExtended

Deadline extended to 12/7/24!

Wisconsin Evolution at the University of Wisconsin-Madison is inviting early-career evolutionary biologists from outside UW-Madison to apply to participate in an early-career scientist seminar in Spring 2025 and Fall 2025 as part of our Evolution Seminar Series (<https://evolution.wisc.edu/seminars/seminars-info/>). Please

come share your science with our community!

The 3-5 speakers selected will be invited to visit UW-Madison, either in person or remotely. Each speaker will present a 50-minute seminar, ideally aimed at evolutionary biologists with a broad range of backgrounds. The speaker will also participate in a 45-minute discussion after the seminar with undergraduate evolution majors. For the day of the seminar, we will schedule meetings and meals with faculty and students working in evolutionary biology. Speakers will receive a \$150 honorarium.

Application deadline: Extended to December 7th, 2024.

Eligibility: Non-UW-Madison graduate students and postdocs who received a Ph.D. no longer than 5 years ago.

For more information about the award and to apply, please visit: <https://evolution.wisc.edu/seminars/early-career-seminars/> For more information about our institute, please visit: <https://evolution.wisc.edu/> For direct inquiries please contact Jassim Al-Oboudi (aloboudi@wisc.edu) or Emily Ubbelohde (ubbelohde@wisc.edu).

Thank you,

Jassim Al-Oboudi

PhD Student Hitting Lab UW-Madison

JASSIM I AL-OBOUDI <aloboudi@wisc.edu>

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VirginiaMuseumNatHist VisitingScholar

Title: Visiting Scholar Hiring Range: \$43,000 - \$48,000
 Agency: Virginia Museum of Natural History Agency
 Website: www.vmnh.net Job Duties

The Virginia Museum of Natural History (VMNH) seeks a Visiting Scholar/Visiting Researcher/Postdoctoral Scholar in Vertebrate Biology, broadly defined. The successful candidate will be appointed in the Research and Collections Division and affiliated with a biology science lab within a given scientific collection (Vertebrate Zoology Collections). This is a 2-year, full time position with the possibility of extension.

We seek a candidate with demonstrated high-impact re-

search applying collections-based approaches to address questions in biodiversity, systematics, phylogenetics, and/or evolution. Candidates should exhibit scientific productivity and grantsmanship, and clear potential for future success in these areas. The candidate's research program should integrate with the Museum's focus on comparative biology and biodiversity science with relevance to patterns and processes including but not limited to Virginia ecosystems and species. The ideal candidate would have an interest in working with data from the museum's ornithology and/or mammalogy collections. Those whose research utilizes or increases visibility of natural history collections through big data computational approaches or fieldwork are encouraged to apply.

The candidate's research and activities are expected to complement and utilize or strategically expand the use of the museum's collections in novel ways. The VMNH has a small but active scientific community and multiple opportunities for public-facing engagement with a large and diverse audience. We are committed to advancing and sustaining a diverse, equitable, and inclusive workplace and visitor experience and expect the opportunity to join with this mission to be apparent in the applicants' statements.

Minimum Qualifications

- A graduate or postdoctoral degree in the natural sciences at the time of hiring
- Experience performing collections-based research that is relevant to the understanding of biodiversity and natural history
- Experience or interest in using science communication to engage with museum patrons and community members
- Post-doctoral experiences in the natural sciences at the time of application submission
- Publications demonstrating expertise in working with one or more vertebrate animal groups and utilizing biodiversity data
- The ability to support an externally funded research program that includes the southeastern United States
- Demonstrated ability to build a regional network with local partners and institutions
- The ability to handle large datasets using advanced computational methods
- Experience with one or more of the following: specimen collection and curation, machine learning, eDNA, metabarcoding, remote sensing, GIS, genomics, and CT scanning

Additional Considerations

The Virginia Museum of Natural History is located in the biologically diverse region of southwest Virginia near a variety of natural areas spanning multiple physiographic provinces (Valley and Ridge, Blue Ridge, Appalachian Plateau, Piedmont). The City of Martinsville is a small but vibrant community with regional access to many larger cities (Roanoke, Greensboro, Danville, Winston-Salem, Blacksburg) and universities and colleges (e.g., Virginia Tech, Roanoke College, UNC Greensboro).

Application materials required (include as attachments with online application):

- Cover letter (max. 1 page)
- Curriculum vitae
- Names and contact information for three letters of reference which will be requested for short-listed candidates

Inquiries about the position should be directed to Ben Williams, Administrator of Science. Applications will be accepted through November 29, 2024.

****Application Process: Only online applications are accepted. Requested documents may be attached to the online application. The Commonwealth of Virginia online employment application is available at <https://www.jobs.virginia.gov/home>. The Virginia Museum of Natural History complies with E-Verify, which is an internet-based system operated by the Department of Homeland Security in partnership with the Social Security Administration that allows participating employers to electronically verify the employment eligibility of their newly hired employees.

We are an equal opportunity employer. All qualified applicants are afforded equal opportunities without regard to race, sex, color, national origin, religion, sexual orientation, gender identity, age, veteran status, political affiliation, genetics or disability. The successful applicant must furnish proof of identity and employment eligibility and is subject to a background check.

Contact Information Name: Lynette Perkins Phone: 276-403-8522 Email: lynette.perkins@vmnh.virginia.gov

Ryan L. Barber, CFRE Deputy Director

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PostDocs

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Arnold Arboretum HarvardU PlantEvolution

Arnold Arboretum Postdoctoral Fellowships

The Arnold Arboretum of Harvard University invites early career scientists to apply for a unique opportunity to start a research career as independent postdoctoral fellow while gaining training and connections within the framework of a top-tier academic environment. The Katharine H. Putnam Fellowship in Plant Science supports scientists focused on utilizing the Arnold Arboretum's living collections of woody plants to study any area of plant science. The Global Change Postdoctoral Fellowship supports researchers that tackle any area of global change science utilizing the myriad resources of the Arnold Arboretum.

The Arnold Arboretum of Harvard University and its urban landscape in Boston are particularly well-suited for global change and plant science research. It is both an outdoor museum of the world's temperate trees and other woody plants grown in a public open space, all within sight of the Arboretum's state-of-the art research facilities.

Deadline: Jan 11

Fellowship Details: An Arboretum Postdoctoral Fellowship includes a salary of \$83,000 per year, health insurance eligibility, and annual support of up to \$10,000 for professional expenses including research, travel, relocation to Boston (and up to \$2,500 of total budget). Fellows are expected to be in full-time residence at the Arboretum during their 2-year tenure and are provided office and research space. It is not necessary to have a specific faculty host. Fellows can start between July 1 and the beginning of September.

Eligibility: Applications are sought from early-career individuals with a PhD in life sciences, plant biology, evolution, plant genetics, plant ecology, horticulture, or related discipline. Applicants must have their PhD when they initiate their term at the Arboretum. We strongly encourage applications from groups under-represented in the sciences. Foreign nationals are eligible to apply, but applicants are expected to be fluent in English.

More information: <https://arboretum.harvard.edu/-research/programs-and-opportunities/global-change-postdoctoral-fellowship/> Commitment to Equity, Diversity, Inclusion, and Belonging Harvard University and the Arnold Arboretum view equity, diversity, inclusion, and belonging as the pathway to achieving inclusive excellence and fostering a campus culture

where everyone can thrive. We strive to create a community that draws upon the widest possible pool of talent to unify excellence and diversity while fully embracing individuals from varied backgrounds, cultures, races, identities, life experiences, perspectives, beliefs, and values.

EEO Statement We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, gender identity, sexual orientation, pregnancy and pregnancy-related conditions, or any other characteristic protected by law.

Faye Rosin, PhD Director of Research Facilitation Arboretum of Harvard University < <https://arboretum.harvard.edu/> > 1300 Centre St | Boston, MA 02131 617.384.5095

“Rosin, Faye M” <frosin@oeb.harvard.edu>

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Brno Czechia FishEcoEvo

POSTDOCTORAL RESEARCH POSITION - 12 MONTHS

TOPIC: Fish Ecology and Evolution

REICHARD LAB (www.reichardlab.eu)

Institute of Vertebrate Biology, Czech Academy of Sciences, Brno

Full-time postdoctoral position for 1 year (funding until 31 Dec 2025) is available at the Institute of Vertebrate Biology of the Czech Academy of Sciences, located in Brno, Czech Republic. All applications submitted before 2 December 2024 will be fully considered. Selected candidates will be interviewed online.

This position is within a generous funding of Expro project of Czech Science Foundation to Martin Reichard on reproductive parasitism in fish (funded for 2021-2025). It uses two understudied fish brood parasitic systems: bitterling fishes (Acheilognathidae) and their mussel hosts, and cuckoo catfish (*Synodontis multipunctatus*) and their cichlid hosts from Lake Tanganyika.

The project aims at identifying the conditions for the origin and evolution of host specificity in brood parasites. Field and lab studies are combined with population

genomics, phylogenetics and comparative methods.

Selected candidate will work in an international group consisting of two Ph.D students, three postdoctoral researchers, and several full-time researchers. There is flexibility in the specific focus within the broad terms of the project, although for this position, we would particularly welcome a candidate with expertise in:

1. genome biology or
2. fish morphology, reproductive biology and behaviour

These topics are complementary to the expertise we already have in our research team.

We expect applications from candidates with a background in ecology and evolution. For experimental work, there is access to well-equipped fish breeding facility and outdoor set of mesocosm tanks.

All research expenses, including fieldwork and conference travel, are covered from the project.

QUALIFICATIONS

PhD in Biology or related discipline

SALARY

50,000 CZK, c. 2,000 EUR per month (well above average for Czech living expenses), giving net earnings of approximately 42,000 CZK per month. Social and health insurance (additional 35%) are covered by the project funding.

APPLICATION PROCEDURE

Feel free to consult through informal enquires by email to reichard@ivb.cz (PI of the project).

For formal applications, please submit a CV with explanations of your previous work and motivation to apply for this position in your Cover Letter (1-2 pages).

Submit your application until 2 December 2024. Short-listed candidates will be interviewed online in December.

Email your formal application to reichard@ivb.cz and polackikova@ivb.cz

Martin Reichard <reichard@ivb.cz>

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ColoradoStateU PopGenomics

Postdoctoral Position: Population and Landscape Genomics to Inform Host-Pathogen Co-evolution and Conservation Management

A postdoctoral position focused on population and landscape genomics to inform host-pathogen co-evolution of wild cervids and chronic wasting disease (CWD) is available in the Funk Lab of Conservation Genomics and Evolutionary Ecology at Colorado State University. Funded by the USDA National Wildlife Research Center, the postdoctoral scientist will harness whole-genome sequence (WGS) data collected from mule deer to test the landscape factors that influence connectivity and CWD transmission, understand the roles of gene flow and pathogen-mediated selection in the ecology and epidemiology of CWD, and investigate fitness consequences of polymorphisms in the prion protein gene that influence the incubation period of CWD, among other research question. In addition to publishing their results in peer-reviewed scientific journals, the postdoctoral scientist will communicate their results at scientific conferences and with federal and state scientists and decision makers to improve conservation management of wild cervid populations. The postdoctoral scientist will be part of a collaborative team from the USDA NWRC (Dr. Jenn Malmberg) and Utah State University (Dr. Kezia Manlove).

Required qualifications:

- â€¢â€¢â€¢â€¢D. by the time of start date in evolutionary biology, population genetics, integrative biology, disease ecology and evolution, or some equivalent.
- â€¢â€¢â€¢â€¢communication (verbal and written) and organizational skills.
- â€¢â€¢â€¢â€¢attitude and desire to work as part of a dynamic, multi-disciplinary team.
- â€¢â€¢â€¢â€¢expertise in bioinformatics, genomics, and the application of genomics to evolutionary and conservation questions.
- â€¢â€¢â€¢â€¢generating, analyzing, and/or integrating large datasets - whole genome sequencing, RAD sequencing, and/or transcriptome sequencing.

Preferred qualifications:

- â€¢â€¢â€¢â€¢in Python or Perl, and R.

-â€¢â€¢â€¢â€¢in disease ecology.

The successful candidate will work under the supervision of Professor Dr. Chris Funk at Colorado State University, and in collaboration with other team members.

The appointment can be extended up to three years, pending satisfactory performance. The salary will be commensurate with experience. Preferred start date is approximately March 1, 2025.

To apply: E-mail a single PDF including a cover letter, a CV, and the names and contact information of three references to the Funk Laboratory Manager, Mackenzie Woods (Mackenzie.Woods@colostate.edu), with the subject line as "Postdoctoral application your name". Review of applications will begin December 30, 2024, and continue until a suitable candidate is identified. Informal inquiries prior to application are welcome and can be directed to Chris Funk (Chris.Funk@colostate.edu).

"Funk,Chris" <Chris.Funk@colostate.edu>

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CPG Stockholm Three DeepTimePalaeogenomics

THREE POSTDOCTORAL POSITIONS IN PALAEOGENOMICS AT STOCKHOLM UNIVERSITY

WORK DESCRIPTION The Department of Zoology invites applications for three postdoc positions (for two years each) based at the Centre for Palaeogenetics (CPG) in Stockholm. The three positions are funded by grants from the European Research Council and the Swedish Research Council. The postdoctoral projects will be aimed at using palaeogenomics to examine the Pleistocene evolution of either small or large terrestrial mammals in the Holarctic. The work will include extraction, sequencing and computational analysis of ancient DNA from specimens collected around the Northern Hemisphere. A large number of samples is already available in the collections at CPG, but there are also possibilities for additional fieldwork. Some of the topics that will be addressed include investigating the tempo and mode of speciation, the degree of hybridization among lineages, as well as the timing, rate and extent of adaptive evolution and demographic change in response to past climatic changes. More specifically, the three projects

will each focus on one taxonomic group:

PROJECT 1 (ARCTIC RODENTS): The goal of this project is to analyze ancient DNA from lemming and vole remains that span in age from the present day to more than two million years old. The higher mutation rates and generation times in rodents mean that we can investigate deeper evolutionary histories as compared to large mammals. The main aim is therefore to examine fundamental questions in evolutionary biology regarding the rate of adaptive evolution, and the role of past climate change on speciation and genetic diversity.

PROJECT 2 (PLEISTOCENE HORSES): Equids are a classical model of evolution and palaeogenomics has shed new and important light on the history of equids throughout the Pleistocene, including the discovery of previously unknown lineages. In this project, the post-doc will work with remains from the past million years to better understand population histories, admixture events, and the Pleistocene diversity of this iconic group.

PROJECT 3 (BROWN BEARS): This project aims to recover genome-wide data from an existing collection of brown bear remains that span hundreds of thousands of years, in order to disentangle how past climate change, human activities, as well as hybridization with polar and cave bears, have shaped the brown bear's range dynamics and present-day gene pool.

TERMS OF EMPLOYMENT The positions involve full-time employment for two years, with the possibility of extension for one more year under special circumstances (current available funding is however for two years). Start date as per agreement, but ideally before April 2025

ASSESSMENT CRITERIA The degree in a relevant subject area (e.g. genetics, evolutionary biology, or bioinformatics) must have been completed at latest before the employment decision is made, but no more than three years before the closing date. An older degree may be acceptable under special circumstances. Special reasons refer to sick leave, parental leave, elected positions in trade unions, service in the total defense, or other similar circumstances as well as clinical attachment or service/assignments relevant to the subject area. In the appointment process, special attention will be given to research skills within the subject area. A demonstrated track-record in wet lab analyses of ancient DNA, handling high-throughput DNA sequencing data using scripts and analysis pipelines, as well as bioinformatics and computational genomics are important merits. Because the position involves integration within a larger team of researchers and students, personal skills such as good collaborative and analytical skills, ability to work independently and take own initiatives, and a

well-developed sense of responsibility are considered additional merits. A strong command of oral and written communication in English is also considered a merit.

MORE INFORMATION AND LINK TO APPLICATION SYSTEM: <https://www.su.se/english/about-the-university/work-at-su/available-jobs?rmpage=-job&rmjob=24600&rmlang=UK> Love Dalén <love.dalen@zoologi.su.se>

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DalhousieU AtlanticCodGenomics

Postdoctoral position available in the group of Daniel Ruzzante at Dalhousie University, Halifax, Nova Scotia, Canada

A two-year postdoctoral position is available in the group of Daniel Ruzzante at Dalhousie University. The candidate will be part of the Northern Cod Acoustic Tracking (NCAT) project in partnership with the Ocean Tracking Network (OTN), Fisheries and Oceans Canada (DFO), and the Atlantic Groundfish Council. The candidate's work will focus on examining the relationship between genomics and movement in Atlantic cod.

The candidate must have experience in population genetics with a successful publication record and proficiency in bioinformatics and the analysis of low-coverage whole genome sequencing data (lcWGS). The project will also involve the analysis of acoustic tracking data.

To apply please submit a cover letter describing why you would want to join the group, a CV, and the names and contact information of two references familiar with your work.

Salary: CAD\$ \$65,000 - \$75,000 range K per year depending on the experience of the candidate.

For informal inquiries, please contact me at daniel.ruzzante@dal.ca

Dr Daniel E Ruzzante, Professor

Graduate Coordinator Department of Biology, Dalhousie University, Halifax, NS, Canada - B3H 4R2

6287 Alumni Crescent ph:(902)494-1688
<http://ruzzante.ca/> Daniel Ruzzante
 <Daniel.Ruzzante@Dal.Ca>

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EdinburghU GenomicsMetagenomicsPopDecline

A 3-year NERC-funded postdoc position in Genomics and Metagenomics of Population Declines

We are looking for an eager, inquisitive scientist to work on the interactions of host and microbiome during population declines, by analysing temporal host genomic and metagenomic data from museum specimens of several mammalian species.

One of the greatest hallmarks of recent human-driven effects on the environment is biodiversity loss, including rapid population declines and associated loss of genetic diversity. Host-associated microbiomes are central to host survival and are themselves impacted by host genetics. Recognising this intimate connection between the hosts and their microbiomes, we aim to answer a central question: How did human-driven population declines during the last two centuries impact host-associated microbiomes and what consequences does it have for the hosts? We will integrate host genomic data and microbial fossils preserved in the form of the calcified oral biofilm - dental calculus - to study host-microbiome co-evolution during periods of unprecedented population declines.

The project is based at the University of Edinburgh, Institute of Ecology and Evolution, in the group of Dr. Katerina Guschanski.

Your task Analyse genomic and metagenomic data derived from museum-preserved specimens of several mammalian species and their microbiomes to study their joint effects in declining populations. The paired host-microbiome samples span from before population declines, during the bottleneck, and following (potential) population recovery, depending on the species. You will be using population genomics framework to understand the effects of population size reduction on the host, and multi-omics/hologenomics approaches to study the interactions between hosts and the microbiomes. Even though the main focus is on data analyses, you will have the chance to participate in sampling in various natural history museums and contribute to data generation in the newly established ancient DNA lab. You will be assisted by a postdoc and a research technician, and will be closely interacting with PhD and Honours students.

Requirements A PhD degree in population genomics,

evolutionary genomics, conservation genomics or a related field. Strong knowledge of population genetics theory and extensive previous experience in population genomics analyses, ideally in wild, non-model organisms. Proven ability to use and develop code for large-scale genomics data analyses and strong skills working with large-scale datasets. You will be collaborating closely with a postdoctoral researcher who is an expert in metagenomics, so we are looking for a curious, highly collaborative, and cross-disciplinary mindset and a broad interest in biodiversity conservation. Experience with wet lab analyses of ancient DNA or molecular lab work would be an asset, as well as experience with analyses of low-coverage population genomics data and multi-omics statistics.

What we offer We are a highly international research group working on various questions of evolution, speciation, adaptation, and conservation genomics, with particular focus on how human actions affect the environment. As part of the Institute of Ecology and Evolution, the post is located in a world-class, dynamic scientific environment with over 40 research groups working on all aspects of evolutionary ecology, population genetics, behaviour and more. It is a highly collaborative and welcoming place, which provides the resources to advance your own career along your desired path through mentorship, professional development opportunities, and opportunities to develop collaborations that extend beyond the core group.

Application More information on the post and the link to the application portal is here: https://elxw.fa.em3.oraclecloud.com/hcmUI/-CandidateExperience/en/sites/CX_1001/job/11522
Application deadline: November 25th, 2024 Expected interview dates: Mid December Expected starting date: March 1st, 2025 or soon thereafter

Contact: Please reach out to Katerina.guschanski@ed.ac.uk for more information and informal inquiries about the post.

Katerina Guschanski Senior Lecturer Institute of Ecology and Evolution School of Biological Sciences

The University of Edinburgh Ashworth Laboratories Charlotte Auerbach Road Edinburgh, EH9 3FL UK Office: +44 (0)131 650 7489 Email: Katerina.Guschanski@ed.ac.uk

Group leader Evolutionary Biology Centre Department of Ecology and Genetics/Animal Ecology Uppsala University Norbyvägen 18D SE-752 36 Uppsala, Sweden

Lab page: <http://www.ieg.uu.se/animal-ecology/-Research+groups/guschanski-lab> Office: +46 (0)18 471 2673 Email: katerina.guschanski@ebc.uu.se

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FreieU Berlin PrimateEvolution

6 year 100% postdoc position with option for habilitation at the Freie Universität Berlin, Germany

Deadline for application: December 2nd 2024

Starting date between February 1st and March 31st 2025

Nowick-Lab:

Our research group “Human Biology and Primate Evolution” focuses on questions related to the molecular evolution of humans using modern experimental and bioinformatics methods. Our primary focus is on differences in gene regulation, the evolution of transcription factors, and non-coding RNAs, as well as their potential influence on the evolution of the human brain, its development, and its functions. For experimental work, we use stem cells from various primates, along with cellular and molecular biology techniques, as well as omics and high-throughput sequencing.

<http://www.nowick-lab.info> Job Description:

We are looking for a person with expertise in working with primate stem cells, preferably with knowledge on differentiating them to neuronal cells and brain organoids. You will participate in research in the field of molecular primate evolution, perform independent teaching in the area of human biology and primate evolution; contribution to teaching, research, and scientific management at the Institute of Biology, particularly in human biology; participation in improving the quality of teaching programs at FU Berlin; involvement in supervising PhD students, students, fellows, interns, and visiting researchers.

The position is intended to contribute to the candidate's scientific qualification (habilitation).

Requirements:

A completed academic degree and a doctorate in biology, biochemistry, or a related field.

Preferred:

Extensive experience with cellular and molecular biology methods, particularly in relation to gene regulation and evolution;

Proficient in handling stem cells, preferably induced pluripotent stem cells from primates, and their differentiation into neural cells and organoids;

Basic knowledge of human biology and a strong interest in human molecular evolution;

International peer-reviewed publications;

Teaching experience, preferably in human biology and human evolution;

Strong teamwork skills;

At least very good English and good German.

If you are interested in this position, please send an email to katja.nowick@fu-berlin.de

Katja

Dr. Katja Nowick Professorin für Humanbiologie

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

Phone: +49 30 83863761

katja.nowick@fu-berlin.de

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GenoscopeCEA Evry France MarinePlankton

Two years Postdoctoral position on Marine Plankton Communities Metabolic Modelling

Marine plankton encompass highly diverse species assemblages across various environmental conditions, and is pivotal to key ecosystem services, ranging from biological carbon pump, marine food web or impact on major biogeochemical cycles.

Throughout more than 15 years of expeditions, the Tara Ocean Consortium gathered a unique collection of samples covering a wide diversity of marine environments to describe composition and biological activities of marine plankton communities, and already contributed to significant breakthroughs in understanding this set of living organisms (cf. Tara Ocean Foundation et al. 2023. Nature Microbiology [<https://doi.org/10.1038/s41564->

022-01145-5] for recent a review and prospective).

What are the biological functions that shape the building of plankton communities? What are the metabolic interactions within a given community? What is the metabolic impact of viral infection? Can we decipher the impact of environmental parameters (e.g. nutrients availability) on biological functions, and vice versa? These are some of the research questions that are addressed in our group.

In this context, we propose a 2 years post-doc position at CEA/Genoscope, near Paris (France), to model metabolic interactions within marine plankton communities (from viruses to unicellular eukaryotes) sampled in the context of the Tara Oceans campaigns, and their intertwining with environment.

This project will take advantage of a new top-down metabolic modelling system for unicellular phototroph eukaryotes (PhotoEukStein, Burel et al. 2023. BiorXiv [<https://doi.org/10.1101/2023.05.22.541783>]) combined with existing methods and resources for prokaryotes, and metabolic niche modelling techniques (Régimbeau et al. 2022. Ecology Letters [<https://doi.org/10.1111/ele.13954>]; Régimbeau et al. 2023. BiorXiv [<https://doi.org/10.1101/2023.11.23.568447>]).

Research will take place within the Ocean EuKaryotes SYstems biology and GENomics (OEKSYGEN) group of the Metabolic Genomics research unit at Genoscope (CEA $\frac{1}{2}$ “ CNRS $\frac{1}{2}$ ” Université Paris Saclay) in Evry, France.

Salary ranges from 32 to 35k€net per year, including health coverage.

Position is to start as soon as possible.

Required qualifications: -â€€â€€â€€â€€.D. by the time of start date in metabolic modelling, bioinformatics, genomics, or some equivalent. -â€€â€€â€€â€€communication (verbal and written) and organizational skills. -â€€â€€â€€â€€attitude and desire to work as part of a dynamic, multi-disciplinary team. -â€€â€€â€€â€€expertise in bioinformatics, metabolic modelling, genomics.

Preferred qualifications: -â€€â€€â€€â€€in Python or Perl, and R. -â€€â€€â€€â€€in metabolic modelling.

The application should contain a short letter of motivation, a CV with a short description of prior research experience, copy of transcripts, and contact information for 2-3 references.

Informal inquiries prior to application are welcome. Contact and application to be sent to: Eric Pelletier (eric.pelletier@genoscope.fr)

Eric Pelletier - Research Director - CEA / Genoscope Ocean EuKaryotes SYstems biology and Genomics - OEKSYGEN +33 160 872 519

HamptonU Virginia MarineMammalGenomics

Postdoc: marine mammal genomics

Full job description The Hampton University Department of Marine and Environmental Sciences (Dr. Carolina Bonin Lewallen’s Lab/ <https://bonincarolina.wixsite.com/mammel>) invites applications for a post-doctoral researcher in marine mammal genetics beginning January 2025 (24 month position). This position will remain open until filled.

Founded in 1868, Hampton University is a leading historically black university (HBCU) located on the Virginia Peninsula in the City of Hampton. It is a privately endowed, co-educational, nonsectarian institution.

Duties and Responsibilities We are seeking a motivated, enthusiastic individual to join Dr. Bonin Lewallen’s team as a post-doctoral researcher on an NSF- funded project “Genomic Inferences of Adaptation in an Antarctic Top Predator: the leopard seal”. The NSF public abstract for this project can be found here: https://www.nsf.gov/awardsearch/showAward?AWD_ID=2401877&HistoricalAwards=false The postdoctoral researcher will be primarily responsible for data generation and data analyses for a comparative genomics project focused on leopard seals. The candidate will work collaboratively with an international team of scientists, assist the PI with mentorship for undergraduate and graduate students, provide support on grant and laboratory management/upkeep, and participate in Departmental and University academic activities. We value diversity in all forms and welcome applicants from all backgrounds to join us.

Qualifications

1. PhD in Biology, with emphasis in ecology, evolutionary biology, wildlife genetics, or a related field. ABD PhD candidates will be considered.
2. Experience (1-2 years) analyzing genomics data for non-model organisms (ability to work with computer clusters/ servers)
3. Outstanding writing and communication skills

Preferred Qualifications The candidate will ideally have some or all of the following:

1. Ability to customize analytical packages already available to analyze large genomic datasets
2. Laboratory skills (e.g., DNA/ RNA extractions; PCR; RT qPCR)
3. Familiarity with large mammal biology/ecology

To Apply: Please send the documents listed below to Dr. Carolina Lewallen, Hampton University: carolina.lewallen@hamptonu.edu

1. Full CV
2. Brief cover letter (2 pages max.) detailing your qualifications and experience relative to the position
3. Separate file listing three recommenders and their full contact information

Carolina Bonin Lewallen, Ph.D.

MaMMELab < <https://bonincarolina.wixsite.com/mammel> > Assistant Professor Marine and Environmental Sciences Department 3 Shore Rd.

Hampton, VA 23668 Office: Marine Science Building # 113 Office phone: (757) 728-6044

CAROLINA.LEWALLEN@HAMPTONU.EDU

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HeidelbergU GeneRegulation

PhD or postdoc position (bioinformatics):

Deep learning models and the evolution of mammalian gene regulation

Center for Molecular Biology (ZMBH), Heidelberg University, Germany

We are looking for a highly motivated PhD candidate or postdoctoral fellow, holding a Master's or a PhD degree in computer science, computational biology, bioinformatics, or similar. A strong background in computational biology, machine Learning with pytorch or similar deep learning libraries is required.

The candidate will be co-supervised between the labs of Henrik Kaessmann (evo-devo single-cell genomic analyses) and Alexander Sasse (S2F models for synthetic genomics). The Kaessmann lab generates and analyzes single-cell data covering different aspects of gene regulation across mammals and other vertebrates to improve our understanding of their evolution and development. Dr. Sasse's junior research group develops Deep Ge-

nomomic Sequence-to-Function (S2F) models to explore how genomic sequences encode gene regulatory functions (Sasse lab).

This project aims at understanding the evolution of the cis-regulatory grammar across the development of humans and other primates/mammals. The candidate will develop and apply new S2F models on single-cell (or cell type specific) genomic data from different species to learn the cis-regulatory sequence elements that orchestrate development. Through multi-species training, the candidate will use these models to perform functional and evolutionary analyses across species and cell types to uncover regulatory changes that underlie phenotypic innovations.

The junior research group is part of the newly founded Carl-Zeiss Center for Synthetic Genomics (CZS Center SynGen, <https://www.syn-gen.de/>) and the Center for Molecular Biology (Zentrum für Molekulare Biologie Heidelberg, ZMBH, <https://www.zmbh.uni-heidelberg.de/>) at the renowned Heidelberg University. The CZS Center SynGen is supported by the Carl-Zeiss-Stiftung to promote research and development at the participating Universities in Heidelberg, Karlsruhe and Mainz to develop an internationally visible research focus on synthetic genomics. The Kaessmann lab is part of the ZMBH, which has a long tradition of conducting cutting-edge research in molecular and cell biology, as well as biomedicine.

Heidelberg is a picturesque international city next to the large Odenwald forest and Neckar river. It offers a very stimulating, diverse and collaborative research environment, with the European Molecular Biology Laboratory (EMBL), German Cancer Research Center (DKFZ), Heidelberg Institute of Theoretical Studies (HITS), and the Max Planck Institute for Medical Research located in close proximity to the University.

Joining the two groups offers a collaborative and international work environment where you can gain hands-on experience and develop crucial research skills. The roles provide invaluable opportunities for professional growth, equipping you with technical expertise at the intersection of AI/ML, genomics, and evolution. The positions come with flexible working hours, company pension scheme, annual special payments, 30 days of vacation, and a subsidized job ticket for public transport.

The salary of these positions will be based on the German public standard table TV-L E13. Applications should be sent to Dr. Alexander Sasse (office-sasse@zmbh.uni-heidelberg.de). The application should contain a short letter of motivation, a CV with a short description of prior research experience, copy of transcripts, and contact information for 2-3 references. Clos-

ing date for applications: January 10th, 2025.

Heidelberg University stands for equal opportunities and diversity. Qualified female candidates are especially invited to apply. Disabled persons will be given preference if they are equally qualified. Information on the application process and the collection of personal data is available at www.uni-heidelberg.de/stellenmarkt. Henrik Kaessmann <henrik.kaessmann@gmx.ch>

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IBENS Paris 12mth ExptEvolGenetics

Dear Colleagues,

**A 12-month postdoctoral position is available at the Institut de Biologie de l'École Normale Supérieure (IBENS) to work on the SVadapt project, funded by the a PSL-Qlife Interdisciplinary Grant. SVadapt is led by François Mallard <<https://scholar.google.com/citations?hl=en&user=Ijq8QhQAAAAAJ>> (IBENS <<https://www.ibens.bio.ens.psl.eu/>>) and Ingrid Lafontaine <<https://scholar.google.com/citations?user=-wcm2EAAAAAJ&hl=en>> (IBPC <<http://www.ibpc.fr/>>) and will be hosted within the Experimental Evolutionary Genetics team <<https://www.ibens.bio.ens.psl.eu/spip.php?rubrique28>>.

The project investigates how structural variations (SVs) including duplications, inversions, and translocations influence adaptation to new environments. The research utilizes *C. elegans* experimental evolution conducted in controlled laboratory settings with hybrid populations derived from 16 inbred founder strains. The selected candidate will analyze whole-genome, long-read data from these founders, and will use short-read sequencing to estimate SV frequency dynamics across time series data as well as from inbred lines of the CeMEE panel.

We are seeking a postdoctoral researcher to develop and implement tools for analyzing both long-read and short-read sequencing data. The candidate should be skilled in programming and statistics, and be qualified in comparative genomics with a genuine interest in evolutionary biology. Ideally the candidate will hold a Ph.D. in evolutionary genomics or bioinformatics. Strong communication and interpersonal skills are essential, and while knowledge of French is not required, it is advan-

tageous. The candidate will be expected to collaborate closely with both principal investigators' teams, which include experimentalists and bioinformaticians, and engage with the broader research communities at IBENS <<https://www.ibens.bio.ens.psl.eu/>>, IBPC <<http://www.ibpc.fr/>>, and PSL <<https://psl.eu/en>>.

This 12-month position offers a salary between 3000 euro and 4500 euro (depending on experience) along with associated social benefits, including access to free healthcare. For continued work beyond this period, the candidate will apply for additional funding (e.g., Marie Skłodowska-Curie Fellowship, EMBO fellowship).

Applications should be submitted to François Mallard (francois.mallard@bio.ens.fr) and Ingrid Lafontaine (ingrid.lafontaine@ibpc.fr) as a single PDF file, including a cover letter, CV, and the contact information of the candidate's Ph.D. advisor and one additional reference. The application deadline is January 15, 2025, and interviews will be conducted shortly thereafter with selected candidates. The anticipated start date is March 2025. Informal inquiries regarding the position or project are welcomed.

Selected references from the host laboratories:

Mallard, F., B. Afonso and H. Teotónio. 2023. Selection and the direction of phenotypic evolution. *eLife* 12—: e80993, doi—: 10.7554/eLife.80993.

Mallard, F., Noble, L., Guzella, T., Afonso, B., Baer, C. F., & Teotónio, H. (2023). Phenotypic stasis with genetic divergence. *Peer Community Journal*, /3/.

Noble L., I. Chelo, T. Guzella, B. Afonso, D. Riccardi, P. Ammerman, A. Pino-Querido, S. Carvalho, A. Crist, A. Dayarian, B. Shraiman, M.V. Rockman and H. Teotónio. 2017. Polygenicity and epistasis underlie fitness-proximal traits in the *Caenorhabditis elegans* multiparental experimental evolution (CeMEE) panel. *Genetics* 207—: 1663, doi—: 10.1534/genetics.117.300406.

François Mallard <francois.mallard@bio.ens.psl.eu>

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Iowa NatlAnimalDiseaseCenter InfluenzaEvolution

Postdoctoral Research Associate - Influenza A virus Ecology/Evolution - National Animal Disease Center.

The Anderson lab (<https://anderson-lab.com>) at the National Animal Disease Center (USDA-ARS) seeks candidates for an ORISE Postdoctoral Fellow position.

The project will explore the evolutionary dynamics of influenza A virus (IAV) in swine and dairy cattle. The participant will use a range of phylogenetic methods to study how interspecies transmission, genomic reassortment, and farm production practices affect the ecology and evolution of endemic viruses and the emergence of novel influenza viruses with zoonotic potential.

Position details: The fellowship includes a monthly stipend, medical and dental insurance, and support for professional development. Full details are available at <https://www.zintellect.com/Oppportunity/Details/-USDA-ARS-MWA-2024-0349>. The position will be located at the National Centers for Animal Health campus in Ames, Iowa. The postdoctoral fellow will have the opportunity to collaborate with USDA-ARS scientists and other investigators in the University of Pennsylvania Center for Excellence in Influenza Research and Response (Penn-CEIRR) as part of the NIH NIAID CEIRR network (<https://www.ceirr-network.org/centers/penn-ceirr>). The lab also maintains collaborations with investigators at Iowa State University (Computer Science, Bioinformatics and Computational Biology, Veterinary Medicine).

Interested candidates are welcome to email Tavis Anderson (tavis.anderson@usda.gov). –

Tavis K. Anderson

Research Biologist

National Animal Disease Center

Agricultural Research Service

United States Department of Agriculture

<https://anderson-lab.com> Tavis Anderson
<tavis.anderson@gmail.com>

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JYU Finland ExperimentalEvolGenetics

Two postdoctoral researcher positions in University of Jyväskylä, Finland Two post-doctoral researcher positions are available in the group of Ilkka Kronholm at the department of Biological and Environmental Sciences

at the University of Jyväskylä. Starting earliest on 6st of January 2025 or later in the spring, for a fixed term of three years.

The genetics, epigenetics, and evolution group lead by Ilkka Kronholm studies the properties of mutations, broadly defined, including properties of epistatic interactions and epigenetic changes. Our research questions are focused on understanding how different intrinsic and extrinsic factors affect evolutionary adaptation. As model systems we use the filamentous fungus *Neurospora crassa* and fission yeast.

The post-doctoral researchers will join an ERC-funded project that studies the properties of epistatic interactions. Epistatic interactions are known to play an important part in certain aspects of evolution, such as speciation. However, the properties of epistatic interactions are not very well known. In this project, we will estimate the probability that a pair of fixed mutations will exhibit a negative epistatic interaction, possibly leading to incompatibilities between two populations. We are using experimental evolution in fission yeast to explore these questions.

Furthermore, we plan to estimate the probability that a pair mutations exhibits an epistatic interaction, and are there some genes in the genome that are more often involved in epistatic interactions than others due to their place in the protein-protein interaction network for example. We plan to address these questions using transposon insertion libraries that will be constructed in different genetic backgrounds, that we have obtained by a mutation accumulation experiment in fission yeast.

Examples of recent work from the group includes developing mutation accumulation lines for the filamentous fungus *Neurospora crassa*, and analysis of how chromatin modifications affect mutation rate, see: Villalba de la Peña et al. 2023. Chromatin structure influences rate and spectrum of spontaneous mutations in *Neurospora crassa*. *Genome Research* 33: 1-13 <https://doi.org/10.1101/gr.276992.122> To be eligible, the candidate needs to have a doctoral (PhD) degree in evolutionary biology, population genetics, genetics, or a related discipline with strong interest in evolutionary genetics.

The first postdoc will be mainly involved in the experimental evolution project involving epistatic incompatibilities. For this project a background in either speciation genetics, experimental evolution, or evolutionary genetics is beneficial. While previous experience in fungal genetics can be an advantage it is not required. Experience with microscopy, microbiology, and analysis NGS data, and a good command of statistics can be an advantage.

The second postdoc will be mainly involved in estimating epistatic interactions by constructing the TE insertion libraries in fission yeast. But will also contribute to the experimental evolution project. For this project background in evolutionary genetics or genetics is beneficial. Experience with yeast genetics and analysis of NGS data, and good command of statistics can be an advantage.

Good written and oral communication skills in English are required for both positions. Please note that while experience in NGS data analysis can be an advantage, both of these positions involve extensive wetlab part, and require previous wetlab experience. While the postdoctoral researchers are expected to contribute to the current project, and supervise students jointly with the PI, there is also the possibility to develop your own interests within the framework of the project or to participate in teaching if the researcher so wishes.

The salary for a Postdoctoral Researcher is determined based on the task-specific demand level 5-6 of the university salary system for teaching and research staff. The salary range will be approximately 3500-4800 euro/month (gross income), depending on the qualifications and experience of the candidate.

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

To find useful information about the University of Jyväskylä, the City of Jyväskylä and living in Finland, see the international staff guide: <https://www.jyu.fi/en/workwithus/international-staff-guide>

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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>

LIB Bonn Germany PathogenDiveristy

1-year position at Leibniz Institute for the Analysis of Biodiversity Change (LIB), Germany

The LIB has a vacancy for a postdoctoral researcher (f/m/d) in the Leibniz Lab “Pandemic Preparedness” at the Bonn location, initially limited to one year, 100% hours, remunerated according to E13 (TV-L) hosted in the labs of Alexander Suh and Madlen Stange. The Leibniz Lab “Pandemic Preparedness”, in which 41 Leibniz Institutes jointly address the most pressing questions about how to deal with future pandemics, combines expertise from various disciplines with practical knowledge to develop evidence-based strategies that permanently strengthen the pandemic resilience of society and science (<https://www.leibniz-gemeinschaft.de/en/research/leibniz-labs/pandemic-preparedness>). The present position is anchored within the key area “interaction of the environment, animals and humans in relation to the emergence and spread of pathogens” of the Leibniz Lab “Pandemic Preparedness” and brings together nearly a dozen Leibniz Institutes across disciplines.

About the position: - Meta-analysis of existing knowledge and existing data sets on pathogen diversity through time and space - Coordination of knowledge synthesis between the involved Leibniz Institutes - Preparation of data analysis for targeted pathogen discovery

Our requirement profile: - Qualifying university degree (PhD) in biology, genetics, bioinformatics, biomedicine, virology or a related field - Excellent communication skills, ability to work independently and as a team - Excellent skills in spoken and written English - High commitment and curiosity to understanding pathogen diversity - Project coordination skills are an advantage - Programming skills and/or experience in large-scale pathogen identification are an advantage

Applications should be submitted in English. The documents should include a covering letter (including the date when the position can be started and the motivation for this position), a CV in table form, final certificates and two reference contacts. Please send your application only digitally via our applicant portal to Ms Josefine Winkels (bewerbung@leibniz-lib.de): [https://8101202752.karriereportal.cloud/job/-2024-18-Postdoctoral-researcher-\(f_m_d\)-](https://8101202752.karriereportal.cloud/job/-2024-18-Postdoctoral-researcher-(f_m_d)-) The closing date for applications for this position is 18 October 2024. You can find more information about our institution at <https://leibniz-lib.de/>. The Leibniz Institute for the Analysis of Biodiversity Change (LIB), formed by the merger of the Zoological Research Museum Alexander Koenig (ZFMK), Bonn and the Centre for Natural History (CeNak) of the University of Hamburg, is an internationally operating research institute. As a research museum of the Leibniz Association, the LIB contributes to taxonomic and molecular biodiversity research and to the conservation of global biodiversity, documents and analyses evolutionary and ecological biodiversity

change and participates in public communication about biodiversity change and its possible causes.

Dr. Madlen Stange Junior Research Group Leader (PhoxHy), Bonn Museum Koenig Bonn Leibniz Institute for the Analysis of Biodiversity Change Postal address: Adenauerallee 127 53113 Bonn +49 228 9122 - 367 m.stange@leibniz-lib.de www.leibniz-lib.de Stiftung Leibniz-Institut zur Analyse des Biodiversitätswandels Postanschrift: Adenauerallee 127, 53113 Bonn, Germany

Stiftung des öffentlichen Rechts; Generaldirektion: Prof. Dr. Bernhard Misof (Generaldirektor), Adrian Grüter (Kaufm. Geschäftsführer) Sitz der Stiftung: Adenauerallee 160 in Bonn Vorsitzender des Stiftungsrates: Dr. Michael Wappelhorst

Madlen Stange <M.Stange@leibniz-lib.de>

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Madrid MicrobialEvolution

Postdoctoral Position in Computational Biology at the Polytechnic University of Madrid

We are looking for an outstanding, enthusiastic candidate to apply for the upcoming Juan de la Cierva postdoctoral fellowship through Spain's National Research Agency (AEI). This prestigious grant supports early-career researchers (up to two years post-PhD) who demonstrate strong potential and an upward trajectory in fundamental sciences. The successful candidate will use advanced experimental and/or computational approaches to study how mutation and recombination biases influence evolution in plant-associated bacteria, addressing both fundamental and applied questions. Based on the candidate's background and expertise, the proposal may focus on one of two primary areas:

- Experimental Evolution: Employing multiplexed genome engineering and bulk competition assays to analyze the fitness impacts of new genetic variations.
- Computational Evolution: Using comparative genomics and computational modeling to explore the role of mutation and recombination biases on the predictability of evolutionary outcomes.

We are seeking a candidate who can work independently and contribute actively to shaping the research direction. We will offer significant career development opportunities, including student supervision, grant writing, teach-

ing, and presenting at international conferences. The Fellow will be based at the Evolutionary Systems Genetics of Microbes lab at the Centre for Plant Biotechnology and Genomics (CBGP), a joint research center of the Polytechnic University of Madrid (UPM) and the Spanish National Research Council (CSIC). The fellowship is a 2-year position that includes a competitive salary and full benefits under the Spanish National Social Security System, offering generous leave policies along with comprehensive health, unemployment, and retirement coverage. Additionally, it provides a budget for professional development (i.e., attending conferences). The call is expected to open in December 2024 and close in February 2025, with provisional results announced in July 2025. The start date is flexible, ideally no later than January 2026.

Eligibility and Requirements for Juan de la Cierva Fellowship Support:

- Doctoral Degree: In biology, biochemistry, bioinformatics, comparative genomics, computer modeling, or a closely related field, awarded before the anticipated application deadline in February 2025.
- Career Stage: PhD completed between January 1, 2023, and December 31, 2024. Extensions may apply for maternity/paternity leave, serious illness, disability, or caregiving responsibilities.
- Publication Record: An excellent record is essential, with at least two major first-author publications in microbial evolution. Additional experience in international research mobility, conference oral presentations, student supervision, and outreach is desirable.

How to Apply: Please send a single PDF containing a cover letter and CV to Alex Couce (a.couce@upm.es). Shortlisted candidates will be asked to provide contact information for two references. Include "JdC.MicrobialEvolution" in the subject line.

Dr Alejandro Couce Evolutionary Systems Genetics of Microbes Lab Centre for Plant Biotechnology and Genomics (CBGP, UPM-INIA) Polytechnic University of Madrid, Spain

phone: +34 910679195 | website: short.upm.es/EvolSysGen

A Couce <a.couce@upm.es>

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MichiganStateU PDF PhD PheromoneCommunication

Michigan State U. Pheromone communication.

We seek a colleague (postdoc or PhD student) to join our research efforts on pheromone communication in sea lamprey. The successful applicant will work as part of an interdisciplinary group and lead a project focused on the relative roles of multiple male pheromone components in female mating behavior. The project builds on nearly 30 years of research on communication via sex pheromones in sea lamprey, a destructive invasive species in the Great Lakes. The selected applicant will lead 1) summer field work out of the US Geological Survey's Hammond Bay Biological Station (HBBS) in Millersburg, MI and 2) chemical analysis of pheromone samples, behavioral data analysis, and manuscript/report writing out of Michigan State University's campus in East Lansing MI. The position may also bring opportunities to leverage our newly renovated laboratory at MSU designed for rearing and genetically modifying sea lamprey and zebrafish to, for example, study the molecular basis of pheromone perception or the effects of pheromones on life history traits (e.g., sex ratio).

Qualified candidates will have an educational background in zoology, fisheries, evolutionary biology, or a related area; experience or interest in field work; expertise or interest in animal behavior, fish biology, invasive species, sensory ecology, or related topics and; experience or interest in collaborating with researchers from diverse disciplines and academic backgrounds.

Applications are welcomed from candidates either 1) with a PhD seeking a postdoc or 2) with a MSc (or BSc and substantial experience) seeking a PhD. Successful postdoc applicants will be offered MSU's generous benefits package and a salary of ~\$60k/year. Successful applicants seeking a PhD graduate assistantship will be offered a full tuition waiver, health insurance, and a stipend of ~30k/ year. Funding is secured for 3 years starting January 2025. Start date can be flexible but before May 2025 is preferred.

For more information, please contact Tyler Buchinger (buching6@msu.edu) or Weiming Li (liweim@msu.edu) and/or visit <https://www.lilabmsu.com/>. Review of applications will begin 2 December 2024 and continue until the position is filled.

Applicants seeking a postdoc position: Please apply at Careers@MSU website <https://careers.msu.edu/en-us/job/521160/research-associatefixed-term> Applicants seeking a PhD assistantship: Please send a letter of interest including a brief summary of background and qualifications and a CV to Tyler Buchinger (buching6@msu.edu).

Tyler Buchinger Assistant Professor Department of Fisheries and Wildlife Michigan State University Office: (517) 355-4106 Google Scholar profile

"Buchinger, Tyler" <buching6@msu.edu>

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OuluU Finland PlantPopulationGenomics

Postdoctoral Researcher - Plant Population Genomics

A three-year postdoctoral position is available in the Research Council of Finland-funded project "Genomics of High-Latitude Parallel Adaptation". In this project, we seek to identify the genetic basis of adaptation to northern environments in multiple northern lineages of *Arabidopsis lyrata*. To do so, we use whole-genome short- and long-read sequencing in combination with advanced population demographic and selection inference.

We are now looking for a postdoctoral researcher to participate in and lead the computational population genomics analyses in this project. The successful candidate has expertise in population genomics, bioinformatics, computational genomics, and plant biology. The primary requirements are a PhD in the aforementioned or related fields, as well as fluency in oral and written English.

See more information and apply for the position: <https://oulunyliopisto.varbi.com/en/what:job/jobID:767419/-type:job/where:51/apply:1> For further details, please contact Tiina Mattila (tiina.mattila@oulu.fi)

Tiina M. Mattila Academy Research Fellow Ecology and Genetics Research Unit University of Oulu

Tiina Mattila <Tiina.Mattila@oulu.fi>

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RostockU Germany PopGenomics

Dear All,

A full-time junior group leader/scientific assistant position/, salary scale E13 is available in the Population Genetics Department at the University of Rostock, Germany from January 1st 2025 or soon thereafter. The position is available for 3 years with the possibility for extension of up to 3 years. The position is comparable to a Lecturer position in the UK or an Assistant Professor position in the US.

*** About the lab ***

The Population Genetics group at the University of Rostock is a newly established chair led by Prof. 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 all contributing to our understanding of species' evolution.

Research topics and lab resources can be consulted here: <https://cordellierlab.wordpress.com/> *** Your tasks *** 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 contribute to the research topics in the group, such as (1) Recombination and Hybridization in a *Daphnia* species complex (2) Population genomics through time with resting egg banks (3) Interspecific variation in gene expression in hybridizing *Daphnia* species (4) Genome and sex chromosome evolution in spiders. The candidate will also be expected to further develop their own research profile with the aim of scientific qualification (habilitation). Finally, the tasks include teaching in Genetics, Bioinformatics and Molecular Ecology for 4 semester periods per week (4SWS) in the form of lectures and practical courses in the Bachelor, Master and teacher programs.

*** This makes you a good fit ***

- Completed university degree (state exam, diploma, master's degree or comparable degree) in Biology, Bioinformatics or comparable discipline - Completed PhD degree in Biology, Bioinformatics or comparable discipline at the time the contract starts - Experience working with high-throughput sequencing data for genomic and/or transcriptomic studies, for example for genome assembly, variant analysis, and gene expression profiling - Successful publication of research results in peer reviewed journals is required - Experience working with non-model species is advantageous - 1 - 2 years of relevant professional experience as postdoc are desirable - Experience in applying for third-party funding for research projects is a plus - Confident knowledge of English language, both written and spoken and basic knowledge of German language or willingness to adopt these - Very good ability to work on schedule, communication skills for presenting research results and ability to work in a team and with international partners

*** How to apply? ***

The application deadline is November 24th 2024 and interviews will take place in December 2024. The preferred start date is January 2025 but is flexible and will depend on the timeframe of the most qualified applicant. For further information, please browse the webpage of the group or contact Mathilde Cordellier via email (mathilde.cordellier@uni-rostock.de) with any informal inquiries.

Please send your application via the university application portal <https://jobs.uni-rostock.de/jobposting/-9c7a47f29445800985f668c1a6346af3201fda760?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 combined in one single file.

Mathilde Cordellier <mathilde.cordellier@uni-rostock.de>

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TuebingenU LargeScaleHumanPopGenetics

2y Postdoc position at the University of Tübingen available

Join us for a project at the intersection of machine learning, population genetics, and medical research in southern Germany.

The genetics of human populations are entangled through shared ancestry, which introduces correlations in medical and genome wide association studies. This project aims to enhance the accuracy of medical studies by leveraging large-scale genealogical analysis. Therefore we will infer huge ancestral recombination graphs that describe the local ancestry of the individuals as a sequence of thousands of genealogical trees along their genomes. We will develop machine learning techniques to process these graphs and classify individuals based on the inferred genetic relationships and disease states within cohorts. By integrating fine-scale genealogical analysis with medical research, we aim to improve cohort selection and the robustness of medical study outcomes.

The AI & Data Science Fellowship Program, a cooperation between the University of Tübingen, distinguished as excellent by the Federal Government of Germany, and Boehringer Ingelheim, a leading pharmaceutical company, is inviting applications for a

Postdoctoral Research Fellow - AI & Data Science (f/m/d; E13 TV-L, 100%)

to work on cutting-edge and exciting AI & data science research topics that generate real added value for human and animal healthcare. The initial fixed-term contract will start as soon as possible and have a duration of 2 years with possible extension.

About the project In this project, you will

- infer ancestral recombination graphs from large-scale human biobank data;
- identify patterns in genomic data associated with immune diseases;
- develop Graph Convolution Networks to analyze large ancestral recombination graphs;
- apply the developed tools to real-world data to support medical research.

Your host: Computational Population Genetics Group

led by Dr. Franz Baumdicker. Your collaborating scientist: Zhihao Ding (Head of Global Human Genetics and Animal Health Genomics) at Boehringer Ingelheim.

Your profile The ideal candidate will bring

- a Ph.D. or equivalent in Computational Population Genetics, Machine Learning, Bioinformatics, Medical Informatics, Computer Science, Mathematics, or a related discipline. This position is also suited for researchers who have recently finished or are about to finish their PhD.
- demonstrated experience in human population genetics on real and simulated data
- experience in translating methodological advances into practical applications
- experience in phylogenetics, coalescent theory
- experience in graph convolution networks
- proficiency in coding (Python)
- a competitive track record of scientific publications
- a keen interest in interdisciplinary work
- the ability to work both independently and as part of a collaborative team

Our offer This position offers you

- exciting research at Europe's leading AI campus
- cooperation with a research-driven global pharmaceutical company
- collegial and supportive work atmosphere
- remuneration in accordance with the TV-L (collective agreement for public employees of the German federal states) as well as all corresponding benefits
- 30 days/year of paid vacation
- potential for travel to conferences and professional development workshops
- career mentoring
- opportunity to gain leadership experience by supervising research assistants
- extensive visa and onboarding assistance
- discounted public transportation, etc.

We value diversity in science, and particularly look forward to receiving applications from women, non-binary people, and researchers from underrepresented groups across cultures, genders, ethnicities, and lifestyles. We actively promote the compatibility of science, work, studies, family life and care work. In case of equal qualification and experience, physically challenged applicants are given preference.

Further information For further information on the project, please reach out to franz.baumdicker@uni-tuebingen.de

How to apply Please send your application (including a motivation letter, CV, certificates, bullet point list of representative publications and their relevance for this project, contact details of 2 academic references) with the subject "AI and Data Science Fellowship Program Application" via e-mail to franz.baumdicker@uni-tuebingen.de Application deadline: 30.11.2024.

Franz Baumdicker <franz.baumdicker@uni-tuebingen.de>

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UArizona AminoAcidSubstitutionModels

Postdoc position: amino acid substitution models

A postdoc position is available with PI Joanna Masel (<https://www.masellab.org/>) at the University of Arizona in Tucson. Tucson is a vibrant city of nearly a million people, located in the biodiverse Sonoran desert, surrounded on all four sides by mountainous national and state parks, with an attractive climate for most of the year. The EEB department is ranked 12th by US News & World Report. Stipend is at NIH rates, and the cost of living in Tucson is around the US national average, i.e. well below most US academic destinations. Start date is negotiable, with the position renewable annually, with 3 years of NSF funding anticipated.

Phylogenetic methods typically use a “good enough” approach to modeling amino acid or nucleotide substitution in the process of inferring a tree. The project will focus on inferring accurate amino acid (and perhaps also codon) substitution models, for their own sake as well as to potentially improve tree inference. This includes time non-reversible models (see <https://doi.org/10.1093/sysbio/syac007>) and non-stationary models (see <https://doi.org/10.1093/sysbio/syu106>). Work will involve collaboration with IQ-Tree lead Minh Bui and cogent3 lead Gavin Huttley at the Australian National University. Depending on interests, the postdoc will - Investigate how substitution models vary as a function of taxonomic group, type of protein structure, GC content, and/or the evolutionary age (phylostratum) of a sequence - Interpret substitution models in terms of mutational spectra + the biophysical basis of selection, including relating them to deep mutational scanning data - Improve phylogenetic methods through improving substitution models, eg via partition or mixture models previously trained in a structure-informed manner.

Strong bioinformatics skills are strongly preferred, although unusually strong candidates who wish to retrain as bioinformaticians will also be considered. Knowledge of more advanced mathematical and statistical approaches, a background in evolutionary biology, and knowledge about protein structure and folding, are all

advantages, but candidates are not expected to have all three.

Contact Joanna Masel at masel@arizona.edu for more information and to apply.

“Masel, Joanna - (masel)” <masel@arizona.edu>

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UCaliforniaLosAngeles ConservationScience

The 2025 UCLA La Kretz Center Postdoctoral Fellowship in California Conservation Science

The UCLA La Kretz Center for California Conservation Science invites applications for its 2025 Postdoctoral Fellowship in California Conservation Science. We seek to hire one or more postdoctoral scholars who conduct innovative biological research at the interface of applied and basic science. Our long-term goal is to help fund a cadre of innovative young scientists who will work closely with UCLA faculty, help broaden the mission of conservation science for the campus, and lead to long-term collaborations between our academic scientists and applied conservation practitioners that will direct and lead California conservation efforts.

Candidates may work in any discipline that provides the scientific underpinnings for the preservation, protection, management, or restoration of at-risk species, environments, or ecological communities in California. Current and past La Kretz Postdocs have worked on a wide variety of research topics, ranging from urban biodiversity and evolutionary adaptation, to wildfire management and conservation, to the interface of conservation and animal behavior; we are open to work in any California ecosystem or group of organisms, as long as the research is innovative, creative, and has clear practical significance. An important initiative, the California Conservation Genomics Project (CCGP), is a large, multi-campus initiative led by the La Kretz Center that is delivering genomic resources to California decision-makers to enhance species and habitat management, and candidates may seek to build off of that project in the realm of conservation genomics. For a full description of past fellows and their work, please visit us at

<https://www.ioes.ucla.edu/lakretz/> Fellows must have both an on-campus UCLA mentor, and an off-campus,

non-university mentor. The on-campus UCLA mentor must also be a La Kretz Center affiliate. A list of applicable affiliates is available at

<https://www.ioes.ucla.edu/lakretz/people/>. The Fellow is expected to work closely with their identified UCLA mentor and one or more off-campus agency partner(s) in developing their project. All applications should include a letter (which may be brief) from each mentor stating their support for the project, what they can contribute to it, and how it fits into their work in conservation biology. Applications that do not include these letters of support will be considered incomplete and ineligible for consideration, and we strongly advise candidates to secure mentor support as early as possible. While we encourage project proponents to identify co-funding, from mentors or other agencies, co-funding is not a requirement. Off-campus mentors may be drawn from any California agency or NGO, including federal and state groups. A partial list of some of our active partners and contact people includes:

The Nature Conservancy: Sophie Parker Natural History Museum of Los Angeles County: Jann Vendetti US Geological Survey: Robert Fisher US Bureau of Land Management: Mike Westphal US Fish and Wildlife Service: Cat Darst Natural Communities Coalition: James Sulentic/Danny L. Fry National Park Service: Katy Delaney National Park Service: Seth Riley Department of Defense: Robert Lovich

The La Kretz Fellowship is for two years, subject to review after the first year. The target start date is September 2025, but this date is quite flexible. The position offers a competitive salary, full benefits, and a research/travel allowance of \$7500. Candidates who have recently completed their Ph.D. or will have completed it before their start date are encouraged to apply.

To apply, please send applications to lakretz@ioes.ucla.edu as a single PDF file that includes:

(i) Cover Letter: Briefly introducing yourself and your project (ii) CV: Composed of your work and accomplishments. (iii) Research and Management Accomplishments Statement (maximum one page) (iv) Project Proposal: Lays out, in some detail, your project (e.g., motivation, methods, expected outcomes/results), why this work is important to academic and applied audiences, and how it integrates with the research of your mentors (maximum three pages, including figures and references) (v) Letters of Support: A brief letter from your on-campus UCLA mentor AND your off-campus agency/NGO mentor (vi) Two of Your Relevant Publications.

In addition, have:

(vii) Two Letters of Reference: One letter must be from your Ph.D. advisor. Note, reference letters are in addition to the letters of support from your proposed mentors. Please arrange to have reference letters emailed to lakretz@ioes.ucla.edu with the subject line "La Kretz Postdoc letter for (your last name)."

The deadline for completed applications is November 25th, 2024 at 12pm (PST).

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UChicago Theoretical Population Genetics

Postdoctoral Scholar Position available in:

THEORETICAL POPULATION GENOMICS

A postdoctoral scholar position is available in the research group of Matthias Steinrücken in the Department of Ecology and Evolution at the University of Chicago. In the group, we are developing theoretical, computational and statistical methods for population genomics analysis. In particular, we focus on developing population genetic methods and theory for inferring complex demographic histories as well as detecting signatures of selection using modern and ancient population genomic datasets. Specific projects are flexible based on the scholar's interests.

The Department of Ecology and Evolution has a very collaborative and unique environment with expertise in theoretical and empirical approaches to questions in ecology and evolutionary genetics. Moreover, the University of Chicago provides ample opportunities for interactions with outstanding researchers in overlapping areas, particularly in the Departments of Statistics, Human Genetics, and Genetic Medicine.

Candidates should have a PhD in Statistics, Mathematics, Biology, Computer Science, or in a related field with substantial quantitative training. Research experience in population genetics is beneficial, but not required. The start date is negotiable, and the salary will be competitive and based on level of experience.

To apply, please send your application to steinrue@uchicago.edu. Your application should include a brief cover letter, a cv, a one-page description of past research and future interests, and contact information for three references. Applications will be considered on a rolling basis until the position is filled, but should be received by December 1, 2024 to ensure full consideration. Candidates from diverse backgrounds are particularly encouraged to apply. Please see <https://steinrueckenlab.uchicago.edu/> to learn more about the group and send any questions regarding the position to steinrue@uchicago.edu.

Matthias Steinrücken, PhD

Assistant Professor Department of Ecology and Evolution University of Chicago <https://steinrueckenlab.uchicago.edu/> Equal Employment Opportunity Statement: All University departments and institutes are charged with building a faculty from a diversity of backgrounds and with diverse viewpoints; with cultivating an inclusive community that values freedom of expression; and with welcoming and supporting all their members.

We seek a diverse pool of applicants who wish to join an academic community that places the highest value on rigorous inquiry and encourages diverse perspectives, experiences, groups of individuals, and ideas to inform and stimulate intellectual challenge, engagement, and exchange. The University's Statements on Diversity are at <https://provost.uchicago.edu/statements-diversity>. The University of Chicago is an Affirmative Action/Equal Opportunity/Disabled/Veterans Employer and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, gender identity, national or ethnic origin, age, status as an individual with a disability, military or veteran status, genetic information, or other protected classes under the law. For additional information please see the University's Notice of Nondiscrimination (<https://www.uchicago.edu/non-discrimination>).

Job seekers in need of a reasonable accommodation to complete the application process should call 773-834-3988 or email equalopportunity@uchicago.edu with their request.

Matthias Steinrücken <steinrue@uchicago.edu>

Matthias Steinrücken <steinrue@uchicago.edu>

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UCopenhagen Airborne eDNA

Postdoc in airborne environmental DNA at the Globe Institute, Faculty of Health and Medical Sciences, University of Copenhagen

Are you passionate about the diversity of life on Earth? Do you want to survey fauna from thin air? Are you keen to contribute to make eDNA data generation more cost-effective? If so, this position is for you. We are looking for a highly motivated and dynamic postdoc for a 2-year position to develop a metabarcoding multiplexing approach to allow parallel surveys of terrestrial vertebrates and insects using airborne eDNA. The position will commence 1 March 2025 (or as soon as possible thereafter).

Information about the department can be found at www.globe.ku.dk Our research The successful candidate will be part of the Environmental DNA Group at the Globe Institute, University of Copenhagen. The group is led by Associate Professor Kristine Bohmann, and currently consists of one assistant professor, three postdocs, one PhD student, two research assistants and three MSc students. Our mission is to assess biodiversity in both modern and ancient environmental samples. For this, we use environmental DNA, metabarcoding and high-throughput sequencing. Our work includes technical studies, analyses of environmental DNA time-series and exploration of novel environmental DNA sample types - for instance airborne environmental DNA for terrestrial animal surveys. To ensure impact, we invest much effort in science communication and outreach.

Your job You will work on the Independent Research Fund Denmark Sapere Aude grant awarded to Associate Professor Kristine Bohmann. To enable parallel, efficient and cost-effective data generation on terrestrial vertebrate and insect communities from samples of airborne eDNA, you will develop a multiplex metabarcoding approach. Firstly, you will investigate how well airborne eDNA reflects local insect communities by generating and analysing metabarcoding data from samples collected as part of the LifePlan project (<https://www.helsinki.fi/en/projects/lifeplan>) and contrasting the results to data on local insect occurrences. In addition, you will develop a multiplexing approach for vertebrates and insects. The work will include in silico analyses, designing multiplexing primer cocktails and testing on 'mock samples'. This will be followed by

application to airborne eDNA samples. Apart from laboratory and computational work, your tasks can include fieldwork and training of new group members.

The team includes both national and international collaborators who you can spar with on e.g. air modelling and airborne particles, airborne eDNA sampling, laboratory and computational processing, as well as community and statistical analysis. Further, you can visit Professor Tomas Roslin's lab in Sweden (working mainly on insect community ecology and DNA-based methods) or Professor Otso Ovaskainen's lab in Finland (working on mathematical biology and advanced bioinformatics). In addition, you will have ample day-to-day support from the UCPH Environmental DNA Group that you will be part of, including Assistant Professor Christina Lynggaard, who is a collaborator on the project advising on airborne eDNA sampling, laboratory and computational processing.

Profile We are looking for a highly motivated and enthusiastic scientist with the following competencies and experience:

Essential experience and skills:

- * Enthusiasm for understanding global biodiversity using molecular tools
- * A PhD in Biology or Molecular Biology
- * Thorough experience in working with ancient and/or modern environmental DNA using eDNA metabarcoding - including both laboratory and computational analyses
- * An active interest in technical explorations of environmental DNA analysis and in the development of new methodologies
- * Experience in statistical analyses in the field of eDNA using R packages
- * Experience with independent fieldwork
- * Proficient communication skills and an ability to work in teams
- * An excellent publication track-record, including first author peer-reviewed scientific articles
- * Excellent English skills - written and spoken

Desirable experience and skills:

- * Programming skills
- * Knowledge and interest in ecology, biodiversity, insect/vertebrate taxonomy, or the like
- * An interest in science communication and/or outreach
- * The ability to design experiments, the determination to generate the data in the laboratory, a zeal for computational work, and a passion for summarising the work

in manuscripts

- * Ideally, we expect you to be resourceful and innovative, highly motivated, and enthusiastic - with great interpersonal skills and the capability to take ownership of your projects and work independently while having a collaborative mindset and the ability

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UDenver EvolutionaryGenomics

Postdoctoral Research Associate in Evolutionary Genomics

University of Denver, Denver, Colorado

The Larson Lab at the University of Denver is seeking a Postdoctoral Research Associate in evolutionary genomics. This position will focus on the gene regulatory evolution of postmating prezygotic (PMPZ) barriers. The project will integrate genetic mapping of PMPZ barrier traits with comparisons of gene regulatory network divergence and eQTL mapping in reproductive tissues to gain a comprehensive characterization of the genes and gene regulatory networks that contribute to PMPZ barriers. The project will also involve studies of gene regulatory evolution in recombinant genomes using natural variation in a hybrid zone. This project is integrative with other projects in the Larson Lab and the successful candidate will be encouraged to participate in other components and to develop new research directions. The successful candidate can also gain teaching experience through developing and teaching hands-on genomics modules in a genomics course. This position is funded through a National Science Foundation CAREER grant with 4 years of support. To find out more visit the Larson Lab webpage at: <https://www.larsonlab.space/career>. This position requires a PhD in evolutionary biology or genetics with expertise in at least one of the following: gene regulation, quantitative genetics, sexual selection, or speciation. The preferred candidate will have expertise analyzing data in R and analyzing genomic data (RNAseq and WGS). The preferred candidate may also have experience in animal care, field work, generating genomic datasets or a track record of mentoring and training undergraduates.

The ability and desire to work both independently and collaboratively with other members of the lab is critical to the success of this position. The initial hire is for 1 year with the possibility of renewals for up to 3 years pending satisfactory progress. The start date is flexible. The salary range for this position is \$61,000 - \$71,000.

Candidates must apply online through jobs.du.edu to be considered. Only applications submitted online will be accepted. Applicant should submit 1) a cover letter describing their research interests, and 2) CV with contact information for at least two references. <https://jobs.du.edu/en-us/job/-497679/postdoctoral-researcher-larson-lab> Erica Larson <erica.larson@du.edu>

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UGuelphDalhousie InfluenzaHostModelling

Project Title: The H5Nx Genomic Landscape: Predictive Modelling of Host and Antigenic Transitions

A funded Postdoctoral Fellow opportunity is available under the co-supervision of Dr. Zvonimir Poljak (University of Guelph) and Dr. Finlay Maguire (Dalhousie University).

Description: This is a full-time one-year position, with the possibility of extension, at the University of Guelph. This position is supported by the Canadian Institute of Health Research/Public Health Agency of Canada's Avian Influenza One Health Research Funding Opportunity with contributions from NSERC.

The successful applicant will lead work in the Poljak and Maguire labs identifying genomic features that are predictive of H5Nx infection in different host groups. This will include developing hierarchical and multi-label prediction models incorporating data from all 8 genomic segments (potentially including embeddings/structural predictions/antigenic data/variant frequency). This work will also involve developing approaches for internal model validation (e.g., phylogenetically informed cross-validation and leakage reduction methods) and external validation of predictions in collaboration with experimental virology colleagues.

The successful candidate will have opportunity to work with a multi-institutional team of experts in epidemiol-

ogy, bioinformatics, virology, immunology and human and animal health (<https://wildepi.ca/flock/>).

Location of employment within Canada is open to negotiation.

Qualifications: The ideal candidate will have strong oral and written communication skills, the ability to work independently and as a part of a team, and proven experience with bioinformatics (including genomics and phylogenetics) and predictive statistical or machine-learning modelling. Programming experience in Python or R is essential for this position. Prior experience with viral data is desirable. Selection of the successful candidate will be based on a combination of academic excellence, relevant experience, career goals, and referee assessments.

Application Process: Please submit a letter of interest, a curriculum vitae, two examples of published research work, and contact information for two references to Dr. Zvonimir Poljak (zpoljak@uoguelph.ca), and Dr. Finlay Maguire (finlay.maguire@dal.ca). Ideal starting date is December 1st 2024; applications will be considered until the position is filled. At the University of Guelph, fostering a culture of inclusion is an institutional imperative. The University invites and encourages applications from all qualified individuals, including from groups that are traditionally underrepresented in employment, who may contribute to further diversification of our Institution.

Further inquiries related to this position can be directed to Drs. Maguire and Poljak.

Finlay Maguire <finlaymaguire@gmail.com>

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UHawaii Biodiversity

Position Overview:

The Pipes Lab (<https://pipes-lab.pbrc.hawaii.edu>) at the Pacific Biosciences Research Center (PBRC) at the University of Hawai'i at Manoa is seeking a highly motivated postdoctoral researcher with a strong background in evolutionary biology and computational approaches. This position offers the opportunity to contribute to groundbreaking research in microbial evolution, taxonomic classification, and biodiversity assessments, with applications in environmental and public health studies such as wastewater surveillance and microbial ecology.

The successful candidate will develop and apply innovative computational and statistical methods to analyze Next Generation Sequencing (NGS) data, addressing key evolutionary questions while advancing biodiversity research.

Key Responsibilities:

- Development of new, and extension of existing statistical methods for species assignment and evolutionary analyses
- Development of a novel method for custom metabarcoding reference databases
- Implementation of the above mentioned methods in easy, accessible open source software packages
- Dissemination of the results in peer-reviewed journals and at national and international scientific conferences focused on evolutionary biology
- Collaborate with other researchers and participate in lab meetings, conferences, and seminars
- Train and mentor graduate students and other research staff as needed

Minimum Qualifications Required (by the time of start date):

- Ph.D. (or equivalent degree) in Computer Science, Statistics, Biology or related fields.
- Proficiency in computing programming languages such as C/C++
- Experience with the development of novel statistical methods in genomics, evolutionary modeling, and/or phylogenetics
- Evidence of scientific productivity, including peer-reviewed publications
- Strong communication skills, both written and verbal
- Ability to work independently and as part of a collaborative team

Preferred Qualifications:

- Ability to work as a team member to accomplish goals
- Experience working on the development of advanced computational methods for large data sets, database construction, and development of user interfaces
- Previous experience working with NGS data, environmental data, evolutionary modeling, and/or phylogenetic methods.
- Demonstrated ability to lead independent projects

Appointment Details:

The initial appointment is for one year, with the possibility of extension based on performance and funding availability. The start date is flexible, between [start date range, e.g., November 2024 and March 2025]. The salary range for this position is between \$65,000 and \$70,000.

Application Process:

Interested applicants should send the following materials to Lenore Pipes at lpipes@hawaii.edu:

- A cover letter describing your research background and how it aligns with the position
- Curriculum vitae (CV)

with contact information for three references. Informal inquiries prior to application are welcome and can be directed to Lenore Pipes (lpipes@hawaii.edu).

The University of Hawai'i is an equal opportunity/affirmative action institution and is committed to a policy of nondiscrimination on the basis of race, sex, gender identity and expression, age, religion, color, national origin, ancestry, citizenship, disability, genetic information, marital status, breastfeeding, income assignment for child support, arrest and court record (except as permissible under State law), sexual orientation, domestic or sexual violence victim status, national guard absence, or status as a covered veteran. For more information about our non-discrimination policies, please visit <https://-manoa.hawaii.edu/policies/m1.000general/index.html>. Lenore Pipes <lpipes@hawaii.edu>

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UKansas EvolutionOfImmunity

Postdoctoral position in the Unckless Lab at the University of Kansas

The Unckless lab at the University of Kansas invites applications for a postdoctoral position that will focus on the evolution of immune defense in *Drosophila*. We will use multiple techniques including genetic mapping, RNA-sequencing, and *Drosophila* genetics to better understand how species differ in their ability to fight infection. The successful candidate should have experience in genomic analysis, *Drosophila* genetics or immunology and would be able to develop skills in some of the other approaches.

The Unckless Lab studies evolutionary genetics in general with a focus on the evolution of immunity and selfish genetic elements (meiotic drive). The University of Kansas is home to both the Department of Molecular Biosciences and the Department of Ecology and Evolutionary Biology and members of the lab interact directly with other labs spanning biochemistry, microbiology, genetics, genomics, evolution and ecology. Lawrence, Kansas is a vibrant college town with plenty of good food, cultural events and a wonderful downtown area. The cost of living is very reasonable. We are about 45 minutes from Kansas City.

For more details including required and preferred quali-

fications and directions about how to apply, please visit <http://www.employment.ku.edu/staff/29312BR> and/or inquire directly with Rob Unckless (unckless@ku.edu). The start date is flexible but could be as soon as January 2025.

The University of Kansas prohibits discrimination on the basis of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, retaliation, gender identity, gender expression and genetic information in the University's programs and activities. The following persons has been designated to handle inquiries regarding the non-discrimination policies and are the Title IX Coordinators for their respective campuses: Director of the Office of Institutional Opportunity and Access, IOA@ku.edu , Room 1082, Dole Human Development Center, 1000 Sunnyside Avenue, Lawrence, KS, 66045, 785-864-6414, 711 TTY (for the Lawrence, Edwards, Parsons, Yoder, and Topeka campuses; Director, Equal Opportunity Office, Mail Stop 7004, 4330 Shawnee Mission Parkway, Fairway, KS 66205, 913-588-8011, 711 TTY (for the Wichita, Salina, and Kansas City, Kansas medical center campuses).

unckless@ku.edu

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ULausanne PDF PhD BarnOwlEvolution

To Evolutionary ecologists

An analysis of long-term data to assess the impact of climate and land use change on an apex avian predator from 1990 to 2028

The aim of this project is to study the impact of climate change and land use on the life history traits, morphology (body size and proportion, plumage colouration) and population dynamics in the barn owl. We will also analyze whether changes over time in all these traits is due to selection. We will also look at whether annual survival and/or breeding success is linked to variation in reproductive parameters, morphological traits and/or life history traits).

This project is timely, as society demands a better understanding of the range of impacts of global change on biodiversity. This is particularly relevant for determining whether populations have had time to adapt to

changing environmental conditions. The project proposed here to collect data in a wild population of barn owls in western Switzerland (400 nestboxes, up to 200 pairs per year) and to analyze data collected since 1990. This predator is at the top of the food chain in intensively farmed areas, and breeds in buildings. It is sedentary, making it possible to study the impact of changes in climate and land use throughout the annual cycle in the same geographical location. We plan to examine reproductive parameters (laying date, clutch size, egg size, hatching success, chick growth, fledging success, sex ratio of offspring), morphological data (body size, plumage characteristics), life cycle characteristics (age at sexual maturity, lifelong reproductive success, survival) and demographics (emigration, immigration, population size).

This project will be performed in collaboration with Lucyna Halupka (Wroclawski), Andrea Romano (Milano), Bettina Almasi & Michael Schaub (Swiss Ornithological Institute), Jérôme Goudet (Lausanne).

I'm looking for a PhD student and a postdoc to work on this project. Skills required are:

- Ability to work in a team.
- Ability to work in the field day and night (these are owls) over a long period (March-September).
- Very good command of R.

The project will last 4 or 5 years. Starting date to be agreed.

Please send your CV and cover letter.

Prof. Alexandre Roulin

University of Lausanne

Switzerland

Alexandre.Roulin@unil.ch

0041 76 702 08 64

Alexandre Roulin

University of Lausanne Department of Ecology and Evolution Building Biophore 1015 Lausanne Switzerland

0041 76 702 08 64

<https://www.youtube.com/watch?v=SAW9zu-DkRw>

Alexandre Roulin <alexandre.roulin@unil.ch>

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ULaval Quebec CaribouPopGenomics

Post-doctoral position available in spatial and demographic connectivity of caribou Université Laval, Quebec (Canada)

As part of the Caribou Ungava research program (www.caribou-ungava.ulaval.ca), we are seeking a post-doctoral candidate interested in working on the population genomics of the different ecotypes of caribou in Quebec and Labrador. The large herds of migratory caribou in northern Quebec and Labrador have sharply declined in recent years and the causes of decline are still not well understood. Most populations of boreal and mountain caribou are also in a precarious state. We are interested in better understanding the evolutionary history of the caribou populations and the demographic and genetic connectivity among them. We aim to compare gene flow between migratory, boreal and mountain caribou populations, and identify geographical regions where gene flow is highest. We plan to assess divergence time during the last few centuries according to variation in climate. Analyses will be based on the long-term monitoring and genome-scale data (whole genomes and 63k SNP chip) from 800 migratory caribou from the Riviere-George and Riviere-aux-Feuilles herds, 850 boreal caribou from 15 populations sampled over the last 20 years in Quebec and Labrador and about 55 mountain caribou (Gaspésie and Torngat populations).

The candidate will work with a team of scientists specializing on caribou ecology and genetics, including Aaron Shafer (Trent University), Glenn Yannic (Université Savoie Mont Blanc, France), Claude Robert (Université Laval), Martin-Hugues St-Laurent (Université du Québec à Rimouski), Joelle Taillon (Quebec government), Sabrina Plante (Quebec government), Sara McCarthy (Labrador and Newfoundland government), as well as Steeve Cote (Université Laval). The position will be based out of Université Laval, but longer-term visits to collaborating labs are an option.

Start date : in 2025 according to the availability of the candidate. Funding : \$59,823 annual fellowship including social benefits (available for 2 years).

Required skills :

PhD in population genetics, animal ecology or similar subject. Very strong academic and publication records;

Rigor, autonomy, and strong writing skills; Experience with handling large genomic dataset and spatial genetic analyses

To apply, please send a brief statement of interest, a CV, copies of University transcripts and 3 names that could provide a reference to: Steeve Cote, Director of Caribou Ungava, Dept of Biology, Centre d'études nordiques, Université Laval, Quebec (Quebec) Canada steeve.cote@bio.ulaval.ca

Catherine Bajzak <catherine.bajzak@bio.ulaval.ca>

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UNottingham EvolutionEcolGenomics

Postdoctoral Research Associates in Evolutionary Ecology, Behaviour and Genomics

<https://jobs.nottingham.ac.uk/Vacancy.aspx?ref=-MED2023> Application deadline: Monday 9th December 2024 Applicants with relevant skills are strongly encouraged to apply for both positions.

Two exciting posts are available to work with Professors Andrew MacColl and Levi Yant at the University of Nottingham on a NERC funded 'Pushing the Frontiers' project, "Migratory behaviour and the persistence of ecotypes" in three-spined stickleback fish. The primary aim of the project is to understand the nature and origin of genomic differences between ecotypes and how these are maintained by mate choice and selection, using a mix of bioinformatic, field and laboratory experiments.

Position 1. Research Associate in Evolutionary Population Genomics. We seek an established postdoc who will lead on analysis and publishing of substantial whole-genome resequencing datasets. The applicant will use the new Nottingham HPC to investigate the origin of, history and patterns of selection in stickleback ecotypes around the Atlantic. Already generated data mean that this position has high potential for rapid publications. Applicants must have experience in population genomic analysis using relevant coding languages (Bash, R and ideally Python or Julia). Expertise in more advanced bioinformatic approaches will be an advantage. See <https://jobs.nottingham.ac.uk/Vacancy.aspx?ref=-MED463424> Position 2. A Research Associate in Evolutionary Ecology/Behaviour will carry out field sampling and experimental work to investigate the genomic basis

of mate choice and migratory differences between ecotypes, and how these are maintained by selection. They will lead on publishing these results. Previous experience of, and willingness to engage in, ecological fieldwork (especially in aquatic systems/with fish) will be advantageous, as will familiarity with relevant ideas in evolution and speciation. See <https://jobs.nottingham.ac.uk/Vacancy.aspx?ref=MED463324> Applicants for both positions must have, or be very near to completing, a PhD in a relevant subject (e.g. evolutionary biology, genetics, ecology) and a track record of publishing their research in relevant journals, appropriate to career stage. Experience with DNA extraction and library preparation for sequencing, and with statistical modelling/experimental design is desirable for both positions.

Both positions will be based in the School of Life Sciences, a large, diverse and supportive unit at the University of Nottingham, with diverse opportunities to interact with a wider group of evolutionary biologists and ecologists locally, in the UK, and with European research labs.

Potential applicants are encouraged to contact Andrew MacColl (andrew.maccoll@nottingham.ac.uk) with informal questions, in advance of applying. Applications sent to this email address cannot be accepted.

Applications must be made at <https://jobs.nottingham.ac.uk/Vacancy.aspx?ref=MED2023>

Applicants with relevant skills are strongly encouraged to apply for both positions. Both positions are full time for max 36 months from 3 March 2025.

Andrew MacColl

Professor of Evolutionary Ecology School of Life Sciences University of Nottingham University Park Nottingham NG7 2RD, U.K. Tel: +44 115 951 3410 <http://ecology.nottingham.ac.uk/AndrewMacColl/index.php> Andrew Maccoll <Andrew.Maccoll@nottingham.ac.uk>

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UppsalaU FungalGenomics

Uppsala University, Department of Organismal Biology
Postdoctoral researcher on fungal genomics

Are you interested in working with systematic biology, with the support of competent and friendly colleagues in an international environment? Are you looking for an

employer that invests in sustainable employeeship and offers safe, favourable working conditions? We welcome you to apply for a postdoctoral position at Uppsala University.

The lab focuses on understanding the evolution of genomes and the genetic basis of adaptation in fungi. We recently discovered that many fungi harbour massive transposable elements, named Starships, that mobilize a vast diversity of fungal genes. We have now deciphered how the Starships move within genomes, but a growing amount of evidence suggests that they are also capable of moving between genomes. The main goal of the position is to demonstrate in a laboratory setting the horizontal transfer of a Starship between different fungi. This will be done by genetically modifying model strains so that successful transfers can be screened at high throughput on selective media.

Duties The applicant will be expected to be largely based in the wet lab. Focussing on transformations of the fungus *Aspergillus fumigatus* and potentially related species. This will also include vector construction using yeast and/or bacterial transformations. Methods may also employ CRISPR/Cas9. They are also expected to analyse data that they generate, including some minor bioinformatic work. Applicants are expected to communicate findings both at international conferences and through writing scientific articles for publication.

Requirements PhD degree in molecular biology/evolutionary biology or a foreign degree equivalent to a PhD degree in molecular biology/evolutionary biology. The degree needs to be obtained by the time of the decision of employment. Those who have obtained a PhD degree three years prior to the application deadline are primarily considered for the employment. The starting point of the three-year frame period is the application deadline. Due to special circumstances, the degree may have been obtained earlier. The three-year period can be extended due to circumstances such as sick leave, parental leave, duties in labour unions, etc.

Experience with molecular techniques is a necessity. Additional assets include microbial culturing of fungi, and fungal transformations. Previous experience with *Aspergillus fumigatus* is especially desired. Knowledge on presenting data and on conducting statistical analyses is also a plus. Candidates who demonstrate strengths in organization, problem solving, communication, and collaboration will be preferred. The applicant must have documented experience and proficiency in oral and written presentation in English.

About the employment The employment is a temporary position of 2 years according to central collective agreement. Full time position. Starting date 2025-01-06 or

as agreed. Placement: Uppsala

For further information about the position, please contact: Aaron Vogan, aaron.vogan@ebc.uu.se

Please submit your application by 6th of December 2024, UFV-PA 2024/3771.

Are you considering moving to Sweden to work at Uppsala University? Find out more about what it's like to work and live in Sweden.

Uppsala University is a broad research university with a strong international position. The ultimate goal is to conduct education and research of the highest quality and relevance to make a difference in society. Our most important asset is all of our 7,600 employees and 53,000 students who, with curiosity and commitment, make Uppsala University one of Sweden's most exciting workplaces.

Read more about our benefits and what it is like to work at Uppsala University <https://uu.se/om-uu/jobba-hoss/> The position may be subject to security vetting. If security vetting is conducted, the applicant must pass the vetting process to be eligible for employment.

Please do not send offers of recruitment or advertising services.

Submit your application through Uppsala University's recruitment system.

Type of employment Temporary position Employment expires 2027-01-05 Contract type Full time First day of employment 2025-01-06 Salary Individual salary Number of positions 1 Full-time equivalent 100% City Uppsala County Uppsala län Country Sweden Reference number UFV-PA 2024/3771 Union representative Seko Universitetsklubben, seko@uadm.uu.se ST/TCO, tco@fackorg.uu.se Saco-rÅdet, saco@uadm.uu.se Published 07.Nov.2024 Last application date 06.Dec.2024 11:59 PM CET

Aaron Vogan <aaron.vogan@ebc.uu.se>

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URochester IntegrativeBiology

Inaugural Postdoctoral Fellowship in Integrative Biology <https://www.sas.rochester.edu/bio/research/fellowship.html> The Department of Biology at the University of Rochester invites applications for two awardees

for its Postdoctoral Fellowship in Integrative Biology. Unlike many current biology departments, which are separated by subdisciplines, the University of Rochester Department of Biology is integrated across multiple disciplines. Research faculty in the department focus on exciting areas including:

* Aging * Intracellular transport * Proteomics * Chromatin biology * DNA repair * RNA biochemistry * Transposable elements * biological imaging * synthetic biology * Development * Evolutionary ecology and behavior * Computational and evolutionary genetics

To further encourage our vision of an integrative program, the department has provided funding for postdoctoral fellowships supporting projects that explicitly span multiple labs within the department, integrating across the diverse research interests featured in the department.

Fellowship Details The fellowship will cover the selected applicant's salary (\$58,700 a year) and provide a \$5,000 yearly stipend for research expenses. Successful applicants will propose a research project that spans the interests of multiple labs in the Department of Biology. Candidates should contact one of the department's research-active faculty (<https://www.sas.rochester.edu/bio/people/faculty/index.html>) to serve as their primary host lab and sponsor, as well as one or more secondary mentors whose research focus aligns with the collaborative work proposed by the applicant. Along with research-related activities, the Fellow will contribute to the department community via designing an initiative to engage with the department and that will also serve as a component of the fellow's training. Examples include (but are not limited to):

* Hosting professional development workshops * Diversity, equity, inclusion, and justice and/or outreach initiative * Journal discussion group

Eligibility

* Applicants must have a PhD in a related field by the start date of the fellowship * Applicants must be sponsored by a primary host lab in the Department of Biology

The University of Rochester is an Equal Opportunity Employer with a strong commitment to diversity, and actively encourages applications from candidates from groups underrepresented in higher education.

How to Apply Applicants should submit the following as PDF files:

* Brief cover letter summarizing the candidate's qualifications and rationale for interest in this fellowship * CV * Copies of up to two publications (preprints are acceptable) * Statement describing past research accom-

ishments and proposed research plans (Three pages maximum including figures but excluding references)

* Statement describing past and proposed community engagement activities (One and a half pages maximum)

* Sponsor form < https://www.sas.rochester.edu/bio/-assets/doc/sponsor-form_ibpf.docx >

All materials should be submitted via email to Brenna Rybak at brenna.rybak@rochester.edu. Applicants should also arrange for two letters of reference and the completed Sponsor Form from the sponsoring Biology faculty member(s) to be emailed separately to the same email address.

Application Deadlines All application submissions should include “Postdoctoral Fellowship in Integrative Biology” and the applicant’s name in the subject line of the email and should be submitted (including reference letters) by 5 p.m. EST on December 1. Finalists will be invited for in-person visits/interviews in February/March and applicants will be notified of their award status by April 15 the following year. Questions can be directed to Brenna Rybak.

Nancy Chen, Ph.D. Assistant Professor Department of Biology University of Rochester popgenchenlab.github.io/ < <https://popgenchenlab.github.io/> >

Pronouns: she/her/hers

“Chen, Nancy” <nancy.chen@rochester.edu>

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UTasmania MHCEvolutionMultipleSclerosis

Postdoctoral Research Fellow to investigate the evolution of multiple sclerosis risk at the University of Tasmania (UTAS), in Hobart, Australia

We are seeking to appoint a Postdoctoral Research Fellow at the Menzies Institute for Medical Research (Menzies), part of the College of Health and Medicine.

The Postdoctoral Research Fellow will be involved in NHMRC and MS Australia funded research. This work uses population genomics to identify functional variation under selection at loci associated with multiple sclerosis risk, improving our understanding of the mechanisms underlying the disease. You will apply statistical and genomics expertise to develop pipelines to detect balancing selection in the major histocompatibility (MHC)

region of the genome using large population datasets. This position will offer the opportunity for you to further develop leadership skills through planning and leading statistical genomics research and support the training and development of junior research staff and students.

What we’re looking for: + A PhD or equivalent in statistical genetics, genetic epidemiology, or a related field. + Experience in the analysis of genomic data including practical experience with the use of high performance computing for the analysis of genome sequence data, and ideally with a focus on analysing immune system genes in the MHC region. + Demonstrated skills in bioinformatics relevant programming languages such as python, R, or perl. + A good record of, and continuing commitment to, research that has achieved national recognition and made worthwhile contributions to the field of statistical genetics, demonstrated by a record of quality publications, presentations at conferences and preferably success in securing external competitive and other funding relative to career stage and opportunity. + A record of contributing to building and maintaining effective and productive links locally and nationally with the discipline, profession, industry (where relevant) and wider community. + Demonstrated ability to work autonomously, as well as to collaborate successfully with other researchers/clinicians and be able to prioritise tasks and meet deadlines.

This is a full time, 1 year Fixed-Term position based in Hobart, Tasmania, with part-time hours considered for the right candidate.

Details at: <https://careers.utas.edu.au/cw/en/-job/500426/postdoctoral-research-fellow-statistical-population-genomics> Applications close Monday, 25 November 2024, 11.55pm AEDT

Please share with any potential candidates, and contact me for further information.

Dr Bennet McComish Senior Research Fellow - Bioinformatics and Human Genetics Menzies Institute for Medical Research | University of Tasmania Private Bag 23, Hobart TAS 7000 +61 3 6226 4285 | bennet.mccomish@utas.edu.au

I acknowledge and pay respect to the Tasmanian Aboriginal community as the traditional and original owners and continuing custodians of the land on which I work.

This email is confidential, and is for the intended recipient only. Access, disclosure, copying, distribution, or reliance on any of it by anyone outside the intended recipient organisation is prohibited and may be a criminal offence. Please delete if obtained in error and email confirmation to the sender. The views expressed in this email are not necessarily the views of the University of

Tasmania, unless clearly intended otherwise.

bennet.mccomish@utas.edu.au

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Vienna GenomicsOfHybridization

Postdoctoral Position in Ecological Genomics of Hybridization

Full time (40 hours/week), temporary position for 24 months, with the possibility for an extension of a maximum of 12 months, starting 1st of March 2025 or as agreed.

The Research Unit of Ecological Genetics at the Department for Forest Biodiversity and Nature Conservation (BFW), Vienna, Austria, is seeking a highly motivated postdoctoral researcher in the field of forest ecological genomics, to work on a recently funded research project on white oak hybridization and adaptation with Dr. Aglaia Szukala (BFW) and Dr. Christian Rellstab (WSL, Switzerland).

The postdoctoral researcher will focus on the genetic and ecological mechanisms underlying hybridization and adaptive differentiation among natural populations of white oaks (genus *Quercus*) in Southeastern Europe. The overarching goal is to identify the genomic hotspots of introgression and establish a potential link to genetic variation underlying local adaptation along a climatic

gradient, and to detect where this variation can be found in the present geographic distribution of white oaks. The focus will be on individual whole genome data and its relation to climatic and soil site characteristics (landscape genomics) documented during fieldwork. This will involve planning travel and field activities, lab work (together with lab technicians), as well as a suite of bioinformatic and statistical analyses. Contributions to project management and outreach, as well as interactions with the scientific board of the project, are also expected.

For additional details, see <https://www.bfw.gv.at/-karriere/> and https://www.bfw.gv.at/wp-content/uploads/11_Postdoctoral-Position_2024-3.pdf Remuneration is based on the salary table for federal contract employees in evaluation group v1/1. The minimum salary is EUR 3.590,30 gross per month. Depending on additional creditable previous service periods, the salary increases according to the pay level.

We look forward to receiving your complete application until the 20th of December 2024 via e-mail (incl. a CV, a letter of intent and at least two references) to Dr. Aglaia Szukala (aglaia.szukala@bfw.gv.at).

Please remember to use the subject “Postdoctoral Position in Ecological Genomics of Hybridization” when sending your documents.

Aglaia Szukala PhD Postdoctoral researcher | Unit of Ecological Genetics Bundesforschungszentrum für Wald (BFW) Seckendorff-Gudent Weg 8, 1131 Wien Web: <https://bfw.gv.at> Szukala Aglaia <Aglaia.Szukala@bfw.gv.at>

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Czech Republic Genomics Jan5-18

Hello EvolDir Community,

We still have a few spots left for the Workshop on Genomics 2025 in Cesky Krumlov, Czech Republic.

PROGRAM The 2025 program can be found here: <https://evomics.org/2025-workshop-on-genomics/> and includes all things genomics: experimental design, UNIX and R, genome assembly and annotation, SNP and SV calling, pangenomics, population genomics, transcriptomics and gene expression analysis, comparative genomics, microbiome analysis, transposable element analysis and BIG data.

To register, please follow the link above and click the link: "CLICK HERE TO BE ADDED TO OUR WAIT-LIST"

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.

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 for 2025 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 Greifswald), Fritz Sedlazeck (Baylor College of Medicine), Olga Vinnere Pettersson (Uppsala University, ERGA Vice Chair), 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 Pehon (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 Equal Opportunities funding is now closed.

FAQs <https://evomics.org/workshops/faq/> Any questions or queries should be directed Josie Paris @ evomics.workshops@gmail.com

Looking forward to meeting you in January!

Workshop on Genomics 2025 Team (Josie, Rayan, Joan, Guy, Mercè, MiloÂ, Daniel and Scott)

evomics workshops <evomics.workshops@gmail.com>

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FloridaCostaRica PlantSystematics May11-Jun29

The International Center for Tropical Botany at The Kampong is currently accepting applications for its Intensive Summer Tropical Botany Course. The course covers the taxonomy, systematics, and conservation of tropical plants and will take place from May 11-June 29, beginning in Miami and concluding in Costa Rica with a practical field component. Students will study over 1,400 species across more than 150 families with daily botanical garden collections in addition to field trips to the Florida Keys and Everglades. Students will then travel to Costa Rica where they will learn how to design and implement tropical plant diversity monitoring plots across a gradient of habitat types. They will process and analyze associated samples and contribute to peer-reviewed manuscripts and presentations.

The course has a 50-year legacy of collaboration with The Kampong, Fairchild Tropical Botanic Garden, Montgomery Botanical Center, and the Gifford Arboretum. The field portion in Costa Rica is in collaboration with NGO FUNDECOR, and is supported by funding from the US National Science Foundation IRES program and other generous donors.

On-site student housing is located at The International Center for Tropical Botany at The Kampong, in Co-

conut Grove, FL. In Costa Rica, lodging is adjacent to forest sites around Braulio Carillo National Park. Open to both US and international graduate students. Applications are accepted on a rolling basis but please apply ASAP, especially if requiring a US and/or Costa Rican visa. Scholarships are available for both US and international students.

Please find details on how to apply here: <https://environment.fiu.edu/ictb/tropical-botany-course/-index.html> Please email ICTBKampong@fiu.edu with any questions.

Nichole M. Tiernan, Ph.D. Program Director Institute of Environment, Florida International University International Center for Tropical Botany (ICTB) at The Kampong of the National Tropical Botanical Garden 3959 South Douglas Road Coconut Grove, Florida 33133 www.nicholetiernan.com Nichole Tiernan <ntiernan@fiu.edu>

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MNHN Paris Integrative Taxonomy Mar24-28

The course “Integrative taxonomy in the ”big data“ era” will be from the 24th to the 28th of March, 2025, at the MNHN of Paris, France.

The course is in English. To register, please fill the form on the website of the course (<https://sites.google.com/site/coursbarcode/home>).

If you have any question, please contact: Nicolas Puillandre (puillandre@mnhn.fr) Sarah Samadi (sarah@mnhn.fr)

Nicolas PULLANDRE

Maitre de conférences, ISYEB Muséum national d’Histoire naturelle 57 rue Cuvier, CP 51 75005 Paris, FRANCE +33 1 40 79 31 66

PI ERC project HYPERDIVERSE -<http://www.hyperdiverseproject.com/> For any request concerning the MNHN collections: <http://colhelper.mnhn.fr/> Nicolas Puillandre <puillandre@mnhn.fr>

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Online Addressing Bias in Evolution Education Dec12

Addressing Bias in Evolution Education: An Online Workshop

Evolutionary biology has historically been misused to justify racial biases, from eugenics to present-day ideological distortions of genetics. As evolution educators, we understand the importance of addressing these issues thoughtfully and accurately in our teaching. However, doing so is challenging. We invite the evolutionary biology community to join an online workshop aimed at creating a collaborative learning community to develop resources for teaching evolutionary biology and genetics in ways that counter social prejudice and reduce misunderstandings.

Studies show that the way we teach Mendelian genetics increases racial bias by focusing on oversimplified examples of human genetic variation, and arguments loosely based on evolutionary biology are often used to justify racist ideology. Teaching students about genetic complexity in a way that enables them to identify and criticize flaws in prejudiced arguments can decrease student misunderstandings that can lead to racist thinking. Integrating these approaches into courses in evolutionary biology at various levels is an ongoing challenge for educators.

In this workshop we will discuss the background and motivation for addressing bias in evolutionary biology curriculum. We will establish an online learning community for faculty interested in developing curriculum for their classes and share resources. Finally, we will organize follow up meetings that allow participants to discuss effective and inclusive teaching practices and we will share what we have learned through posters presented at the Evolution meeting in Athens (June 2025).

December 12th, 10am - 1pm Mountain Standard Time

Workshop format: We will start the workshop with a recorded presentation from Dr. Brian Donovan on the motivation and evidence for changing how we teach evolution and genetics. We will then work in smaller groups to discuss these topics, our own experiences in teaching, and the practicalities of how to incorporate these viewpoints into our curriculums. We will end the workshop with a group discussion. The workshop will

be a starting point for connecting educators and sharing teaching materials. We will offer a small honorarium for participants thanks to funding from the Society for the Study of Evolution (SSE).

If you are interested in participating, please complete this brief survey.

<https://forms.gle/U2nN3eAHYYKsw2j17> If you have questions, contact Erica Larson (erica.larson@du.edu) or Catherine Wagner (Catherine.Wagner@uwyo.edu).

“Catherine E. Wagner” <Catherine.Wagner@uwyo.edu> (to subscribe/unsubscribe the EvoDir send mail to gold-ing@mcmaster.ca)

Online Analyses Using Phylogenies Jan13-22

Dear colleagues,

I am happy to announce that there is a new (12th) edition of the Transmitting Science course “Introduction to Macroevolutionary Analyses Using Phylogenies”.

Format: Live Online (synchronous). Places are limited to 15 participants.

Dates and schedule: January 13th, 15th, 17th, 20th, and 22nd, 2025, from 15:00 to 19:00 (Madrid time zone).

20 hours of online live lessons, plus 20 hours of pre-recorded classes and assignments.

Instructor: Dr. Juan L. Cantalapiedra [1] (Universidad de Alcalá¹/₂, Spain)

Course Overview

Phylogenetic trees have changed the way we study and understand life on Earth. Taking phylogenetic information into account in our analyses is critical to account for the non-independence of biological data. Also, phylogenies allow us to get a deep-time perspective of the processes that have shaped the evolutionary history of groups, including diversification and trait evolution.

This course will introduce participants to the use, modification and representation of phylogenetic trees. Also, we will focus on the use of phylogenetic information to reconstruct ancestral characters and biogeographic histories, using different phylogenetic comparative methods.

This course will also tackle trait evolution modelling and the assessment of phylogenetic signal. Finally, we

will learn about the shape of phylogenetic trees and its evolutionary causes, and how to estimate the rates of diversification throughout the history of groups. Participants are encouraged to bring their data sets to use in the practical classes.

The course includes an optional first introductory day to basic R.

Important note: Please bear in mind that this course is not about reconstructing (building) phylogenetic trees.

Software: Mesquite, FigTree, R (ape, TreeSim, TreePar, Geiger, OUwie, BioGeoBEARS).

More information and registration: <https://www.transmittingscience.com/courses/evolution/introduction-macroevolutionary-analyses-using-phylogenies/> Check the Ambassadors Institutions to see if you can apply for 20 % discount (<https://www.transmittingscience.com/funding/ambassador-institutions/>)

Best wishes

Sole

– Soledad De Esteban-Trivigno, PhD Director Transmitting Science www.transmittingscience.com/courses Twitter @SoleDeEsteban Orcid: <https://orcid.org/0000-0002-2049-0890> Under the provisions of current regulations on the protection of personal data, Regulation (EU) 2016/679 of 27 April 2016 (GDPR), we inform you that personal data and email address, collected from the data subject will be used by TRANSMITTING SCIENCE SL to manage communications through email and properly manage the professional relationship with you. The data are obtained based on a contractual relationship or the legitimate interest of the Responsible, likewise the data will be kept as long as there is a mutual interest for it. The data will not be communicated to third parties, except for legal obligations. We inform you that you can request detailed information on the processing as well as exercise your rights of access, rectification, portability and deletion of your data and those of limitation and opposition to its treatment by contacting Calle Gardenia, 2 Urb. Can Claramunt de Piera CP: 08784 (Barcelona) or sending an email to info@transmittingscience.com or <http://transmittingscience.com/additional-terms>. If you consider that the processing does not comply with current legislation, you can complain with the supervisory authority at www.aepd.es. Confidentiality. - The content of this communication, as well as that of all the attached documentation, is confidential and is addressed to the addressee. If you are not the recipient, we request that you indicate this to us and do not communicate its contents to third parties, proceeding to its destruction.

Links:

[1] <https://www.transmittingscience.com/instructors/-juan-l-cantalapiedra/> Soledad De Esteban-Trivigno <soledad.esteban@transmittingscience.com>

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Online BayesianStats Feb11-May13

Dear evoldir community,

I am happy to announce the fourth edition of Modern Statistical Thinking for Biologists, set to run as weekly online sessions from the 11th of February till the 13th of May 2025. For registration and more information, see here:

<https://www.mondegoscience.com/courses/modern-statistical-thinking-for-biologists-online-11-feb-13-may-2025> This course uses an approach that differs drastically from most introductory statistics courses. The goal is both to make learning more intuitive and to address some of the criticisms that have been raised against common statistical practices in the biological sciences (notably an over-reliance on dodgy P-values).

Unlike most introductory courses, we will put heavy focus on Bayesian modelling. This may sound very advanced but most beginners actually find this approach more intuitive than classical methods, such as P-values and confidence intervals. Bayesian methods have become particularly common in ecology and evolutionary biology, and training in this approach is becoming more and more crucial to researchers in these fields. Don't worry - at the end of the course, we will also talk about the more classical techniques but they should be easier to learn at that point as you'll already have your Bayesian baggage.

The course will be highly interactive, with lots of group work in break-out rooms and weekly individual assignments, to which you will always receive written feedback. There are no prerequisites in terms of maths or stats skills. Usually, there are both participants that have very little background in any kind of statistics, as well as participants that already have a fair amount of experience with classical statistics and want to learn more about Bayesian approaches. So both of these profiles are very much welcome!

Hope to see you soon at a course,

Rosina Savisaar, Mondego Science.

Rosina Savisaar <rosinasavisaar@gmail.com>

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Online GeneralizedAdditiveModelsInR Jan20-24

Dear all,

registrations are now open for the Physalia course on Generalized Additive Models in R.

Course website: (<https://www.physalia-courses.org/-courses-workshops/gams-in-r/>)

Dates: (online) January 20-24

The course will provide an applied introduction to generalized additive modelling in R for biologists. Most of the statistical methods you are likely to have encountered will have specified fixed functional forms for the relationships between covariates and the response, either implicitly or explicitly. These might be linear effects or involve polynomials. Generalized additive models (GAMs) are different; they build upon the generalized linear model by allowing the shapes of the relationships between response and covariates to be learned from the data using splines. Modern GAMs are a general data analysis framework, encompassing many models as special cases, including GLMs and GLMMs, and the variety of splines available to users allows GAMs to be used in surprisingly large situations. In this course we'll show you how to leverage the power and flexibility of splines to go beyond parametric modelling techniques like GLMs.

For the full list of our courses and workshops, please have a look at: (<https://www.physalia-courses.org/-courses-workshops/gams-in-r/>)

Best regards, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org mobile: +49 17645230846

"info@physalia-courses.org" <info@physalia-courses.org>

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**Online
GenomicDataVisualisationWithR
Nov18-20**

Dear all,

there are only 3 seats left for the online course on GENOMIC DATA VISUALISATION WITH R.

Dates: November 18th-20th (Classes from 12-6 PM Berlin time)

Course website: (<https://www.physalia-courses.org/-courses-workshops/genomic-data-viz/>)

This course aims to familiarize participants with the most essential graphs in the field of genomics using R. We will start with graphs related to expression studies, such as volcano plots, peak profiling, and Gene Ontology. Then, we'll move on to genomic studies and explore genome statistics plots, including genome coverage, metagenomics bar plots, and time series of allele frequencies over time. On the last day, we'll focus on plots related to comparative genomics studies, such as phylogenetic trees, Venn diagrams, ideograms, and synteny plots.

For the full list of our courses and workshops, please visit: (<https://www.physalia-courses.org/courses-workshops/-genomic-data-viz/>)

Best regards, Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
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**Online GeometricMorphometrics
Feb3-5**

Dear all,

registrations are now open for the 3-day course “FOUNDATIONS OF GEOMETRIC MORPHOMETRICS”.

Dates: February, 3rd-5th (1-7 PM CET).

This course focuses on the initial steps of geometric morphometrics such as: acquiring data (in 2D and 3D), ensuring data quality, and performing basic analyses and visualizations.

For more information about this course, please visit: (<https://www.physalia-courses.org/courses-workshops/-course22/>)

More advanced techniques in data analysis of geometric morphometric and other multidimensional data, as well as more in-depth explanation of the analyses, are presented in the course (<https://www.physalia-courses.org/courses-workshops/mpe/>)

For more information about our other 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

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**Online InferenceWithBEAST2
Nov18-29**

Dear colleagues,

There are a few slots available for the online course “Bayesian phylogenetic inference with BEAST2”.

Online live sessions on November 18th, 20th, 22nd, 25th, 27th, and 29th, 2024, from 15:00 to 18:30 (Madrid time zone)

Instructors: Dr. Joël Barido-Sottani [1] (Ecole Normale Supérieure de Paris, France) and Dr. Bethany Allen [2] (ETH Zurich, Switzerland)

Course Overview:

Bayesian phylogenetic inference is a powerful tool for reconstructing phylogenies while accounting for complex evolutionary dynamics. It allows prior knowledge to be integrated into the inference, and also provides a detailed picture of the uncertainty present in the dataset. However, the number and complexity of the available models and options can be daunting for users and can make it difficult to apply inference tools effectively in

practice. In this workshop, participants will learn the theoretical concepts underlying the different models involved in Bayesian phylogenetic inference, and get hands-on experience using these models in BEAST2. Particular attention will be given to more complex tree models, such as the fossilized birth-death model used to integrate past information into phylogenies, as well as rate-heterogeneous models which allow for variations in evolutionary dynamics across clades. Finally, the course will give practical information on setting up and troubleshooting analyses in BEAST2.

Registration and more information: <https://www.transmittingscience.com/courses/evolution/-bayesian-phylogenetic-inference-with-beast2/> Best wishes

Sole

Soledad De Esteban-Trivigno, PhD Director Transmitting Science www.transmittingscience.com/courses Twitter @SoleDeEsteban Orcid: <https://orcid.org/0000-0002-2049-0890> Under the provisions of current regulations on the protection of personal data, Regulation (EU) 2016/679 of 27 April 2016 (GDPR), we inform you that personal data and email address, collected from the data subject will be used by TRANSMITTING SCIENCE SL to manage communications through email and properly manage the professional relationship with you. The data are obtained based on a contractual relationship or the legitimate interest of the Responsible, likewise the data will be kept as long as there is a mutual interest for it. The data will not be communicated to third parties, except for legal obligations. We inform you that you can request detailed information on the processing as well as exercise your rights of access, rectification, portability and deletion of your data and those of limitation and opposition to its treatment by contacting Calle Gardenia, 2 Urb. Can Claramunt de Piera CP: 08784 (Barcelona) or sending an email to info@transmittingscience.com or <http://transmittingscience.com/additional-terms>. If you consider that the processing does not comply with current legislation, you can complain with the supervisory authority at www.aepd.es. Confidentiality. - The content of this communication, as well as that of all the attached documentation, is confidential and is addressed to the addressee. If you are not the recipient, we request that you indicate this to us and do not communicate its contents to third parties, proceeding to its destruction. Disclaimer of liability. - The sending of this communication does not imply any obligation on the part of the sender to control the absence of viruses, worms, Trojan horses and/or any other harmful computer program, and it corresponds to the recipient to have the necessary hardware and software tools to guarantee both the security of its information system

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Links:

[1] <https://www.transmittingscience.com/instructors/joelle-barido-sottani/> [2] <https://www.transmittingscience.com/instructors/-bethany-allen/> Soledad De Esteban-Trivigno <soledad.esteban@transmittingscience.com>

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Online IntroSingleCellAnalysis Dec2-4

FINAL CALL - ONLINE COURSE - Introduction to Single Cell Analysis (ISCA01)

<https://www.prstats.org/course/introduction-to-single-cell-analysis-isca01/> 2nd - 4th December 2024

Please feel free to share!

COURSE OVERVIEW -Take your RNA-Seq analysis to the next level with single cell RNA-Seq. This technology allows insights with an unpredicted level of detail, but that brings a new level of complexity to the data analysis. In this course, we will learn about the most popular single cell platforms, how to plan a scRNA-Seq experiment, deal with some of the many pitfalls when analysing your data, and effectively gain exciting, and cell type specific biological insights

By the end of the course participants should:

- Understand the basic principles of popular single cell platforms and the pros and cons of the different technologies.
- Be able run standard software to process raw 10x Genomics and Parse Bioscience data and interpret the outputs
- Understand how to use the 'Trailmaker' to quickly analyse scRNA-Seq data.
- Understand the basics of the R Bioconductor 'Seurat' package, and how to combine it with other tools.
- Understand how to perform appropriate data quality control and filtering.
- Understand how to cluster cells both within and between samples, and identify possible cell types of individual cells and clusters
- Understand how to use statistically robust methods to compare gene expression between samples to identify cell type specific changes in gene expression and potential pathways of interest.

Please email oliverhooker@prstatistics.com with any questions.

Upcoming courses

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 - Time Series Analysis and Forecasting using R and Rstudio (TSAF01) This course will be delivered live

ONLINE COURSE - Species Distribution Modelling With Bayesian Statistics Using R (SDMB06) 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 - Multivariate Analysis Of Ecological Communities Using R With The VEGAN package (VGNR07) This course will be delivered live

-

Oliver Hooker PhD.

PR stats

Oliver Hooker <oliverhooker@prstatistics.com>

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Online Machine Learning Feb17-21

Dear all,

We're excited to announce our upcoming Introduction to Machine Learning with R course, running online from 17-21 February 2025. Designed for researchers and students in life sciences, this hands-on course offers a comprehensive introduction to machine learning (ML) techniques for analyzing multivariate 'omics datasets, such as metabolomics, transcriptomics, genomics, and proteomics.

For full details and registration, visit: (<https://www.physalia-courses.org/courses-workshops/>-

[course43/](https://www.physalia-courses.org/courses-workshops/course43/))

Course Highlights: Learn foundational ML concepts, including supervised and unsupervised learning. Practical sessions using R with tidymodels and other advanced libraries. Topics include regression, classification, random forests, PCA, UMAP and more. Who Should Attend? This course is ideal for life science researchers and students seeking an intuitive introduction to ML, with a preference for those familiar with basic statistics and R.

Daily Schedule: Each day includes lectures, practical exercises, and dedicated Q&A. Sessions run from 2-8 pm Berlin time.

For the full list of our courses and workshops, please visit: (<https://www.physalia-courses.org/courses-workshops/course43/>)

Best regards, Carlo

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Online MetaAnalysis in R February 10-14

Dear all,

registrations are now open for the online course on Meta-analysis in R.

This online course (February 10-14, 2025) equips you with the skills to conduct robust evidence synthesis using meta-analysis in R.

For more information, please visit: (<https://www.physalia-courses.org/courses-workshops/meta-in-r/>)

It includes a mix of lectures and hands-on exercises using real meta-analytic datasets. The emphasis throughout the course is on the application of the various methods and the interpretation of the results using the free software R and the R packages 'metafor' (Viechtbauer 2010) and 'orchaRd' (Nakagawa et al. 2023). The course will follow the principles of open science, with a strong focus on the importance of adhering to preferred reporting items for systematic reviews and meta-analyses

(PRISMA EcoEvo; O’Dea et al. 2021). Throughout, we will consider examples of how to interpret results and present them using tables and data visualization, and for each step, we will provide literature and practical resources (e.g., R scripts).

For more information about our courses and workshops, please visit: (<https://www.physalia-courses.org/courses-workshops/metain-r/>)

Best regards,

Carlo

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Online Multivariate Data Analysis Feb10-13

Dear all,

registrations are now open for the online Multivariate Data Analysis with R and vegan course.

Dates: February 10-13, 2025.

Course website: (<https://www.physalia-courses.org/courses-workshops/vegan/>)

Overview: This course will offer participants a practical introduction to some of the most useful functions available within vegan. We will focus on the use of ordination methods and on the use of restricted permutations to test a range of experimental designs. We will focus on when and how to use multivariate methods including unconstrained and constrained ordination (CCA, RDA, Constrained PCoA), as well as between-group tests such as PERMANOVA. We will cover concepts such as design- and model-based permutations and the exchangeability of samples in tests. We will also discuss the use of vegan to go beyond simply fitting a constrained ordination model, to diagnostics, plotting, etc.

Who Should Attend? This course is suitable for PhD students (including senior thesis-based masters students) and researchers working with multivariate data sets in biology (inter alia ecology, animal science agriculture, microbial ecology/microbiology), with limited statistical knowledge but a willingness to learn more. Participants

should be familiar with RStudio and have some fluency in programming R code, including being able to import, manipulate (e.g. modify variables) and visualise data. There will be a mix of lectures, and hands-on practical exercises throughout the course.

Program Overview

Monday: Intro to multivariate data, transformations, dissimilarity metrics
Tuesday: Unconstrained ordination (PCA, PCoA, NMDS)
Wednesday: Constrained ordination, PERMANOVA
Thursday: Statistical inference with permutation tests

For the full list of our courses and workshops, please visit: (<https://www.physalia-courses.org/courses-workshops/-vegan/>)

Best regards,

Carlo

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Online Phylogenomics Dec2-6

Dear all,

We would like to inform you that only 4 seats remain for our upcoming online Phylogenomics course.

Dates: December 2-6 Course website: <https://www.physalia-courses.org/courses-workshops/-phylogenomics/> In this 5-day course you will learn about:

- 1) Time-calibrated phylogenetic inference using multi-locus genomic data.
- 2) Addressing challenges like gene-tree discordance, incomplete lineage sorting, and introgression.
- 3) Practical hands-on sessions using tools such as MAFFT, RAxML, IQTree, PhyloBayes, ASTRAL, BPP and more.

For the full list of our courses and workshops, please visit: <https://www.physalia-courses.org/courses-workshops/>

Best regards, Carlo

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Online RNAseqNonModelOrganisms Nov18-22

Dear all,

We are excited to announce that there are a few seats remaining for our online course “RNA-Seq Analyses in Non-Model Organisms” taking place from 18th to 22nd November. Course website: (<https://www.physalia-courses.org/courses-workshops/course11/>)

This course offers a comprehensive guide to RNA-Seq data analysis, with a focus on non-model organisms. Participants will learn de novo transcriptome assembly (using tools such as Trinity), expression analysis, and functional annotation. Additionally, hybrid assemblies using both short-read (Illumina) and long-read (PacBio IsoSeq) data will be explored. Programme Highlights: Day 1: High Throughput Sequencing, 2nd generation- Day 2: NGS data de-novo transcriptome assembly Day 3: Long-read (3rd gen) sequencing and hybrid assembly Day 4: Transcript quantification, differential expression (using R/Bioconductor) Day 5: Differential expression analysis, final discussion

Target Audience: Biologists with basic bioinformatics skills and familiarity with Linux and R, seeking to explore transcriptome sequencing in organisms without a reference genome.

For the full list of our courses and workshops, please visit: (<https://www.physalia-courses.org/courses-workshops/course11/>)

Best regards, Carlo Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR info@physalia-courses.org mobile: +49 17645230846

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Online SingleCellDataAnalysis Nov26

Dear colleagues

This is your final chance to register for the 1-day seminar on Single-Cell Data Analysis in R and Python, happening on November 26 with Professor Nikolay Oskolkov.

<https://instats.org/seminar/single-cell-data-analysis2>
Single-cell analysis offers unparalleled insights into cellular heterogeneity, opening doors to understanding complex biological systems with unprecedented precision. These methods are increasingly relevant to evolutionary biologists and ecologists, providing tools to investigate questions such as cellular adaptations, developmental processes, immune responses, and the molecular underpinnings of phenotypic diversity in natural populations.

The workshop will provide an in-depth introduction to cutting-edge computational techniques and workflows for analyzing single-cell data. Whether you’re exploring questions in organismal biology, disease ecology, or comparative genomics, this seminar will equip you with the skills to leverage single-cell methodologies for groundbreaking evolutionary research. Sign up today to secure your spot!

<https://instats.org/seminar/single-cell-data-analysis2>
Best wishes

Michael Zyphur Director Institute for Statistical and Data Science instats.org

mzyphur@instats.org

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Online SoilTaxonomy Dec20

To all interested people,

With a warm invitation to share this announcement, we are pleased to announce the Call for Applications for SoilMATs - Soil Meiofauna Advanced Taxonomy School, a fee-free specialized training program designed to address taxonomic knowledge gaps and foster expertise in

soil ecology and fauna, focusing on Nematoda, Rotifera, and Tardigrada. For further details, please visit the call page: SoilMATs - CALL.

This program combines online learning (60 h) with hands-on field and laboratory sessions (a total of 15 days in three different countries) led by experts of four European countries, enabling participants to develop both theoretical and practical taxonomy skills.

Application Details: Application Deadline: 20 December 2024 Eligibility Criteria: European citizens or residents involved in a European research institution/university. Third-year bachelor's students, master's students, graduate students, PhD students, and post-docs (within five years of PhD completion). Background in biology, forestry, agriculture, or natural sciences. English proficiency at B1 level or above.

Application Process: Interested candidates can apply through the online registration form by submitting a short CV (using the following CV template) and a short motivation letter. Fees: The program is free of charge. SoilMATs will cover training fees, travel from European locations, local transport, meals, and accommodations. All other expenses are the responsibility of participants. Certifications: Certificates of Attendance; ECTS and ECVET Credits.

For any questions, write toevozoolab@unimore.it.

We invite your Scientific Society to share this opportunity with your members who may wish to advance their skills in taxonomy and soil biodiversity. For additional information, please see the attached flyer, which provides an overview of SoilMATs.

Thank you for your support in promoting this initiative. Sincerely, Prof. Roberto Guidetti PI of the SoilMATs Team

Associated Professor Department of Life Sciences University of Modena and Reggio Emilia via Campi 213/D, 41125, Modena, Italy email: roberto.guidetti@unimore.it tel. +39 0592055555, fax: +39 0592055548, Skype: roberto.guidetti69 Laboratory of Evolutionary Zoology (www.evozoo.unimore.it/) YouTube Channel: <https://www.youtube.com/channel/UCUE7-VizjkbZa0Pmh1HbQ/> This project has received funding from the European Union's Horizon Europe Research and Innovation program within the framework of the TETTRIs Project funded under Grant Agreement Nr 101081903

evozoolab@unimore.it

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RosalidFranklinInst UK TransposableElements May12-16

???? Deadline: 2 December 2024 ???? Apply to the EMBO Practical Course: Transposable Elements in the Era of Data Science!

???? Discover the fascinating world of transposable elements and how data science is revolutionizing their study. Don't miss this opportunity to advance your bioinformatics, genomics, and data analysis skills!

???? Interested in attending? Visit the website: Course Info: <https://meetings.embo.org/event/25-transposable-elements-12-16> May 2025 | The Rosalid Franklin Institute, Didcot, United Kingdom Send you Abstract for poster presentation

#EMBO #TransposableElements #Bioinformatics #DataScience #Genomics

Dr. Emmanuelle LERAT, Chercheuse CNRS, HDR

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SanDiego ConservationGenomics Jan10

ORG.one Genomes for Conservation Workshop at PAG32

Dear Colleagues,

We are excited to solicit abstracts for the upcoming workshop at PAG 32: ORG.one genomes for conservation of endangered species. The workshop will be held on Friday, January 10, 2025 from 10:30 AM to 12:40

PM in room Pacific E at the Town and Country Resort in San Diego, CA.

We are soliciting abstracts from interested individuals and groups to present at the workshop. Any project that relies on Org.one or ONT sequencing for conservation genomics is appropriate for submission. This includes wet lab and bioinformatic methods, de novo genome sequencing projects, population genetic projects, outreach initiatives, or other projects derived from participation in the ORG.one project.

To submit an abstract, please email it format to the workshop organizer before Friday, November 15, 2024. Selected abstracts for oral presentations will be 15 minutes long. Presenting authors will be contacted in early November to provide a title. Early bird registration is

ending soon (Oct. 31st) with rates increasing on Nov. 1st, however, workshop speakers can obtain 'early-bird' registration rates after November with a discount code.

If you have questions, please get in touch!

Karl Fetter (Organizer) Jill Wegrzyn (Moderator) Kara Dicks (Moderator)

Karl C. Fetter, PhD

USDA NIFA Postdoctoral Fellow Plant Computational Genomics Lab Department of Ecology and Evolutionary Biology University of Connecticut kcf@uconn.edu hemlock@uconn.edu

karl.fetter@gmail.com

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Instructions: To be added to the EvoDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from 'blackballed' addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notification of the availability of a monthly review pdf file.

To be removed from the EvoDir mailing list please send an email message to Golding@McMaster.CA. Note that 'on vacation', etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail's your code can be temporarily changed to 000000.

To send messages to the EvoDir direct them to the email evodir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as L^AT_EX files, Excel files, etc. . . . plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category "Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:" and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

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