

---

# E v o l D i r

November 1, 2017

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](mailto:Golding@McMaster.CA).

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

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



Foreword .....	1
Conferences .....	2
GradStudentPositions .....	8
Jobs .....	65
Other .....	107
PostDocs .....	114
WorkshopsCourses .....	151
Instructions .....	170
Afterword .....	171

---

## Conferences

Bristol PopulationGenetics Jan3-6 .....	2	Toronto Canada WildQuantGen Mar23-25 .....	5
Bristol UK 51stPopulationGenetics Jan3-6 .....	2	UNorthCarolina ChapelHill SEPEEG Oct20-22 deadline	
Granada Bioinformatics Apr25-27 .....	3		6
London EvolutionaryPatternsSexualSelection May ..	4	Ventura California PredatorPreyEvolution Jan28-Feb2	
Marseilles 22ndEvolutionaryBiology Sep25-28 registra-	4		6
tion .....	4	Yokohama SMBE Jul8-12 CallSymposia .....	7
Nancy France PlantEvolution Apr11-13 .....	4		
SenckenbergMuseum Frankfurt ClimateAdaptation .	5		

---

### Bristol PopulationGenetics Jan3-6

Registration is now open for the 51st Population Genetics Group meeting, at the University of Bristol, UK on 3-6th January 2018.

This conference, one of the longest running evolutionary biology meetings in the world, is a great place for researchers at all stages of their career to meet in a supportive atmosphere, and to present and discuss their ideas.

Contributed talks will be accepted on a first-come-first-served basis, and arranged into parallel sessions. The interests of attendees are broad and include all aspects of population and evolutionary genetics, particularly their relevance to genomic architecture, understanding selection on quantitative traits, the evolution of mating systems, and ecological speciation.

Confirmed plenary speakers are: Prof Tracey Chapman (UEA, UK); Prof Daven Presgraves (University of Rochester, USA), Prof Katie Peichel (University of Bern, Switzerland), and Prof Mike Brockhurst (University of Sheffield). Prof Joe Felsenstein will also be giving the Fisher Memorial Lecture, live via video link up.

Registration and accommodation details are here:

<http://populationgeneticsgroup.org.uk> We forward to seeing you in Bristol!

Best wishes

Jon Bridle (jon.bridle@bristol.ac.uk)

(On behalf of the Organising Committee)

Jon Bridle <Jon.Bridle@bristol.ac.uk>

---

### Bristol UK 51stPopulationGenetics Jan3-6

The 51st Population Genetics Group meeting will be held at the University of Bristol, UK on 3-6th January 2018.

This conference, one of the longest running evolutionary biology meetings in the world, is a great place for researchers at all stages of their career to meet in a supportive atmosphere, and to present and discuss their ideas.

Contributed talks will be accepted on a first-come-first-served basis, and arranged into parallel sessions. The interests of attendees are broad and include all aspects of population and evolutionary genetics, particularly

their relevance to genomic architecture, understanding selection on quantitative traits, the evolution of mating systems, and ecological speciation.

Confirmed plenary speakers are: Prof Tracey Chapman (UEA, UK); Prof Daven Presgraves (University of Rochester, USA), Prof Katie Peichel (University of Bern, Switzerland), and Prof Mike Brockhurst (University of Sheffield). Prof Joe Felsenstein will also be giving the Fisher Memorial Lecture, live via video link up.

Registration will begin very soon. Details to follow.

We forward to seeing you in Bristol!

Best wishes

Jon Bridle (jon.bridle@bristol.ac.uk)

(On behalf of the Organising Committee)

Jon Bridle <Jon.Bridle@bristol.ac.uk>

---

## Granada Bioinformatics Apr25-27

Apologies if you received multiple copies of this CFP. Please kindly forward to those who may be interested. Please DO NOT reply to this email. To unsubscribe send us an email to: iwbbio\_cfp@ugr.es. To obtain more information: iwbbio@ugr.es.

**CALL FOR PAPERS.** IWBBIO-2018 2018 International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2018) 25-27 April, 2018. Granada (SPAIN) <http://iwbbio.ugr.es> It is our great pleasure to announce you the 6th International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2018), which will take place in Granada (Spain) in April, 2018. Details and instructions for the conference can be found at the conference web site. The conference will be devoted to current researches in Bioinformatics, Computational Biology and Bioengineering, including the following topics (but not limited to): 1. Computational proteomics. 2. Next generation sequencing and sequence analysis. 3. High performance in Bioinformatics. 4. Biomedicine. 5. Biomedical Engineering 6. Computational systems for modeling biological processes. 7. Healthcare and diseases. 8. E-Health We encourage you to submit paper focused on interesting, relevant and original works that are related to these subjects. We also admit the submission of short abstracts, which must be extended to full paper in case of being accepted. You could also be interested in organizing a special session for this conference.

These are some important dates for the submission: Special session proposals: November 15th, 2017. Submission of abstracts/papers by authors: November 28th, 2017. Notification of provisional acceptance: January 20th, 2018. Submission of final papers: January 30th, 2018.

**PAPER PUBLICATION:** There are two different categories for submissions: 1.- FULL PAPER CONTRIBUTIONS

Full papers should contain 10-12 pages in its final version according to the Lecture Notes in Bioinformatics (LNBI) format of Springer-Verlag format. All accepted abstracts will be published in the conference proceedings, under both ISBN and ISSN references. The proceedings of abstract will be submitted to Thomson Reuters Conference Proceedings Citation Index (ISI), INSPEC, DBLP, EI (Elsevier Index) and Scopus for indexation. 2.- ABSTRACT CONTRIBUTIONS Abstract submissions are also accepted. Abstracts must be submitted directly in the EasyChair platform. Once they have been accepted, a selection of abstracts can be extended to full papers before final papers submission deadline. All accepted abstracts will be published in the conference proceedings, under both ISBN and ISSN references. The proceedings of abstract will be submitted to Thomson Reuters Conference Proceedings Citation Index (ISI), INSPEC, DBLP, EI (Elsevier Index) and Scopus for indexation.

**SPECIAL ISSUES:** A list of papers with very high quality will be selected to be extended and submitted in different special issues (more information in the web page of the conference): 1.- Statistical Methods in Medical Research. 2.- PLOS Computational Biology. 3.- BMC System Biology. 4.- BMC Bioinformatics.

Thank you very much for your attention and hope to see you at IWBBIO 2018 in Granada (Spain), April 2018.

IWBBIO 2018 Organizers International Work-Conference on Bioinformatics and Biomedical Engineering 25-27 April, 2018. Granada (Spain)

powered by phpList

“iwbbio@iwbbio.org” <iwbbio@iwbbio.org>

---

**London Evolutionary Patterns Sexual Selection**  
May

Dear all

We have been lucky enough to get the Royal Society to host a two-day meeting entitled Sexual selection: patterns in the history of life in May 2018. We have made a point of bringing together both biologists working on contemporary systems and palaeontologists, and we have been able to assemble a stellar lineup of speakers. There is a limited number of places available for non-speakers, and we will also be having a poster session. More details here:

<https://royalsociety.org/science-events-and-lectures/-2018/05/sexual-selection/> Looking forward to seeing you there

Rob K

Rob Knell Reader in Evolutionary Ecology School of Biological and Chemical Sciences Queen Mary University of London

research website <http://webpace.qmul.ac.uk/rknell/>  
r.knell@qmul.ac.uk

R Knell <r.knell@qmul.ac.uk>

---

**Marseilles 22nd Evolutionary Biology**  
Sep25-28 registration

The (early) registration for the 22nd evolutionary biology meeting “at” Marseilles: September 25-28 2018 is now open

see [aeeb.fr](http://aeeb.fr) (contact [marie-helene.rome@univ-amu.fr](mailto:marie-helene.rome@univ-amu.fr))

best regards

Pierre

PONTAROTTI Pierre <[pierre.pontarotti@univ-amu.fr](mailto:pierre.pontarotti@univ-amu.fr)>

---

**Nancy France Plant Evolution**  
Apr11-13

Registration now open! 41st New Phytologist Symposium: Plant sciences for the future

11-13 April 2018, Nancy, France

<https://www.newphytologist.org/symposia/41> The 41st New Phytologist Symposium will provide new insights into the evolutionary forces and molecular mechanisms that govern plant development and physiology, and their interactions with biotic and abiotic cues.

Invited speakers from the New Phytologist Editorial Board will highlight emerging topics in plant sciences as well as the application of modern technologies to capture the complex mechanisms driving plant development, physiology, interactions and evolution.

Eighteen leading scientists will speak at the symposium along with early career researchers, selected to give talks following submission of poster abstracts. Travel grants are available.

Travel grant deadline: Thursday 18 January 2018  
Poster abstract deadline: Thursday 8 February 2018

More details and registration at <https://www.newphytologist.org/symposia/41>. Dr Mike Whitfield Development Coordinator, New Phytologist  
————— New Phytologist Central Office, Bailrigg House, Lancaster University, Lancaster, LA1 4YE, UK  
Tel: + 44 1524 592839; Fax: + 44 1524 594696  
[newphytologist.org](http://newphytologist.org)— Twitter: @NewPhyt— Facebook: [fb.com/NewPhytologist](https://www.facebook.com/NewPhytologist)

The New Phytologist Trust, registered charity number 1154867

2016 Impact Factor 7.33

Calling early career scientists! Your CV needs a New Phytologist Tansley Medal. Apply now.

New Phytologist Symposia in 2018 Plant sciences for the future | The biology of wood: from cell to trees

“Whitfield, Mike” <[m.whitfield@lancaster.ac.uk](mailto:m.whitfield@lancaster.ac.uk)>

---

## SenckenbergMuseum Frankfurt ClimateAdaptation

–Conference–

### GENOMIC BASIS OF CLIMATE ADAPTATION

A symposium hosted by Senckenberg Biodiversity and Climate Research Centre, Frankfurt, Germany

January 17th to 18th 2018

Senckenberg Museum of Natural History in Frankfurt am Main

Senckenberganlage 25

60325 Frankfurt am Main

Germany

Global warming and changing climatic conditions will require organisms to either track their climatic niche or rapidly adapt to new conditions. Our understanding of the genomic basis underlying climate adaptation across various taxa is currently growing fast. We have so far learned about adaptive inversion clines, polygenic traits, the interplay of standing genetic variation and newly arising mutations, adaptation in symbiotic systems, and the role of adaptive introgression between species. These species-specific responses now raise more general scientific questions:

I) Which processes and genomic features further or hinder adaptation?

II) Are common patterns arising in terms of genes or pathways responding to climate stress selection? What are the relative roles of transcription changes versus structural changes?

III) Which directions of research are promising for the future?

IV) Which next generation sequencing techniques, and other methods, are most appropriate in the near future?

This symposium aims at bringing together leading scientists in the field to discuss recent results in genomic climate adaptation. Particularly, we want to integrate knowledge across disciplines (e.g. population genetics, molecular ecology/evolution, bioinformatics), and across taxa (e.g. plants, animals, fungi). Together, we want to identify open questions and promising methodology, and conceptually advance this scientifically and societally important field.

Confirmed keynote lecturers:

Outi Savolainen (University of Oulu, Finland), Alan O. Bergland (University of Virginia, USA)

Confirmed plenary speakers:

Thomas Flatt (University Lausanne, Switzerland), Robert Kofler (VetMedUni, Vienna, Austria), Christian Rellstab (WSL, Zürich, Switzerland), Thomas Bataillon (Aarhus University, Denmark), Karl Schmid (University of Hohenheim, Germany)

Find more information here:

[http://www.senckenberg.de/root/index.php?page\\_id=18682](http://www.senckenberg.de/root/index.php?page_id=18682) < [http://www.senckenberg.de/root/index.php?page\\_id=18682&preview=true](http://www.senckenberg.de/root/index.php?page_id=18682&preview=true) > &preview=true

Registration open until 1st of November:

[http://www.bik-f.de/root/index.php?page\\_id=362](http://www.bik-f.de/root/index.php?page_id=362) < [http://www.bik-f.de/root/index.php?page\\_id=362&cms\\_veranstaltung\\_id=234](http://www.bik-f.de/root/index.php?page_id=362&cms_veranstaltung_id=234) > &cms\_veranstaltung\_id#4

The organizers and scientific committee cordially invite you!

Barbara Feldmeyer (Barbara.Feldmeyer(q)senckenberg.de)

Ann-Marie Waldvogel (Ann-Marie.Waldvogel(q)senckenberg.de)

Imke Schmitt (Imke.Schmitt(q)senckenberg.de)

Markus Pfenninger (Markus.Pfenninger(q)senckenberg.de)

Ann-Marie Waldvogel <Ann-Marie.Waldvogel@senckenberg.de>

---

## Toronto Canada WildQuantGen Mar23-25

We are happy to announce the rescheduling of the 2017 AGA President's Symposium, \* Wild Quantitative Genetics\*. The event will now take place in dynamic Toronto, Canada, over the spring weekend of March 23-25, 2018. The meeting will focus on studies of the quantitative genetics of fitness-related traits in an evolutionary context across diverse species. We will open with a reception on Friday night, and our Key Distinguished Lecturer, Loeske Kruuk, will lead off a full day of talks on Saturday. A poster session reception is planned for Saturday night. Finally, a half day of talks

will be presented on Sunday.

Speakers include:

Coltman David Alberta (CA) Conner Jeff Mich State (US) Delph Lynda Indiana (US) Dochtermann Ned N Dakota (US) Donohue Kathleen Duke (US) Janzen Fred Iowa State (US) Jones Adam Idaho (US) Josephs Emily UC Davis, Mich State (US) Kruuk Loeske ANU (Australia) McAdam Andrew Guelph (CA) McGlothlin Joel Virginia Tech (US) Morrissey Mike St Andrews (UK) Moyle Leonie Indiana (US) Paaby Annalise Georgia Tech (US) Saltz Julia Rice (US) Slate Jon U Sheffield (UK) Stinchcombe John Toronto (CA) Weinig Cynthia Wyoming (US) Wolf Jason U Bath (UK)

Registration includes meals as well as complimentary membership in the American Genetic Association and subscription to Journal of Heredity

STUDENTS: The AGA is offering multiple \*free\* registration slots to graduation students who submit an abstract. AGA symposia are small, friendly gatherings, and provide wonderful opportunities for students and researchers to engage with one another and share their science.

Registration is open! For all details, visit <http://www.theaga.org>. Best wishes,

Anne Bronikowski 2017 AGA President

Anjanette Baker <[theaga@theaga.org](mailto:theaga@theaga.org)>

---

## UNorthCarolina ChapelHill SEPEEG Oct20-22 deadline

Reminder registration closes in just a week (10/9) for the 43rd Annual Southeastern Population Ecology & Evolutionary Genetics Meeting (a.k.a. SEPEEG 2017 and “sepage”). This fun regional conference will be held October 20-22, 2017, and is hosted by the Department of Biology at the University of North Carolina at Chapel Hill. It will be at the Camp Monroe Retreat Center in Laurel Hill, NC.

Website: <http://sepeeg.web.unc.edu/> thanks!

Corbin D. Jones, Ph.D. Professor Department of Biology iBGS - Integrative Program for Biological & Genome Sciences Campus Box 3280, Genome Science Building UNC-Chapel Hill Chapel Hill, NC 27599-3280

“Jones, Corbin D” <[cdjones@email.unc.edu](mailto:cdjones@email.unc.edu)>

---

## Ventura California PredatorPreyEvolution Jan28-Feb2

MESSAGE TITLE: 32 seats left: 2018 Predator-Prey Interactions Gordon Research Conference MESSAGE BODY:

Third Gordon Research Conference on Predator-Prey Interactions

January 28 - February 2, 2018, Ventura, California

<https://www.grc.org/predator-prey-interactions-conference/2018/> Gordon Research Conferences are recognized as the “world’s premier scientific conferences”, where leading investigators from around the globe meet biennially for a full week of intense discussion of the frontier research in their field. We have an outstanding list of confirmed speakers and contributors, detailed below. Our meeting is capped at 200 people, and we’ve already accepted 168 applicants (listed at the bottom of this email); so please apply soon.

The neurobiology of responses to risk in individual prey can, when aggregated across a population, profoundly affect surrounding ecosystems. Similarly, researchers are increasingly aware of how quickly selection and epigenetic forces can shift prey phenotypes and alter future interactions with predators. In both cases, the connections between small-scale (within an individual or at a single point in time) and large-scale (across ecosystems or generations) processes illustrate how exploring the ‘linkage map’ of predator-prey interactions across scales can identify new fields of research and synergize the collaborations necessary to address them. We have targeted the most exciting advances in predator-prey work across multiple fields, with each speaker agreeing to share their latest unpublished findings. In order to encourage active participation from everyone at the conference, all attendees are strongly encouraged to present a poster on their work.

The complete program is available, along with further details concerning registration, at our website (<https://www.grc.org/predator-prey-interactions-conference/2018/>).

Sessions and Confirmed Speakers

Predator-prey interactions in the field and lab

Joel Berger, Caroline Blanchard (speakers)

Jacqueline Blundell & Evan Preisser (discussion leaders)  
Evolutionary underpinnings of predator-prey interactions

John Orrock, Catherine Matassa, Robyn Crook, Robby Stoks (speakers)

Sonny Bleicher (discussion leader)

Predators at the landscape level

Elizabeth Madin, Trisha Atwood, Meredith Palmer

Shelby Rinehart (discussion leader)

Prey responses to predator cues

Ted Stankowich, Grant Brown, William Resetarits, Mark Berry

Adam Crane (discussion leader)

Neural responses to predators

Gwyneth Card, Rupshi Mitra, Cornelius Gross

Newton Canteras (discussion leader)

Neurobiology of fear

Ken Lukowiak, Arun Asok, Gal Richter-Levin, Marta Moita

Wen Han Tong (discussion leader)

Carnivores in natural and managed landscapes

Doug Smith, Justin Suraci, Mathew Crowther

Rebecca Selden (discussion leader)

Transgenerational impacts of stress

Tracy Langkilde, Michael Sheriff, Brian Dias, Regina Sullivan

Michael Clinchy (discussion leader)

Past, present, and future directions in fear and predator-prey research

James Estes, Liana Zanette

Maud Ferrari & Ajai Vyas (discussion leaders)

Participants and Accepted Applicants

Mark Abrahams (Memorial University), Bridie Allan (James Cook University), T. Michael Anderson (Wake Forest University), Thomas Anderson (University of Kansas), Fergus Mark Anthony (Pune University), Arun Asok (Columbia University), Trisha Atwood (Utah State University), Kevin Bairos-Novak (University of Saskatchewan), Adalbert Balog (Sapientia University), Shanta Barley (University of Western Australia), Brandon Barton (Mississippi State University), Lynne Beaty (Trent University), Miguel Bedoya-Perez (The University of Sydney), Joel Berger (Colorado State University

/ Wildlife Conservation Society), Mark Berry (Memorial University of Newfoundland), Sriya Bhattacharya (Memorial University of Newfoundland), James Biardi (Fairfield University), Caroline Blanchard (University of Hawaii), Sonny Bleicher (University of Arizona), Jacqueline Blundell (Memorial University of Newfoundland), Paul Bourdeau (Humboldt State University), Crasso-Paulo Breviglieri (Universidade de Campinas), Grant Brown (Concordia University), Holly Brown (University of Connecticut), Newton Canteras (University of Sao Paulo), Gwyneth Card (Janelia Research Campus, Howard Hughes Medical Institute), Irene Castaneda Gonzalez (University of Paris Sud), Cynthia Chai (California Institute of Technology), Michael Cherry (Virginia Tech), Xochitl Clare (University of California Santa Barbara), Michael Clinchy (University of Western Ontario), Alison Collins (The Metropolitan Water District of Southern California), Adam Crane (University of Saskatchewan), Robyn Crook (San Francisco State University), Mathew Crowther (The University of

— / —

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>

## Yokohama SMBE Jul8-12 CallSymposia

\*SMBE 2018 Call for Symposia\*

We are delighted to announce that the Society for Molecular Biology & Evolution is now accepting proposals for symposium topics for the 2018 Annual Meeting, which will take place in Yokohama, Japan, from July 8 - 12, 2018.

Proposals should span the range of interests of SMBE members, including exciting new scientific developments, and represent the geographic and gender diversity of our membership. For each accepted symposium, SMBE will provide partial financial support to help attract outstanding invited speakers.

For more details and to submit your proposal please visit the \*meeting website\* < <https://t.e2ma.net/click/-92vhm/hhkkqu/t2wdue> >. The deadline for proposal submission is \*October 31, 2017\*. Successful applications will be confirmed by the middle of November.

If you have any questions, please email [smbe2018-p@jtbcom.co.jp](mailto:smbe2018-p@jtbcom.co.jp) <[smbe2018-p@jtbcom.co.jp?subject=](mailto:smbe2018-p@jtbcom.co.jp?subject=)>. We look forward to your participation in the SMBE An-

nual Meeting next July in Yohohama, Japan.

< <https://t.e2ma.net/click/92vhm/hhkkqu/9uxdue> >

SMBE Contact <[smbe.contact@gmail.com](mailto:smbe.contact@gmail.com)>

---

## GradStudentPositions

AMNH NewYork ComparativeBiology .....	9	OhioStateU PlantGenomicEvolution .....	30
BiKF Frankfurt MammalianEvolutionaryGenomics	10	SaintLouisU InsectEvolutionaryEcol .....	31
BoiseStateU PlantHerbivoreEvolution .....	11	SGN Frankfurt LandscapeGenetics .....	31
BrighamYoungU EvolutionaryBiology .....	12	SmithColl UMassAmherst EvolEukMicrobes .....	32
CardiffU AmphibianConservation .....	12	StellenboschU EvolutionFloralHandedness .....	33
CarletonU MammalPalaeoecologyEvolution .....	13	StockholmU InsectClimateAdaptation .....	33
CityU NewYork EvolutionaryBiol .....	14	StonyBrookU NY EvolutionaryGenomics .....	33
ClarkU EvolutionaryMorphology .....	15	SwedishUAgricultureSciences MosquitoEvol .....	34
CSIRO Australia NationalCollections .....	15	SyracuseU PlantEvolution .....	35
CWilliamMary London EvolutionaryBiol .....	16	TexasAMU EvolutionaryGenomics .....	35
DSASC DeadSea Holobiont Evolution .....	17	TexasAMU TravelGrants .....	36
DSASC Israel MicrobialMetagenomics .....	17	TexasTech PlantPhylogenomics .....	36
ETH Zurich PlantPathogenEvolution .....	18	TexasTechU AvianGenomics .....	37
Europe 15 PlantAdaptation .....	19	TexasTechU PlantClimateAdaptation .....	37
GeorgeWashingtonU EvolutionEcol .....	19	UBath Biodiversity .....	38
Helsinki FossilDataAnalysis .....	20	UBath GenomeEvolution .....	39
IllinoisStateU PlantMicrobeInteractions .....	20	UBath HostParasiteCoevolution .....	39
LeedsU GalapagosIguanasAdaptation .....	21	UBergen DeepSeaSpeciation .....	40
MaxPlanck EvolBio ModelingAntibioticResistance	22	UBern SexChromosomeEvolution .....	41
MemorialU TheoreticalEpidemiology .....	22	UCalgary WildHorsesEvolEcolGenet .....	41
MiamiU Ohio PlantEvo-Devo .....	23	UCalifornia SantaBarbara NomophilaAdaptation	42
MichiganState PopGen .....	24	UCambridge BrainEvolution .....	43
MississippiStateU Evodevo .....	24	UExeter WinnerLoserEffects .....	43
Montana UNebraska EcolEvolGenomics .....	25	UFlorida SexualSelection .....	43
Netherlands 2 ClimateAdaptation .....	26	UGreifswald Adaptation .....	44
NHM UBergen MarineSystematics .....	26	UHamburg PopGenomicsDaphnia .....	45
NorthernArizonaU AvianMalariaGenomics .....	27	UHawaii GenomicsAndSymbiosis .....	46
NorthernArizonaU MicrobialEvolution .....	28	UHawaii Hilo TropicalConservation .....	46
NorthernArizonaU PlantEvolutionaryPlasticity	28	UIllinois EvolutionaryBiology .....	47
NorthwesternU PlantBiolConservation .....	28	UKentucky EvolutionEcology .....	47
OhioStateU AntVenomEvolution .....	29	UMississippi HostParasiteEvolution .....	48
OhioStateU CichlidAdaptation .....	29	UMontana SpeciationAdaptation .....	49

UMuenster TemperatureAndReproduction .....	49	UStAndrewsEdinburgh EvolutionaryGenetics .....	58
UNorthCarolina DrosophilaAdaptation .....	50	UStAndrews WhaleSexualSelection .....	58
UNorthCarolina Greensboro MicrobialEvolution ...	51	UtahStateU MaternalEffectsBees .....	59
UNorthCarolina Greensboro MicrobialGenomics ...	51	UTartu DrosophilaEvolutionaryEcol .....	60
UNotreDame EvolutionPathogens .....	52	UTexas Arlington EvolutionaryBiology .....	60
UNottingham SticklebackEvolution .....	52	UUtah HostParasiteEvolution .....	61
UOregon EcolEvolution .....	53	UVermont MethylationConservation .....	61
UOulu EvolutionaryGenomics StatisticalGenetics ..	53	Uvienna 2 CephalopodEvolution .....	62
UOulu SpeciesCoevolution .....	54	UYork UK RhizobiaEvolution .....	62
UPennsylvania MacroevolutionFishesPaleo .....	55	UZurich MarineAdaptation .....	63
UPittsburgh HostMicrobeInteractions .....	55	VirginiaTech 2 HoneyBeeEvolution .....	64
UppsalaU HumanEvolGenetics .....	56	Zurich Switzerland EvolutionaryEcol .....	65
URhodeIsland MarinePopulationGenomics .....	57		
USouthampton NHMLondon SpeciationGenomics ..	57		

---

## AMNH New York Comparative Biology

American Museum of Natural History Richard Gilder Graduate School Comparative Biology Ph.D. Program and Graduate Fellowships Program

The AMNH RGGGS Ph.D. Program in Comparative Biology is training the next generation of biologists through an integrative approach that focuses on the history, evolutionary relationships, and interactions among species. It utilizes the Museum's strength and experience in research and training to educate a new generation of scientists and industry leaders. The AMNH provides exceptional support facilities for student research, with collections of more than 33 million specimens and artifacts. Training and research opportunities exist across a wide array of disciplines in comparative biology, incorporating research in systematic and evolutionary biology, paleontology, conservation biology, comparative genomics, computational biology, Earth history, anthropology, and biological and cultural diversity. Global fieldwork, with AMNH faculty, student-led or in partnership with others, provides exceptional research opportunities for students. RGGGS students may take advantage of RGGGS course cross-enrollment agreements with partner universities Columbia and the City University of New York. Armed with a Gilder School education, graduates will not only understand the history and diversity of life on Earth, but may contribute to advances in human health, biodiversity conservation, and other related biological research fields as well.

This is an accelerated program, designed for students to complete their degrees in four years. Students will

earn a minimum of 62 credits through a combination of coursework, teaching assistantships, and individual dissertation research. The Richard Gilder Graduate School will typically provide full financial support to students matriculating in the Comparative Biology Ph.D. Program.

We also offer Graduate Fellowships for students interested in earning a Ph.D. at one of our partner institutions (Columbia University, CUNY, NYU, Stony Brook and Cornell University), when they are advised by an AMNH curator.

The AMNH Graduate Student Fellowship Program is an educational partnership with selected universities, dedicated to the training of Ph.D. candidates in those scientific disciplines practiced at the Museum. Our current collaborations are with Columbia University, City University of New York (CUNY), Cornell University, Stony Brook University, and New York University (NYU). The host university in which the student enrolls exercises educational jurisdiction over the students and formally awards the degree. In these partnership programs, at least one Museum curator must serve as a graduate advisor, co-major professor or major professor, and adjunct university faculty member. Each student benefits by having the staff and facilities of both the university and the Museum to support his/her training and research. To be eligible for the AMNH Graduate Fellowship, students must apply to both the host University's Ph.D. program and to the AMNH Graduate Student Fellowships Program. Students already matriculated in a Ph.D. program are not eligible to apply; only new, first-time Ph.D. applicants will be considered.

**SUMMARY OF APPLICATION REQUIREMENTS FOR FALL 2018 APPLICANTS** Bachelor of Arts or Bachelor of Science or equivalent degree, from an accredited institution Official transcripts from all undergraduate/graduate institutions attended GRE (general)

results (taken within the past five years—Institution Code 2471 or 1760) Three letters of support Statement of Academic Purpose (Essay 1: past research experience [length of up to 500 words] and Essay 2: proposed research interests [length of up to 500 words]) Interview (Final candidates will be interviewed) AMNH Faculty sponsor Application fee of \$50 (Comp Bio Only) Proficiency in English (TOEFL [100 or higher] or IELTS scores [total 7.0 or higher] are required for non-native English speakers, taken within the past 2 years)

Deadline: December 15, 2017

For more info, please visit: <http://www.amnh.org/our-research/richard-gilder-graduate-school/academics-and-research/fellowship-and-grant-opportunities/doctoral-and-graduate-student-fellowships> amanuel@amnh.org

---

## BiKF Frankfurt Mammalian Evolutionary Genomics

Sehr geehrte Damen und Herren,

gerne möchten wir auf Ihrem Jobportal die folgende PhD-Stellenausschreibung veröffentlichen.

-----

Job offer ref. #11-17020 The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. SGN conducts natural history research with almost 800 employees and research institutions in six federal states. Within SGN, the Senckenberg Biodiversity and Climate Research Centre (BiK-F) explores the interactions between biodiversity, climate, and society. Senckenberg BiK-F invites applications for a

PhD position in Mammalian Evolutionary Genomics (50 %)

There is an exciting opportunity for a talented and motivated applicant to join the research group of Prof. Dr. Axel Janke. The applicant is expected to be closely involved in evolutionary, population- or phylogenomics to study speciation and geneflow in mammals (bears, giraffe, kangaroos or other) at the genomic level.

Your profile: - Master degree in Biology, Genetics, Bioinformatics or a related field - Strong interest and proven skills in evolutionary, population or phylogenetics - Experience in analyzing genomic data of eukaryotes - Very good written and oral communication skills in English - Interest to be involved in an international and interdis-

plinary group to expand the work to species distribution modeling, paternal inference and conservation genetics

Salary and benefits are according to a full time public service position in Germany (TV-H E 13, 50%). The contract should start on February 1st, 2018 and will initially be limited until January 31st, 2021. The Senckenberg Biodiversity and Climate Research Centre supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment is in Frankfurt am Main, Germany. The employer is the Senckenberg Gesellschaft für Naturforschung. Please send your application, mentioning the reference of this job offer (ref. #11-17020) before November 12th, 2017 by e-mail (attachment in a single pdf document) and including a cover letter detailing research interests and experience, a detailed CV and a copy of your Master degree to:

Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt am Main E-Mail: [recruiting@senckenberg.de](mailto:recruiting@senckenberg.de)

For scientific enquiries please get in contact with Prof. Dr. Axel Janke, [axel.janke@senckenberg.de](mailto:axel.janke@senckenberg.de)

-----

Für Ihre Mühen bedanken wir uns bereits im Voraus.

Mit freundlichen Grüßen /Best Regards

Jessica Helm Personalsachbearbeiterin

SENCKENBERG Gesellschaft für Naturforschung (Rechtsfähiger Verein gemäß §22 BGB) Senckenberganlage 25 60325 Frankfurt am Main

Besucheradresse: Voltastraße 1, 60486 Frankfurt am Main (5. Obergeschoss)

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

Leiterin Personal & Soziales - 1458 Loke, Uta

Stellv. Leiterin Gruppe Personal & Soziales - 1319 Elsen, Carina

Mitarbeiter/in Personalbeschaffung (Recruiting) - 1313 di Biase, Maria - 1313 Helm, Jessica - 1478 Gajcevic, Isabel

Fax: 0049 (0)69 / 7542-1467 Mail: [recruiting@senckenberg.de](mailto:recruiting@senckenberg.de)

Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Andreas Mulch, Stephanie Schwedhelm, Prof. Dr. Katrin Böhning-Gaese, Prof. Dr. Uwe Fritz, Prof. Dr. Ingrid Kröncke Präsidentin: Dr. h. c. Beate Her-aeus Aufsichtsbehörde: Magistrat der Stadt Frankfurt am Main (Ordnungsamt)

Senckenberg forscht für Ihr Leben gern!  
[www.200jahresenckenberg.de](http://www.200jahresenckenberg.de)  
 <recruiting@senckenberg.de> recruiting

---

## BoiseStateU PlantHerbivoreEvolution

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

GRADUATE ASSISTANTSHIP (Ph.D. in Ecology, Evolution, and Behavior) - at Boise State University. A position is available for a Ph.D. student to scale-up mechanisms and consequences of plant-herbivore interactions from genes to organisms to populations. This multidisciplinary project will identify genetic, physiological and behavioral mechanisms of tolerance to plant phenotypes (phenology, nutrients, chemical defenses) in herbivores to explain population dynamics in arctic systems. The Ph.D. student will work as part of our collaborative team that includes, but is not limited to, the Norwegian Polar Institute, Icelandic Institute of Natural History, University Centre in Svalbard, University of Iceland, University of Tromsø, and Peregrine Fund. The student will participate in: 1) field work that involves remote sensing, behavioral observations of ptarmigan and reindeer, and collection of samples in established field stations in Norway, Iceland, and/or Alaska (30-40% of data collection) and 2) laboratory work that involves genetic and chemical assays and processing of remotely sensed data (60-70% of data collection) at Boise State University. Training for both field and laboratory activities will be provided by team members who offer expertise in ecology, physiology, genetics, chemistry, and remote sensing to provide the student with diverse skills sets and scientific networks to prepare them for broad career opportunities.

\*Qualifications\* We are seeking someone who has: 1) strong writing and quantitative skills; 2) analytical laboratory experience; and 3) experience working in cold climates. Competitive students will have: 1) a Master's degree; 2) foundational knowledge in population ecology and interest in the genetic, physiological, and behavioral mechanisms driving observed population patterns of animals; and 3) direct experience conducting biochemical and molecular assays or demonstrated excellence in a breadth of chemistry and molecular coursework. Please address your qualification for each of these points in your cover letter. The position starts Fall (August) 2018.

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

\*About the program and Boise\* The Ecology, Evolution, and Behavior PhD is a new and modern graduate program at Boise State University. This program brings together faculty from across multiple academic departments including biological sciences, geosciences, anthropology, and the human-environment systems group to offer relevant courses and provide unique mentorship and training opportunities. Further, we have created a network of valuable connections in academia, local relationships with federal and state agencies, nonprofits and NGOs, as well as partnerships with international organizations all dedicated to providing students with transformative research and educational experiences for diverse career opportunities. To learn more, please visit: <http://eeb.boisestate.edu/>. Students in this program enjoy living in the beautiful city of Boise, which strikes a perfect balance with close-by outdoor recreational activities as well as a vibrant downtown life. Nestled in the foothills of the Rocky Mountains and the capital of the State of Idaho, Boise is frequently featured as a top-ranked metropolis. The city has ample opportunities for world-class outdoor activities year round and a thriving arts and entertainment culture. In 2017, US News and World report ranked Boise the 12th best city to live in the United States. To learn more, please view "Visit Boise" link at: [\\*https://www.cityofboise.org/](https://www.cityofboise.org/) <<https://www.cityofboise.org/>>\*

\*To Apply\* Please send via email in a \*single file attachment\* (include your last name in the file name): 1) a cover letter that states qualifications and career goals; 2) a CV with the names and contacts for 3 references (they do not need to provide a letter of recommendation at this time); 3) copies of transcripts (unofficial are O.K.); and 4) GRE scores and percentiles (not combined) to Dr. Jennifer Forbey (email: [jenniferforbey@boisestate.edu](mailto:jenniferforbey@boisestate.edu)). \*Please put "PhD application" in the subject line\*.

Applications will be reviewed as they are received \*until 1st of December 2017\*. If you do not have GRE scores by this deadline your application cannot be considered. Top candidates will be interviewed in early December and asked to formally apply to Boise State's EEB program by 20th of January 2018. All admission decisions must be approved by the Graduate Dean.

Boise State University embraces and welcomes diversity in its faculty, student body, and staff. Accordingly, applicants who would add to the

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

---

## Brigham Young University Evolutionary Biology

The Department of Biology at Brigham Young University (BYU) welcomes applications from students interested in joining our MS or PhD programs in the Fall of 2018. Housed in a new, state of the art building, the department (<http://biology.byu.edu>) comprises a large and dynamic faculty spanning a diverse array of research areas including informal and collaborative research groups in Ecology, Evolutionary Ecology, Molecular Systematics, Bioinformatics, Conservation Biology, and Biological Science Education.

The Ecology and Evolutionary Ecology group is a diverse set of faculty working on plants, fungi, animals, and microbes in the areas of evolutionary ecology, conservation biology, biogeography, phylogeography, population and community ecology, biogeochemistry, environmental monitoring, evolutionary and ecological stoichiometry, and ecosystem ecology. There is a focus on integrating modeling, theory, and experimentation.

The Molecular Systematics and Evolution group features faculty working in both model and non-model systems in experimental laboratory and field applications. Specific areas of research include genomics (experimental and computational), molecular evolution, population genetics, quantitative genetics, biogeography, phylogeography, and the evolution of genetic and infectious diseases.

Faculty in the Bioinformatics group maintain research programs in the genetics of human disease, molecular evolution, and computational biology, including solutions for next generation sequencing applications.

The Biological Science Education group involves research at all levels of education, focusing on inquiry teaching, learning theory, and assessment of science pedagogy. Faculty in this focal group also use this platform for various outreach activities, including K-12 collaborative projects with the State Office of Education.

Each of the focal groups in our department maintain strong collaborative ties with each other, as well as other departments on campus, including Plant and Wildlife Sciences, Microbiology and Molecular Biology, Physi-

ology and Developmental Biology, Biochemistry, Statistics, Computer Science, and the McKay School of Education.

Exceptional facilities and resources for carrying out research are available through the Monte L. Bean Life Science Museum (<http://mlbean.byu.edu>), Lytle Ranch Preserve (<http://mlbean.byu.edu/lytle>), the DNA Sequencing Center (<http://dnasc.byu.edu>), the Research Instrumentation Core Facility (<http://ricfacility.byu.edu>), the Microscopy Lab (<http://microscopy.byu.edu>) and the Fulton Supercomputing Lab (<https://marylou.byu.edu>).

BYU is located in Provo, Utah, where opportunities for world-class skiing, fly-fishing, kayaking, hiking, mountain biking, and many other outdoor recreational activities are less than 20 minutes from the lab. Salt Lake City is only 45 minutes travel by car or commuter rail.

For full consideration, complete applications should be received by January 15, 2018. We strongly encourage prospective applicants to contact faculty members as soon as possible to discuss their research interests. Financial support for graduate students is competitive and comes from a variety of sources, including teaching assistantships, research assistantships, fellowships, and external research funds. Faculty Profiles can be accessed here: <http://biology.byu.edu/Connect/FacultyandStaff>

Byron Adams Graduate Coordinator Department of Biology Brigham Young University

Google Scholar <https://scholar.google.com/citations?user=oASVdOIAAAAJ&hl=en&oi=ao>  
Byron Adams <[byron\\_adams@byu.edu](mailto:byron_adams@byu.edu)>

---

## Cardiff University Amphibian Conservation

PhD Opportunity at Cardiff University

Understanding the dynamics and determinants of recovery of a regionally iconic wild food resource following its near-extinction due to infectious disease

Main supervisor: Pablo Orozco-terWengel (Cardiff University)

Co-supervisor: Andrew Cunningham (Zoological Society of London; Institute of Zoology)

Co-supervisor: Mark Beaumont (Bristol University)

Co-supervisor: Mike Bruford (Cardiff University)

Non-academic supervisor: Richard Young (Durrell Wildlife Conservation Trust)

Application Deadline: Monday 4th December

#### Project Description

The Mountain Chicken Frog (MCF) is one of the world's largest amphibians and is endemic to the Caribbean islands of Dominica and Montserrat. This iconic species has traditionally been an important part of the local cultures, playing a major role in nutrition with an estimated 36,000 animals harvested annually for human consumption on Dominica alone. However, the emergence of chytridiomycosis due to infection with the fungus, *Batrachochytridium dendrobatidis* - Bd, in 2002 in Dominica led to the near-extinction of the species on the island. Despite efforts to avoid its introduction to Montserrat, Bd reached that island, with mass mortality first being detected in February 2009. Bd is major threat to amphibian populations, having caused the extinction of >200 amphibian species worldwide in recent decades. The Bd infection of MCF on Dominica and Montserrat is an ideal case study that can be used to understand the dynamics and determinants of species recovery following catastrophic declines due to infectious disease. This project is of a multidisciplinary nature, combining laboratory and field work, next generation sequencing techniques, bioinformatics and epidemiology, as well as engagement with stakeholders involved in the management of remaining populations of MCF. You will carry out field work in Dominica with the Institute of Zoology and local partners involved in MCF research. Using a combination of chytridiomycosis susceptible and tolerant animals identified in the past two years and during the course of the project, a combination of analyses aiming to characterise immune related genes (e.g. MHC) and the skin microbiome (skin is the only tissue infected by Bd in adult frogs) will be carried out to identify differences between the two types of animals that might be related to resistance to the development of chytridiomycosis. For more information on this project, please see the following links: <https://www.cardiff.ac.uk/study/postgraduate/research-programmes> /project/understanding-the-dynamics-and-determinants-of-recovery-of-a-regionally-iconic-wild-food-resource-following-its-near-extinction-due-to-infectious-disease

<http://www.swbio.ac.uk/programme/projects-available/agriculture-and-the-environment/>

#### How to Apply

In the first instance, you should submit an application for the Doctor of Philosophy in Biosciences, with a start date of October 2018. Please also email a copy of your CV and covering letter to the primary supervisor of the project(s) you are applying for, including two references.

In the research proposal section of your application, please specify the project title and supervisors of this project and copy the project description in the text box provided. In the funding section, please select "I will be applying for a scholarship / grant" and specify that you are applying for advertised funding from BBSRC SWBio DTP. If are applying for more than one Cardiff University project please note this in the research proposal section.

Shortlisting will be completed in January and successful applicants will be invited to interview in Cardiff University in early February.

Please be aware that your personal data will be used and disclosed to other universities, research organisations and/or partners as part of the application process, as outlined in our data sharing policy for collaborative doctoral training programmes.

Find out more information about the DTP including how to apply: <http://www.cardiff.ac.uk/-study/postgraduate/funding/view/bbsrc-swbio-phd-in-biosciences>

#### Funding Notes

This research project is in competition for funding with one or more projects available across the BBSRC SWBio DTP. Usually the projects which receive the best applicants will be awarded the funding.

For EU nationals that do not meet the BBSRC residence criteria, there are a (very!) limited number of fully-funded four year studentships available within the GW4 institutions (1-2 studentships per university).

The SWBio DTP is not able to fund international applicants.

Pablo Orozco Ter Wengel <Orozco-terWengelPA@cardiff.ac.uk>

---

## CarletonU MammalPalaeoecologyEvolution

MSc Fellowship (2 years) in mammal evolution/palaeoecology/palaeontology at Canadian Museum of Nature and Carleton University (Earth Sciences)

An MSc fellowship (2 years) is available in the Earth Sciences Department at Carleton University in Ottawa, Canada (funded by the Canadian Museum of Nature,

CMN). Dr. Fraser is seeking an MSc student interested in studying mammal palaeoecology and evolution using the fossil record.

Potential thesis topics include, but are not limited to, inferring the ecology of extinct mammals using a variety of methods, the evolution of mammal diets/niches, changes in the spatial distribution of mammalian diversity, and the influence of biotic and abiotic factors on mammal macroevolution (extinction and speciation). The student can also develop a novel project using descriptive or quantitative methods focusing on extinct or extant mammals. The project will involve use of the CMN collections (<https://nature.ca/en/research-collections/collections/fossils>).

This MSc fellowship is funded by the Canadian Museum of Nature and is subject to admittance into the graduate program in Earth Sciences. All applicants require a co-supervisor in the department. Options for co-supervisor can be discussed with Dr. Fraser and the potential co-supervisor thereafter. International students are welcome but should discuss international tuition with Dr. Fraser.

Departmental scholarships and TA positions are subject to availability.

There may be some opportunity for field work but this is subject to funding.

Further information regarding the Department of Earth Sciences can be found here (<http://earthsci.carleton.ca/>). I am currently awaiting adjunct status in the Department of Biology (<https://carleton.ca/biology/>). I may therefore be able to entertain applications to the Biology Department in the near future.

Applications can be submitted online at <https://graduate.carleton.ca/apply-online/> after discussion and a Skype interview with Dr. Fraser. Applications are due March 1, 2018 for admittance in September, 2018.

For more information on Dr. Fraser please see: <https://fraserdanielle.wordpress.com/> Danielle Fraser, Ph.D. Research scientist / Chercheure scientifique Palaeobiology / Palaeobiologie Canadian Museum of Nature / Musée canadien de la nature PO Box 3443 Stn "D" / CP 3443 Succ « D » Ottawa, ON K1P 6P4 Canada T: 613-566-4722 <tel:(613)%20566-4722> E/C: DFraser@mus-nature.ca

Danielle Fraser <DFraser@mus-nature.ca>

---

## CityU New York Evolutionary Biol

Interested in a PhD in Ecology, Evolutionary Biology and Behavior? The EEB subprogram at the City University of New York is recruiting doctoral students!

EEB faculty research spans diverse topics across ecology, behavior, evolution and systematics to understand the relationships of organisms, populations and communities to their historic and contemporary environments, with particular strengths in using molecular and computational approaches to solving evolutionary questions. Doctoral students conduct research with faculty mentors across eight campuses of the City University of New York and the American Museum of Natural History.

Applications are due January 1, 2018. Please see instructions on our website ([gc.cuny.edu/biology/eeb](http://gc.cuny.edu/biology/eeb)) and contact program chair Dr. Elizabeth Alter ([elalter@york.cuny.edu](mailto:elalter@york.cuny.edu)) with any questions. NB: Students applying to work with a faculty mentor at the AMNH must also submit a fellowship application by December 15, 2017.

Please see our website for a full list of faculty ([gc.cuny.edu/biology](http://gc.cuny.edu/biology)). Faculty recruiting in Fall 2018 include:

- \*Lorenzo Prendini\* \*(AMNH):\* Systematics, evolution and biogeography of arachnids. [scorpion.amnh.org](http://scorpion.amnh.org)
- \*Eunsoo Kim\* \*(AMNH):\* Evolution, diversity, and symbioses of microbial eukaryotes. <https://www.amnh.org/our-research/staff-directory/eunsoo-kim/>
- \*Mark Siddall\* \*(AMNH):\* Protistan parasites. <http://research.amnh.org/users/siddall/>
- \*Mande Holford\* \*(Hunter):\* Discovering novel peptides from venomous marine snails. <http://www.holfordlab.com/>
- \*Christopher Blair (City Tech):\* Phylogenetics, phylogeography and demographic history of amphibians and reptiles. <http://www.citytech.cuny.edu/faculty/-CBlair>
- \*David Gruber (Baruch):\* Fluorescence in marine organisms. [http://www.baruch.cuny.edu/-wsas/academics/natural\\_science/dgruber.htm](http://www.baruch.cuny.edu/-wsas/academics/natural_science/dgruber.htm)
- \*Stefano Ghirlanda (Brooklyn):\* Computational models of learning and decision making, e.g. <http://rsos.royalsocietypublishing.org/content/3/11/160734>
- \*Jeffery Bird (Queens):\* Belowground C and N cycling in terrestrial and estuarine ecosystems. <http://qcpages.qc.cuny.edu/~jbird/Index.html>
- \*Paul Forlano (Brooklyn):\* Evolutionary/systems neuroscience of

fishes. <http://forlanolab.com/> \*Jeremy Draghi (Brooklyn):\* Eco-evolutionary feedbacks in host shifts in viruses and fitness

landscapes in bacterial metabolism. <https://jeremydraghi.com/> \*Lisa Manne (CSI):\* Terrestrial ecology, biogeography and conservation. <https://csivc.csi.cuny.edu/Lisa.Manne/files/> \*Richard Veit (CSI):\* Ecology of birds, including foraging behavior. <https://www.csi.cuny.edu/campus-directory/richard-veit> \*Tony Wilson (Brooklyn):\* Evolution of reproductive complexity in aquatic environments. <http://evolution.brooklyn.cuny.edu> \*Mike Hickerson (CCNY):\* Population genetics, community ecology and biogeography. Determinants of community assembly. <https://hickerlab.wordpress.com/> \*Ana Carnaval (CCNY):\* Spatial patterns of biodiversity and their underlying evolutionary and ecological processes. [www.carnavallab.org](http://www.carnavallab.org) \*Rob Anderson (CCNY):\* Biogeography, spatial configuration of environmental suitability for species, and its ecological, evolutionary and practical consequences.

<http://www.andersonlab.cuny.cuny.edu/> \*Kyle McDonald (CCNY):\* Water and carbon cycling. <https://www.cuny.cuny.edu/profiles/kyle-mcdonald> – S. Elizabeth Alter, Associate Professor Biology, City University of New York/York College Doctoral Program in Ecology, Evolutionary Biology and Behavior, The Graduate Center Research Associate, American Museum of Natural History

Email: [sealter@gmail.com](mailto:sealter@gmail.com), [ealter@york.cuny.edu](mailto:ealter@york.cuny.edu) Office: (718) 262-2732 Website: [fishfiles.org](http://fishfiles.org) Twitter: @lizalter  
Liz Alter <[sealter@gmail.com](mailto:sealter@gmail.com)>

---

## ClarkU EvolutionaryMorphology

Dr. Philip Bergmann's Evolutionary Functional Morphology Lab at Clark University is recruiting a Ph.D. student to begin in Fall 2018. The Bergmann lab studies form-function relationships in an evolutionary and ecological context, primarily using reptile and amphibian locomotion as a study system. The main research foci are (1) how form-function relationships work and are affected by such as ontogeny and substrate, and (2) the evolution of snake-like body shapes from phenotypic, functional, and ecological perspectives. Tools used by the lab to address these questions include high-speed video and X-ray video, force plates, EMG, dissection, behavioral observations, field work, and computational

statistics.

Graduate students should be self-motivated and have prior research experience. They will be encouraged to develop their own projects within the context of the lab research. Interested students should contact Dr. Bergmann ([pbergmann@clarku.edu](mailto:pbergmann@clarku.edu)) prior to applying with any questions they may have, a cover letter that includes their research interests, CV, and names and e-mail addresses for two references. The Biology Department at Clark University is small but vibrant, providing students the opportunity to gain experience in research, teaching, mentoring, and outreach. Support by way of Teaching Assistantship is guaranteed for five years, and includes tuition waiver. The application deadline is January 15, 2018.

For more information, visit:

Bergmann Lab: <http://www2.clarku.edu/faculty/pbergmann/> Biology Department: <http://www2.clarku.edu/departments/biology/> Graduate Admissions: <http://www.clarku.edu/admissions/graduate-admissions> Philip J. Bergmann

Associate Professor

Biology Department

Clark University

950 Main Street

Worcester, MA 01610

United States

Phone: 508-793-7553

E-mail: [pbergmann@clarku.edu](mailto:pbergmann@clarku.edu)

Philip Bergmann <[PBergmann@clarku.edu](mailto:PBergmann@clarku.edu)>

---

## CSIRO Australia NationalCollections

CSIRO Postgraduate Scholarships - National Collections and Marine Infrastructure (link - <https://jobs.csiro.au/job/VariouS-CSiRO-Postgraduate-Scholarships-National-Collections-and-Marine-Infrastructure/429692700/>)

- Are you passionate about a career in science?

- Want to access CSIRO's world-class facilities and staff?

- Apply for a CSIRO PhD Scholarship now!

CSIRO invites applications for top-up Postgraduate

Scholarships in a number of priority topic areas for funding commencing in 2018.

CSIRO's Postgraduate Scholarship Program provides enhanced opportunities in science and engineering for outstanding graduates enrolling each year at Australian tertiary institutions as full-time postgraduates for research leading to the award of a PhD. Scholarships are being offered in 46 priority research areas. Students are co-supervised by researchers in an Australian university and CSIRO.

Top up Postgraduate Scholarships are available to post-graduate students who have gained (or expect to gain), first class honours or equivalent in relevant research areas. They must also expect to receive a Research Training Program (RTP) or equivalent scholarship commencing in the year of the scholarship.

CSIRO is the custodian of a number of collections of animal and plant specimens that contribute to national and international biological knowledge. Together, they constitute a vast storehouse of information about Australia's biodiversity and underpin a significant part of the country's taxonomic, genetic, agricultural and ecological research - making these vital resources for conservation and the development of sustainable land and marine management systems. For more information please see our website at National Research Collections of Australia.

Research areas: for details of research areas and how to apply please see document CSIRO Postgraduate Scholarships - National Research Collections of Australia (link to document) Scholarship: Top-up scholarships valued at \$7,000 per year, plus a generous operating budget of \$10,000 per annum Reference: 47424

Pre-Requisites/Eligibility:

To be eligible to apply you must have (or expect to gain): \* first class honours or equivalent in a relevant research area; \* admission to an Australian University as a PhD student; \* a Research Training Program (RTP) scholarship or university equivalent; and \* an university supervisor who is willing and able to supervise you

- International applicants must have the appropriate immigration approvals to allow them to take up the scholarship.

Applications will be assessed on:

- Quality and relevance of the student project
- Academic calibre of the student
- Availability of appropriate university supervision

How to Apply:

For details on how to apply, please see the document provided in the link under Research areas

About CSIRO: The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is Australia's national science agency. At CSIRO we shape the future. We do this by using science to solve real issues. Our research makes a difference to industry, people and the planet. Find out more at [www.csiro.au](http://www.csiro.au) Applications close on: Tuesday 31 October 2017 (10.59pm AEDT)

Regards,

Karen Smith

Senior Recruitment Consultant

Human Resources

CSIRO

E [karen.smith@csiro.au](mailto:karen.smith@csiro.au) T +61 3 9545 7840

Private Bag 110, Clayton South VIC 3169  
[www.csiro.au](http://www.csiro.au) "Recruitment.Campaign@csiro.au"  
 <Recruitment.Campaign@csiro.au>

---

## CWilliamMary London EvolutionaryBiol

Masters opportunities in Evolution, Ecology, and Conservation at the College of William and Mary:

The Biology Department at the College of William and Mary is recruiting new research Masters students in behavioral, community, plant, wetlands, viral, functional, spatial, physiological, evolutionary, mathematical and conservation ecology, to start in Fall 2018.

We offer a two-year research-intensive Masters program where students are supported by teaching assistantships and full tuition waivers. For many students, getting a Masters in two years and writing publications and grants before applying to highly competitive Ph.D. programs or jobs is a very attractive option. We have a great track record of our recent MS students going on to excellent PhD programs and professional positions.

With a low student-to-faculty ratio (approximately 7 - 8 new students each year with 25 full-time faculty), we offer an intimate and highly personalized research and education experience. Also, our graduate students often work closely with and mentor undergraduates, offering numerous informal teaching and personal development opportunities to go along with teaching assistantship

experience in formal classes.

Importantly, we have real strengths in many aspects of evolution, ecology, and conservation. We have a diverse and active group, including: Harmony Dalglish and Jelena Pantel (community ecology), John Swaddle and Dan Cristol (behavioral evolution & ecology/ecotoxicology), Martha Case (pollination ecology and plant conservation), Laurie Sanderson (functional ecology), Joshua Puzey (molecular evolution & ecology), Kurt Williamson (viral ecology), Matthias Leu and Randy Chambers (conservation, wetland, and landscape ecology), Helen Murphy and Will Soto (experimental evolution and evolutionary genetics), Jon Allen (evolutionary ecology), Drew LaMar (mathematical ecology), and Paul Heideman (physiological ecology and pedagogy in biology). We have fully equipped labs to conduct behavioral and evolutionary studies in captivity with vertebrates and invertebrates, perform ecological experiments in a greenhouse and lab setting, analyze molecular data using core facilities, and analyze spatial data in state-of-the-art GIS labs, including our Center for Geospatial Analyses. The proximity of William and Mary to county, state, and federal parks as well as the Chesapeake Bay allows for extensive field research opportunities.

Please visit us at: <http://www.wm.edu/as/biology/-graduate/index.php>

And more specific information at the following to explore faculty research lab web pages:

Jon Allen: <http://wmpeople.wm.edu/jdallen> Martha Case: <http://wmpeople.wm.edu/macase> Randy Chambers: <http://rmcham.people.wm.edu/> Dan Cristol: <http://wmpeople.wm.edu/dacris> Harmony Dalglish: <http://wmpeople.wm.edu/hjdalglish> Paul Heideman: <http://pdheid.people.wm.edu/> Drew LaMar: <http://www.people.wm.edu/~mdlama/> Matthias Leu: <http://wmpeople.wm.edu/mleu> Helen Murphy: <http://www.helenmurphy.net> Jelena Pantel: <http://www.jhpantel.com> Joshua Puzey: <http://puzeylab.weebly.com> Laurie Sanderson: <http://sandsand.people.wm.edu/> John Swaddle: <http://jpswad.people.wm.edu/> Kurt Williamson: <http://wmpeople.wm.edu/kewilliamson> Will Soto: <http://www.wm.edu/as/biology/people/faculty/soto-w.php> hamurphy@wm.edu

---

## DSASC DeadSea Holobiont Evolution

The Bacterial Metagenomics Division, The Dead Sea and Arava Science Center, Mt. Masada, Israel

is seeking a PhD student to study holobiont evolution in natural and agricultural systems.

The DSASC, Dead Sea Branch, Israel, seeks to recruit a PhD student for a project related to bacterial metagenomics in agricultural and natural systems, and touches on the issues of biological control and holobiont ecology and evolution. We study the taxonomy, the genetic toolkit and the population genetics of symbionts in metazoan hosts, in the context of the hosts pop. gen., and variation in the environments. The project is supervised by Dr. Amir Szitenberg. Further details are at <https://goo.gl/D8WeHS> and by emailing Dr. Szitenberg: [amir@adssc.org](mailto:amir@adssc.org). You can learn about our facility here: <https://goo.gl/qiW4m7> An MSc in life sciences is required, with experience and interest in at least one of the following:

Microbial ecology

Evolutionary/ phylogenetic bioinformatics analysis of biological sequences

Molecular biology laboratory techniques

Applications will be reviewed upon submission until the post is filled.

To apply please express interest via email [atamir@adssc.org](mailto:atamir@adssc.org)

[amir@adssc.org](mailto:amir@adssc.org)

---

## DSASC Israel MicrobialMetagenomics

Bacterial Metagenomics Division, The Dead Sea and Arava Science Center, Mt. Masada, Israel

PhD student opening in Agricultural and Ecological microbial metagenomics

The DSASC, Dead Sea Branch, Israel, seeks to re-

cruit a PhD student for a project related to bacterial metagenomics in agricultural and natural systems, and touches on the issues of biological control and holobiont ecology and evolution. The project is supervised by Dr. Amir Szitenberg. Further details are at <https://goo.gl/D8WeHS> and by emailing Dr. Szitenberg: [amir@adssc.org](mailto:amir@adssc.org). You can learn about our facility here: <https://goo.gl/qiW4m7> An MSc in life sciences is required, with experience and interest in at least one of the following:

Microbial ecology

Evolutionary/ phylogenetic bioinformatics analysis of biological sequences

Molecular biology laboratory techniques

Applications will be reviewed upon submission until the post is filled.

To apply please express interest via email at [amir@adssc.org](mailto:amir@adssc.org)

– Amir Szitenberg PhD Researcher Arava and Dead Sea Science Center Masada Israel [amir@adssc.org](mailto:amir@adssc.org) <https://goo.gl/iAJw8T> <http://goo.gl/y3Rpck> Amir Szitenberg <[amir@adssc.org](mailto:amir@adssc.org)>

---

## ETH Zurich PlantPathogenEvolution

PhD position in Plant-Pathogen Interactions in the Plant Pathology group at ETH Zurich

The Plant Pathology group of ETH Zurich is multidisciplinary and encompasses several research areas including evolutionary biology, ecology, population genomics and molecular biology. The molecular biology team led by Andrea Sanchez Vallet aims to understand the molecular mechanisms that enable necrotrophic pathogens to infect plants and also seeks to understand how host-pathogen interactions respond to genetic diversity.

**Work description** Natural infections are often caused by mixtures of genetically different pathogen strains (multi-infection). Most research projects aim to understand the interactions of individual hosts with single pathogen strains. The consequences of simultaneous infection by multiple pathogen strains for disease development, epidemiology and pathogen evolution remain largely unexplored. This research project will explore the consequences of multi-infections on disease outcome and pathogen evolution.

Our model system for studying multi-infections is *Zygomoseptoria tritici*, a major fungal pathogen of wheat that commonly exhibits multi-infection in nature. Extensive knowledge of *Z. tritici* population genetics and genomics, transcriptomics and infection processes has already been developed in our labs and will provide the tools needed to study the interaction between different pathogen strains within the wheat host.

This research project has three main objectives: 1. Determine the effect of multi-infections on disease development and epidemiology. 2. Characterize how growth patterns in planta are affected by multi-infections compared to mono-infections. 3. Characterize the molecular mechanisms underlying strain interactions in multi-infections.

**Desired profile** \* We seek highly motivated individuals interested in host-parasite interactions. The successful candidate should have experience in molecular biology, confocal microscopy and bioinformatics. \* Experience in microbiology is desired. \* The candidate should hold a BSc or MSc degree in plant science, microbiology or plant pathology. \* Good communication skills in English are required.

**Applications** The application should include: \* A motivation letter describing your research interests and your personal rationale for applying for this PhD position. In addition, it should include an outline of your relevant current knowledge and skills, indicating how these will be useful for the research project (max. 300 words). \* A detailed CV that includes all relevant experience. \* Official transcripts (in English) of your higher education qualifications. \* Names, addresses and phone numbers of two referees.

**Supervisors:** Dr. Andrea Sanchez Vallet and Prof. Bruce A. McDonald

The application should be submitted as a single pdf file sent to Andrea Sánchez Vallet ([andrea.sanchez@usys.ethz.ch](mailto:andrea.sanchez@usys.ethz.ch)). Applications can be submitted before 15th November 2017.

McDonald Bruce <[bruce.mcdonald@usys.ethz.ch](mailto:bruce.mcdonald@usys.ethz.ch)>

---

## Europe 15 PlantAdaptation

Dear all,

15 PhD student positions are currently available within the EU-funded European training Network EpiDiverse ([www.epidiverse.eu](http://www.epidiverse.eu)). The EpiDiverse network - Epigenetic Diversity in Ecology - joins research groups from ecology, molecular (epi)genetics and bioinformatics to study epigenetic mechanisms and their adaptive relevance in natural plant populations.

For information on the positions and to apply, please go to: <https://nioo.knaw.nl/en/vacancies-epidiverse> The 15 positions are distributed over 12 different European universities and research institutes (see below). The cross-disciplinary research program investigates how epigenetic mechanisms, in interaction with environments and transposable elements, contribute to variation that is relevant for the adaptive capacity of plants. By applying epigenomic research tools to a selection of different wild plants (including long-lived trees, annual and asexually reproducing species) we investigate how epigenetic mechanisms, and their ecological relevance, differ between plant species. The network facilitates close collaborations between individual research projects and will provide comprehensive training in molecular, genomic, computational and ecological/evolutionary aspects of studying natural epigenetic variation.

The deadline for applications is 24 November 2017. The fixed starting date for all projects is 1 April 2018.

For these positions EU eligibility and mobility criteria apply: candidates must be, at the time of recruitment, in the first four years of their research careers and have not yet been awarded a doctoral degree. Eligible candidates may be of any nationality but must not, at the time of recruitment, have resided or carried out their main activity in the country of the recruiting host organisation for more than 12 months in the 3 last years immediately prior to the reference date.

The 15 projects are:

- RP01: De novo assembly and functional annotation of the genome of *Populus nigra* (Institute of Applied Genomics-Tech, Udine, Italy) - RP02: The role of repetitive DNA and genome structural variation in mediating environment-epigenome interactions in *Populus nigra* (Institute of Applied Genomics-Tech, Udine, Italy) - RP03: Inferring genomic information from bisulfite se-

quencing data (ecSeq, Leipzig, Germany) - RP04: Integration of DNA methylation, genetic patterns, and functional annotation in non-model species (Martin Luther University Halle- Wittenberg, Germany) - RP05: Epigenome-wide association studies (Philipps University Marburg, Germany) - RP06: Natural DNA methylation variation in *Fragaria vesca* populations along climatological gradient (Institute of Botany, Pruhonice, Czech Republic) - RP07: Natural DNA methylation variation in European *Thlaspi arvense* populations (Eberhard Karls University Tuebingen, Germany) - RP08: Natural DNA methylation variation in clonal and outcrossing European *Populus nigra* populations (Philipps University Marburg, Germany) - RP09: Life history effects on epigenetic inheritance (Netherlands Institute of Ecology, Wageningen, Netherlands) - RP10: Uncovering the epigenetic component of plant-herbivore interactions (CSIC Donana Biological Station, Seville, Spain) - RP11: Heritable stress-induced genetic and epigenetic changes in Strawberry (INRA, Angers, France) - RP12: Epigenetic response to stress in natural variants of pennycress (*Thlaspi arvense*) (Gregor Mendel Institute, Vienna, Austria) - RP13: Epigenetic contribution to phenotypic plasticity in *Populus nigra* (Netherlands Institute of Ecology, Wageningen, Netherlands) - RP14: Transgenerational epigenetic effects: role of small RNAs (Max Planck Institute for Developmental Biology, Tuebingen, Germany) - RP15: Investigating the plant mobilome responsiveness under stress (Institut de recherche pour le développement IRD-Diade, Montpellier, France)

Koen Verhoeven EpiDiverse coordinator Netherlands Institute of Ecology (NIOO-KNAW) Wageningen, Netherlands [info@epidiverse.eu](mailto:info@epidiverse.eu)

“Verhoeven, Koen” <[K.Verhoeven@nioo.knaw.nl](mailto:K.Verhoeven@nioo.knaw.nl)>

---

## GeorgeWashingtonU EvolutionEcol

PhD position in ecology/evolution/physiology of plants/microbes/termites - We are looking for a graduate student to join our research group beginning in fall semester 2018. The student would develop an independent research focus in line with ongoing lab projects. We are exploring how plant traits relate to community structure and function of plant-associated microbes and termites using culturing and next generation sequencing techniques and the consequences of these interactions for the forest carbon cycle in the USA, France and Australia as climate changes. Additionally, we are looking

at the evolution, ecology and physiology of plants across environmental gradients in various locations around the globe. The student would join an interactive lab group (<http://www.phylodiversity.net/azanne/>) that broadly focuses on plant, microbe and termite structure and function (anatomy and physiological ecology), community ecology, and evolutionary ecology, both in the temperate and tropical systems. The graduate work will be completed at George Washington University. Washington, DC is a dynamic city with a wealth of ecologists and evolutionary biologists. We have strong links to area institutions, including the Smithsonian. George Washington University is located in the heart of DC, with easy access to numerous science, conservation, and policy based institutions. If you are interested in working with us, please send an email to me (Amy Zanne: [aezanne@gmail.com](mailto:aezanne@gmail.com)) with brief details about your GPA, GRE, research interests, experience, and why you want to go to graduate school. For information about applying to the program, go to the George Washington University, Department of Biological Sciences website (<https://biology.columbian.gwu.edu/apply-now>). The application deadline is 1 December 2017. I am also happy to answer any further questions you might have.

Dr. Amy Zanne Department of Biological Sciences  
George Washington University

Science and Engineering Hall

800 22nd Street NW

Suite 6000

Washington, DC 20052 Office: 6690 SEH Office Phone: (202) 994-8751 Lab: 6420 SEH Lab Phone: (202) 994-9613 Fax: (202) 994-6100 Website: <http://www.phylodiversity.net/azanne/> Amy Zanne <[aezanne@gmail.com](mailto:aezanne@gmail.com)>

---

## Helsinki FossilDataAnalysis

PhD position in machine learning for fossil data analysis (Helsinki, Finland)

Life Science Informatics group at the University of Helsinki is looking for a PhD student in machine learning for evolving data with a particular focus on fossil data analysis and ecometrics. Candidates with background in bioinformatics or related fields are particularly encouraged to apply.

<https://www.helsinki.fi/en/open-positions/doctoral->

[student-machine-learning-for-evolving-data](#) best regards, IndrÄÄliobaitÄ

IndrÄÄliobaitÄ | [indre.zliobaite@helsinki.fi](mailto:indre.zliobaite@helsinki.fi)

---

## IllinoisStateU PlantMicrobeInteractions

The Byers lab at Illinois State University is recruiting graduate students interested in the evolutionary dynamics of plant and soil microbes as well as plant - pollinator dynamics in the fragmented landscape of Midwestern prairies. Our recent work has been focused on the impacts of genetic drift on the frequency of female plants of a native prairie plant with a gynodioecious breeding system - *Lobelia spicata*. Given interesting patterns in earlier results we are now focusing on the potential impacts of soil pathogens or mutualisms in altering the relative fitness of the different sexes.

We are also working in collaboration with multiple researchers at the University of Kansas and University of Minnesota on the role of plant-pathogen interactions in the maintenance of species diversity. This recently NSF-funded project will be assessing these interactions across rainfall and species diversity gradients in Midwestern U.S. prairies.

The position is for a talented and industrious graduate student to work on this NSF-funded project, which will be focusing on prairie plant-microbial interactions in the high diversity tallgrass prairies of Illinois. This work will be done in close coordination with parallel field and greenhouse projects in Kansas. The student will have the opportunity to develop additional directions linked to our work with *Lobelia spicata*.

Illinois State University is located in central Illinois in the college-dominated medium-size town of Normal, IL. which is an easy drive to Chicago and St. Louis. The School of Biological Sciences has a broad interactive group of faculty with both M.S. and Ph.D. degree programs. You can learn more about the School at <http://biology.illinoisstate.edu/>. Interested applicants should contact Dr. Diane Byers at [dbyer2@ilstu.edu](mailto:dbyer2@ilstu.edu). With your inquiry, please include a CV, unofficial transcript, short overview of your research interests and experience, and GRE scores if available.

Applications for the Fall are accepted until January or until a candidate is chosen, so earlier application is encouraged.

“dlbyer2@ilstu.edu” <dlbyer2@ilstu.edu>

---

## LeedsU Galapagos Iguanas Adaptation

PhD studentship opportunity: A genomic perspective on the origins, evolution and adaptation of Galapagos Iguanas

Supervised by Dr Simon Goodman, Dr Mary O’Connell (University of Leeds), and Dr Gabriele Gentile, (University of Rome, Tor Vegata)

Eligibility: UK & EU students Full details & how to apply: <http://www.nercdtp.leeds.ac.uk/projects/-index.php?id=694> Closing date for applications: 8th January 2018

Overview: The revolution in sequencing technology and genomic science in recent years is now allowing evolutionary biologists to dissect the genetic basis of adaptation and population histories of non-model organisms in unprecedented detail. Key questions related to adaptation include, the type and number of genetic changes which underpin the evolution of new phenotypes, the strength and time scales for selection, the extent of parallel and convergent evolution among different taxa, and the nature of environmental and ecological factors which drive natural selection. Understanding these mechanisms not only provides fundamental insights into the process of evolution, but is also important for assessing species vulnerability and responses to potential future environmental change.

This project provides a unique opportunity to examine adaptation and evolutionary history in an iconic set of species for evolutionary biologists, the marine (*Amblyrhynchus cristatus*) and land iguanas (*Conolophus* sp) of the Galapagos archipelago. Both genera of Galapagos iguanas originate from the same common ancestor, which diverged around 10.5 million years ago, with both groups subsequently spreading across the archipelago. Land iguanas diversified to form 3 species - *Conolophus subcristatus*, native to six islands, and *Conolophus pallidus*, which is restricted to Santa Fe. The third species *Conolophus marthae*, known as the pink iguana, is only found on Volcan Wolf at the northern end of Isabela. It was only recently recognised as forming a genetically and ecologically distinct species and is now considered endangered due to its small population size and restricted distribution.

The process of divergence and diversification among these iguanas has generated many novel adaptations over relatively short evolutionary timescales - most strikingly adaptation to diving and the marine environment in *Amblyrhynchus cristatus*, which is the world’s only marine lizard. Land iguanas have their own adaptations to the harsh terrestrial environment in the Galapagos, including diet, tolerance of arid conditions and fluctuating resources, as well as various differences in morphology and pigmentation. This provides an amazing natural model system for evolutionary biologists to characterise the genomic basis of adaptation and novel phenotypes; the process of speciation, including mechanisms that prevent hybridization and genetic introgression; as well as characterising the origins and history of iguana populations. These can be linked with palaeo- and present environmental data to yield a better understanding of the environmental and ecological conditions which drove the evolution of these species.

The project is a collaboration between Dr Simon Goodman and Dr Mary O’Connell at the University of Leeds, and Dr Gabriele Gentile at the University of Rome Tor Vegata. Dr Gentile has been pioneering the study and conservation of pink iguanas for many years. The student will spend time working in both Leeds and Rome.

Multiple genome sequences for all land and marine iguana species are currently being generated, as a result of a collaboration between the University of Rome Tor Vegata and the Universiti Kebangsaan Malaysia (Prof. Mohd Firdaus Raih) and will be completed shortly. The aims for this PhD project include:

1. Complete the annotation of the nuclear and mitochondrial genomes of Galapagos iguanas.
2. Use comparative genomic and molecular evolutionary approaches to detect signatures of selection at a genome-wide scale.
3. Identify genes and other sequence variation related to adaptation to diving and other evolutionary trajectories, such as patterns of pigmentation, and DNA repair, driven by selection or drift.
4. Use nuclear genome data to investigate the interaction between pigmentation, DNA repair system genes and their possible role in determining rates of molecular evolution along different lineages.
5. Use mtDNA and its methylation patterns to provide insights on the level of expression and regulation of mitochondrial genes and its possible link with metabolic rates, which may ultimately influence rates of molecular evolution of mtDNA.
6. There is potential to generate additional data at a population scale to conduct high resolution analyses of population history in land and marine iguanas.

Expected outcomes: New knowledge on the molecular adaptations underpinning the evolution of



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>

---

## MaxPlanck EvolBio ModelingAntibioticResistance

I am seeking a PhD student to work on mathematical models of plasmid-borne antibiotic resistance in my new group in the Department for Evolutionary Theory at the Max Planck Institute for Evolutionary Biology in Plön, Germany.

Plasmids are extrachromosomal DNA elements that can be transmitted vertically or be transferred horizontally between cells. Clinically relevant antibiotic resistance is often encoded on plasmids rather than on the chromosome, which can lead to special evolutionary dynamics. The aim of the PhD project is to develop mathematical models for the evolution and spread of resistance on plasmids. On the mathematical side, the analysis will mainly be based on branching process theory, complemented by deterministic ODE systems and stochastic computer simulations.

Applicants should have a degree in mathematics, physics, biology, or another related field. A prerequisite is a keen interest both in mathematical modeling and in biological systems. Good quantitative skills are essential. Experience in mathematical modeling and knowledge of a programming language (C, C++, Java, R, Python) is an advantage.

The PhD student will join a vibrant interdisciplinary institute with departments spanning evolutionary genetics, experimental evolution, evolutionary ecology, and theoretical biology. The Max Planck Institute provides an international working environment with an excellent infrastructure. With the close-by Universities of Lübeck and Kiel and the Kiel Evolution Center, it is embedded into a collaborative scientific community. The town of Plön is surrounded by lakes and close to the Baltic Sea, offering ample opportunity for outdoor activities. The cities of Kiel and Lübeck can be easily reached by train in 30 and 40 minutes, respectively.

The payment and benefits are according to a 50% position of the remuneration level 13 within the TVöD and the appointment is for 3 years. This corresponds to

a typical German PhD salary, includes social benefits, and easily covers the costs of living.

Interested students should send their application (motivation letter, CV, copies of certificates, contact details of two references) by email to [uecker@evolbio.mpg.de](mailto:uecker@evolbio.mpg.de). Please use the code PhD2017 in the subject line.

The Max Planck Society is committed to employing more handicapped individuals and especially encourages them to apply. The Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

Application deadline is December 10, 2017. However, the position will remain open until filled by a qualified candidate.

Contact: Dr. Hildegard Uecker Max Planck Institute for Evolutionary Biology August-Thienemann-Strasse 2 24306 Plön Germany Email: [uecker@evolbio.mpg.de](mailto:uecker@evolbio.mpg.de)

"uecker@evolbio.mpg.de" <[uecker@evolbio.mpg.de](mailto:uecker@evolbio.mpg.de)>

---

## MemorialU TheoreticalEpidemiology

The Hurford and Tahlan laboratories at Memorial University (Canada) are recruiting 1 M.Sc. student to design and perform experiments, and to develop models and analyze data for a host-parasite model system. The experimental system involves *Klebsiella* sp. infection of nematodes. The theoretical models used to describe this system will consider coinfection and disease-induced mortality for different *Klebsiella* strains.

A competitive salary will be offered with additional funding available for conference travel. The ideal candidate will have experience deriving mathematical models, and epidemiological models in particular, and experience simulating and fitting these models to data. An interest in microbiology is necessary and previous experience in microbiology is an asset, however, all interested candidates are encouraged to apply.

Applicants should email Dr. Amy Hurford ([ahurford@mun.ca](mailto:ahurford@mun.ca)). This email should include: (i) 1-2 paragraphs describing your research interests and any relevant past experience, (ii) your CV, and (iii) unofficial transcripts pertaining to your previous or ongoing studies (if possible). I will consider applications as they are received. For full consideration applicants should

indicate their interest before October 31, 2017, but applications received after this date may be considered. Applicants should be able to begin their studies in May or September, 2018.

Memorial University is located in St John's, Newfoundland, Canada. The city offers many unique experiences with a vibrant arts community, stunning coastline, and proximity to a variety of outdoor activities (hiking, fishing, cross-country skiing, etc: <http://www.newfoundlandlabrador.com>).

– AMY HURFORD | ASSISTANT PROFESSOR

Biology Department Department of Mathematics and Statistics Memorial University of Newfoundland Box 133, 232 Elizabeth Avenue St. John's, NL A1B 3X9 T: 709 864 8301 W: <http://www.mun.ca/math/people/ppl-faculty/ahurford.php> Amy Hurford <ahurford@mun.ca>

---

## MiamiU Ohio PlantEvo-Devo

The Baker Lab (<http://www.rlbakerlab.com>) in the Biology Department at Miami University of Ohio is recruiting a highly motivated graduate student (M.S. or Ph.D.) to study plant microevolutionary developmental biology. Research in the Baker Lab includes work on the evolution and development of locally adapted wildflower populations (*Mimulus*) and leveraging evo-devo approaches for sustainable agriculture in crop systems (*Brassica*). Current research involves broad, interdisciplinary approaches to understanding genotype to phenotype connections and environmental interactions throughout organismic ontogeny from genomic, transcriptomic, anatomic, morphological, and physiological perspectives. The research will primarily be conducted at Miami University, but may necessitate some extended travel for summer fieldwork.

Miami University features multiple greenhouses, a center for bioinformatics and genomics (<http://miamioh.edu/cas/academics/centers/cbfg>), a center for advanced microscopy and imaging (CAMI; <https://miamioh.edu/cas/academics/centers/cami/>), a 170 acre (69 hectare) Ecological Research Center field station (<http://miamioh.edu/cas/academics/centers/erc/>), and an Institute for Food (<http://miamioh.edu/cas/academics/centers/iff/index.html>), which maintains an organic farm (<https://miamioh.edu/cas/academics/centers/iff/our-farm/index.html>).

Preferred candidates will have a background in organismal evolution. Experience with or coursework in genetics (molecular or quantitative), genomics/bioinformatics, physiology, and/or statistical analyses would be an asset. Students from diverse backgrounds, and/or who participated in research preparation programs including NSF Research Experiences for Undergrads (REU) or McNair Scholars, are highly encouraged to apply.

Successful applicants will receive tuition waivers and at least one year of support as research assistants (typically their second year) and are guaranteed teaching assistantships throughout their graduate studies (2 years total for M.S. or 6 years total for Ph.D.).

Miami University is located in Oxford < <http://www.cityofoxford.org/> >, Ohio. Oxford is approximately one hour from both Cincinnati < <http://www.cincinnati-oh.gov/cityofcincinnati/> > and Dayton < <http://www.daytonohio.gov/> >, and two hours from Columbus < <http://www.columbus.gov/> >. Living in Oxford and being a part of the Miami University community will give you access to a number of exciting opportunities such as weekly farmer's market, summer concerts, performing arts, sports, museums, lectures, and special events. Nearby Hueston Woods State Park offers 3,000 acres of outdoor recreation including hiking, fishing, canoeing, mountain biking, and fossil hunting.

Applicants should submit a personal statement, CV, 3 letters of recommendation, GRE scores, proof English proficiency (if applicable), and baccalaureate transcripts by January 1, 2018 via <http://miamioh.edu/graduate-school/admission/>. Interested applicants should contact Dr. Robert Baker at [robert.baker@miamioh.edu](mailto:robert.baker@miamioh.edu) with any questions.

For more information about graduate programs in the Biology Department, visit:

<http://miamioh.edu/cas/academics/departments/-biology/academics/graduate-studies/index.html> -Rob Baker

Robert L Baker, Ph.D. Assistant Professor Department of Biology Miami University of Ohio

Email: [robert.baker@miamioh.edu](mailto:robert.baker@miamioh.edu) URL: <https://rlbakerlab.com> [robert.baker@miamioh.edu](mailto:robert.baker@miamioh.edu)

---

## MichiganState PopGen

The Bradburd Lab at Michigan State University is seeking motivated PhD students interested in studying statistical population genetics.

The lab is focused on evolutionary biology and population genetics, and especially on statistical methods for inferring and visualizing complex patterns of genetic information over space and time. There are currently two main lines of inquiry in the lab:

1) Spatial population genetics: using spatial population genetic data to study the processes that have generated patterns of genetic variation, with a particular focus on isolation, migration, and local adaptation.

2) Temporal population genetics: studying how population structure changes across space and through time, especially geared toward understanding how populations adapt to climate change

I am interested in students who would like to collaborate on these projects or develop independent research programs in the general fields of population and evolutionary genetics/genomics. I am open to advising students who develop their own empirical systems, but I expect all students to be excited about statistical population genetics methods.

Positions: Students will be admitted through the Integrative Biology Department (<https://integrativebiology.natsci.msu.edu/graduate-program>) and the Ecology, Evolutionary Biology, and Behavior Group (<https://eebb.natsci.msu.edu>) at MSU.

Qualifications: Applicants should hold a bachelor's degree in biology, statistics, computer science, or a related field. Preference will be given to applicants with previous relevant research experience. A passion for evolutionary biology, data analysis, and quantitative methods is a key asset. The Bradburd Lab is dedicated to being a safe space for diversity in STEM.

Funding: Students in the lab will receive a generous stipend, research and travel funds, and tuition waivers. Financial support comes through research and teaching assistantships, as well as university fellowships for competitive applicants. Students are strongly encouraged to seek external fellowships through the NSF, NIH, and other relevant agencies or sources.

Those interested in positions in the lab should visit

the lab webpage ([genescape.org](http://genescape.org)) and email me ([bradburd@msu.edu](mailto:bradburd@msu.edu)) with the following information:

1) "Prospective Student" in the email subject line 2) Brief cover letter describing research interests, reasons for pursuing a PhD, and career goals 3) CV 4) Unofficial transcripts, including GRE scores if available 5) Samples of scientific writing (published paper, manuscript in preparation, undergrad/masters thesis, or class assignment) 6) Names and email addresses for 3 references

Applicants are encouraged to contact me well before applications are due to the graduate school on December 1st.

I look forward to hearing from you!

-Gideon

Gideon Bradburd Dept. Integrative Biology Michigan State University [genescape.org](http://genescape.org)

"bradburd@msu.edu" <[bradburd@msu.edu](mailto:bradburd@msu.edu)>

---

## MississippiStateU Evodevo

The Range lab in the Department of Biological Sciences at Mississippi State University is recruiting graduate students interested in evolutionary and developmental biology. Research in the lab focuses on understanding how a network of three different Wnt signaling branches (Wnt/Beta-catenin, Wnt/JNK, and Wnt/Ca2+) coordinate the regulatory networks that establish territories along the anterior-posterior axis, using sea urchin embryos as the primary model system. Remarkably, functional and expression studies in other metazoans (vertebrates, urochordates, hemichordates, echinoderms and cnidarians) suggest that many aspects of this Wnt signaling network governing AP axis specification identified in the sea urchin are part of the ancient AP patterning mechanism that existed in the common ancestor of bilaterians and cnidarians.

We also work closely with Counterman lab at MSU to study how Wnt signaling is involved in butterfly wing pattern development. In collaboration, we have begun to characterize the Wnt network of signaling governing pigmentary and structurally-based color patterns.

The position is for a talented PhD student to work on a NIH funded project beginning as early as the Spring of 2018. The student project will focus on the roles of non-canonical Wnt signaling pathways (Wnt/JNK and Wnt/Ca2+) in patterning the early AP axis in sea

urchin embryos. The student will also have opportunities to study similar Wnt pathways in butterfly wing development. The position offers training in a combination of molecular manipulations, high-throughput genome-wide assays and bioinformatics, gene regulatory network analysis as well as classical embryology.

Mississippi State University is situated in the quintessential college town of Starkville and is located close to several major cities (e.g. New Orleans, Memphis, Birmingham) as well as the beaches along the Gulf of Mexico. You can learn more about the Department of Biological Sciences at Mississippi State University at <http://biology.msstate.edu>. Interested applicants should contact Dr. Ryan Range at [range@biology.msstate.edu](mailto:range@biology.msstate.edu). With your inquiry, please include a CV, unofficial transcript, and GRE scores if available.

Applications for Spring are accepted until November 1st, 2017.

Recent publications related to the position:

Integration of canonical and non-canonical Wnt signaling pathways patterns the neuroectoderm along the anterior-posterior axis of sea urchin embryos. Range RC, Angerer RC, Angerer LM. *PLoS Biol.* 2013;11(1):e1001467. doi: 10.1371/journal.pbio.1001467. PMID: 23335859

Specification and positioning of the anterior neuroectoderm in deuterostome embryos. Range R. *Genesis.* 2014 Mar;52(3):222-34. doi: 10.1002/dvg.22759. Review. PMID: 24549984

An anterior signaling center patterns and sizes the anterior neuroectoderm of the sea urchin embryo. Range RC, Wei Z. *Development.* 2016 May 1;143(9):1523-33. doi: 10.1242/dev.128165. PMID: 26952978

[range@biology.msstate.edu](mailto:range@biology.msstate.edu)

---

## Montana UNebraska EcolEvolGenomics

Graduate research fellowships in ecological adaptation

**THE UNVEIL RESEARCH NETWORK:** We are pleased to announce several Ph.D. fellowship opportunities at the University of Montana and the University of Nebraska as part of a new collaborative research and training network created to advance evolutionary and ecological genomics in natural populations. The NSF-funded UNVEIL network (Using Natural Varia-

tion to Educate, Innovate, and Lead) brings together researchers from the University of Montana (UM) and the University of Nebraska Lincoln (UNL). The network seeks to advance understanding of the genetic basis of fitness-related traits in wild populations and to train the next generation of integrative biologists to solve pressing societal challenges in ecological and conservation genomics.

The research and training activities of the UNVEIL network will center around three core projects united by their conceptual focus on adaptation to spatiotemporal environmental variation - high altitude adaptation and hypoxia resistance in deer mice, adaptation to seasonal environments in snowshoe hares, and thermal adaptation in yellow monkeyflowers. A more detailed description of the research and training network is available through the UNVEIL website ([www.unveilnetwork.org](http://www.unveilnetwork.org)).

**FELLOWSHIP OPPORTUNITIES:** Two forms of fellowship support are available through this program. First, several fellowships will be available to top applicants to UM or UNL whose research interests are within the core research foci of the network. Second, two UNVEIL Diversity Fellowships will be available starting Fall of 2018 to support one graduate fellow on each campus for a three-year tenure. We encourage applications from students broadly interested in the study of evolutionary adaptation in variable environments and genome-to-phenome connections and whose backgrounds are traditionally underrepresented in STEM fields, including students with no family history of higher education (i.e., first generation college students).

**HOW TO APPLY:** Interested applicants are strongly encouraged to \*contact one or more\* \*project PIs or other network members\* ([www.unveilnetwork.org/our-team/](http://www.unveilnetwork.org/our-team/)) \*whose interests overlap with their own prior to developing their application.\* Graduate students seeking to join the UNVEIL network must be admitted into affiliated graduate programs at either the University of Montana (Organismal Biology, Ecology, and Evolution or Wildlife Biology) or the University of Nebraska (Biological Sciences), dependent on the home institution of the student's chosen primary advisor. The application deadlines for all three programs are Dec. 1, 2017. In addition, to the standard application materials required by each program, UNVEIL applicants must also submit a separate Curriculum Vitae and a single page statement of interest to [unveilnet@gmail.com](mailto:unveilnet@gmail.com). Statements should specify which graduate program and specific network members the applicant has applied to work with and articulate reasons for interest and suitability for the UNVEIL program.

– Jeffrey M. Good, Ph.D.

Associate Professor Division of Biological Sciences The University of Montana 32 Campus Drive, HS104 Missoula MT 59812 Phone: 406-243-5771 Fax: 406-243-4184 Website: <http://www.thegoodlab.org/> Jeffrey Good <[jeffrey.good@mso.umt.edu](mailto:jeffrey.good@mso.umt.edu)>

## Netherlands 2 ClimateAdaptation

Dear colleagues,

Below you can find the information for two PhD positions in The Netherlands on: “INTEGRATING SHORT-TERM CAUSES AND LONG-TERM CONSEQUENCES OF ADAPTATIONS TO ENVIRONMENTAL CHANGE”. We would be grateful if you could circulate this amongst possible candidates.

The aim of this project is to achieve a sound understanding of the structure and development of a migratory shorebird’s (Red Knot) exploration and foraging strategies, and the implications of these strategies for the adaptive capacity of individuals and populations to deal with rapid environmental change. The project will elaborate on, and empirically test, a recently developed unifying theoretical framework for understanding the adaptive capacity of organisms. The two PhD candidates will closely collaborate. One position is at the NIOZ Royal Netherlands Institute for Sea research and has an empirical/experimental focus. The other is at the University of Groningen and has a theoretical focus.

For more information on the position and how to apply please visit: <https://www.workingatnioz.com/our-jobs/-2-phd-students-%E2%80%9Cintegrating-short-term-causes-and-long-term-consequences-of-adaptations-to-environmental-change%E2%80%9D.html> Best wishes, Allert Bijleveld

NIOZ Royal Netherlands Institute for Sea Research Department of Coastal Systems (COS) P.O. Box 59 1790 AB Den Burg, Texel The Netherlands tel.: +31 (0) 222 369484 mobile: +31 (0) 6 55116798 e-mail: <mailto:allert.bijleveld@nioz.nl> <https://www.nioz.nl/en/about/organisation/staff/allert-bijleveld> University of Oxford Department of Zoology South Parks Road Oxford OX1 3PS United Kingdom mobile: +44 (0) 75 9909 8230 e-mail: <mailto:allert.bijleveld@zoo.ox.ac.uk> <https://oxnav.zoo.ox.ac.uk/allertbijleveld> Allert Bijleveld <[Allert.Bijleveld@nioz.nl](mailto:Allert.Bijleveld@nioz.nl)>

## NHM UBergen MarineSystematics

A PhD position in marine malacology is open at the Natural History Museum of Bergen, Norway to work on the systematics of the genus *Scaphander* and deep-sea patterns of biogeography and speciation. Please, spread the word across your networks and students. Many thanks,

Manuel Malaquias

Link to official announcement and job application (Closing date: October 31, 2017):

<https://www.jobbnorge.no/en/available-jobs/job/-143008/phd-position-in-biosystematics-malacology> Job Description:

The University of Bergen (UiB) is an internationally recognised research university with more than 14,000 students and close to 3,500 employees at six faculties. The university is located in the heart of Bergen. Our main contribution to society is excellent basic research and education across a wide range of disciplines. Phd position in biosystematics (Malacology) There is a vacancy for a PhD position at the Department of Natural History, University Museum of Bergen (University of Bergen, Norway) within the field of biosystematics.

About the project/work tasks: The candidate will be working on a research project related with systematics, phylogeny, speciation, and biogeography of deep-sea organisms. The focal group is the gastropod genus *Scaphander* distributed worldwide. This model-group will be used to address broader questions of marine diversification and historical biogeography in the deep-sea using a combination of morphological characters and molecular phylogenetic methods.

Qualifications and personal qualities: Applicants must have an MSc degree or equivalent education in biology. We seek a candidate ideally with experience in biosystematics of marine invertebrates and with the ability to work independently. Evaluation criteria include grades and relevance of the MSc thesis and other pertinent evolutionary biology subjects. Proven skills on fieldwork, anatomical dissection, electron microscopy, and phylogenetic analysis will be considered as strengths. Availability to carry out fieldwork abroad is a requirement.

About the PhD position: The position is for a fixed-term

period of 4 years of which 25% (one full year) is work duty including teaching assistance and curation of scientific collections at the museum. The employment period may be reduced if you have previously been employed in a recruitment position.

About the research training: As a PhD Candidate, you must participate in an approved educational programme for a PhD degree within a period of 3 years. The PhD fellow will also become a member of the Research School in Biosystematics (ForBio). A final plan for the implementation of the research training must be approved by the faculty within three months after you have commenced in the position. It is a condition that you satisfy the enrolment requirements for the PhD programme at the University of Bergen. Application for admission to the PhD study, including progress plan for education and research, will be made together with the project advisors.

Your application must include:

- \* A cover letter (maximum 1 page) describing your motivation to work on the project, and a CV (maximum 2 pages) with personalia, qualifications and working experience.
- \* The names and contact information for two reference persons. One of these must be the main advisor for the master's thesis or equivalent thesis.
- \* Transcripts and diplomas showing completion of the bachelor's and master's degrees.
- \* Relevant certificates/references.
- \* A list of any works of a scientific nature (publication list).
- \* Any publications in your name.

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at Jobbnorge.

We can offer:

- \* A good and professionally challenging working environment, modern laboratories with diverse research activities, comprehensive scientific collections.
- \* Salary at pay grade 50 (Code 1017/Pay range 20) in the state salary scale. This currently amounts to an annual salary of NOK 436.900. Further promotions are made according to qualifications and length of service in the position. A higher salary may be considered for a particularly well qualified applicant.
- \* Enrolment in the Norwegian Public Service Pension Fund.
- \* A position in an inclusive workplace (IA enterprise).
- \* Good welfare benefits.

General information: Additional information on the position is obtainable from Associate Professor Manuel Malaquias (Manuel.Malaquias@uib.no), phone +47 55582582.

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. Age and

gender balance among employees is therefore a goal. People with immigrant background and people with disabilities are encouraged to apply for the position. We encourage

— / —

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>

---

## NorthernArizonaU AvianMalariaGenomics

We are seeking a Ph.D. student for a project on the evolution of resistance to avian malaria in Hawaiian Honeycreepers. Collaborative work will involve comparative genomics on three closely related species of amakihi, honeycreepers that have apparent variation in resistance/tolerance to Plasmodium relictum. The work will be part of a collaboration funded by the NSF-Ecology and Evolution of Infectious Disease program. This graduate position will be primarily a lab and bioinformatics focused project, although there will be some fieldwork catching amakihi and other birds in Hawaii. The genomics will be done in concert with Rob Fleischer at the Smithsonian Institution (<https://nationalzoo.si.edu/conservation/robert-c-fleischer>) and Loren Sackett at the University of South Florida ([www.cassinsackett.com](http://www.cassinsackett.com)).

Desired Qualifications - Master's in Biology or related field (but MS not required for highly qualified applicants) - Skills in bioinformatic analyses of vertebrate genomes - Experience in population genetics and molecular evolution - Bird handling experience

Graduate program applications should be submitted to the Graduate College via the Department of Biological Sciences (<https://nau.edu/cefns/natsci/biology/degrees-programs/graduate/>), due January 15, 2018 (but earlier applications are highly encouraged). Candidates should first contact me at the email below with a cover letter describing your background, research interests, and qualifications, as well as a current CV.

Jeffrey Foster, Ph.D. Associate Professor Pathogen and Microbiome Institute Northern Arizona University Flagstaff, AZ 86011 email: [jeff.foster@nau.edu](mailto:jeff.foster@nau.edu) website: [fozlab.weebly.com](http://fozlab.weebly.com)

[Jeff.Foster@unh.edu](mailto:Jeff.Foster@unh.edu)

[staff/faculty-pages/dr-jason-sahl/](mailto:staff/faculty-pages/dr-jason-sahl/) [Jeff.Foster@nau.edu](mailto:Jeff.Foster@nau.edu)

---

## NorthernArizonaU MicrobialEvolution

Graduate Assistantships Northern Arizona University

Multiple PhD and MS positions are available in the Pathogen and Microbiome Institute (PMI) at Northern Arizona University. The PMI mission is to conduct high-impact, innovative research on pathogens and the human microbiome (how microbes positively and negatively impact host health, are transmitted and spread across the landscape, and persist in the environment).

Research opportunities are available in the following areas linked to specific PMI faculty: pathogen genomics, bioinformatics, molecular genetics, pathogen transmission and dispersal dynamics, human microbial community dynamics, and disease ecology and evolution. Graduate student benefits include stipend (TA or RA), tuition waiver, health insurance, and amazing access to the outdoors in a small, mountain town.

Candidates should explore the PMI website (<http://pmi.nau.edu/>) and contact the professor whose interests align most closely with their own. In your inquiry, please include a cover letter describing your background, research interests, and qualifications, as well as a current CV. After communicating with a faculty member, Graduate program applications should be submitted to the Graduate College via the Department of Biological Sciences (<https://nau.edu/cefnatsci/biology/degrees-programs/graduate/>), due January 15, 2018 (but earlier applications are highly encouraged).

PMI Faculty accepting graduate students

Bridget Barker Valley Fever, fungal pathogens and disease ecology [http://www.mggen.nau.edu/Barker\\_Lab/Barker\\_Lab/Welcome.html](http://www.mggen.nau.edu/Barker_Lab/Barker_Lab/Welcome.html) Greg Caporaso Microbiome analysis and bioinformatics software engineering <http://caporasolab.us/> Emily Cope Role of microbiome in airway inflammatory disease <http://copelab.com/> Jeff Foster Genomics of wildlife disease <http://fozlab.weebly.com> Jason Ladner Viral evolution and transmission <https://scholar.google.com/citations?user=BERyl5AAAAAJ&hl=en> Talima Pearson Bacterial pathogen transmission, and gut microbiome associations with disease <http://www.mggen.nau.edu/tpearson/Home.html>

Jason Sahl Bioinformatics and infectious disease genomics <https://nau.edu/cefnatsci/biology/faculty->

---

## NorthernArizonaU PlantEvolutionaryPlasticity

A M.S. or Ph.D. position is available to begin in the fall of 2018 with Amy Whipple and Liza Holeski ([holeski-lab.weebly.com](http://holeski-lab.weebly.com)), Dept. of Biological Sciences at Northern Arizona University. Research will focus on transgenerational plasticity in *Populus trichocarpa*, a model forest tree species. The graduate student will use laboratory and field-based approaches to investigate relative effects of genetics and within- and across-generation phenotypic plasticity of plant traits relevant to adaptation to environmental change. For more information about the NAU Biology department and graduate programs, visit <http://nau.edu/cefnatsci/biology/> Northern Arizona University (<http://www.nau.edu>) is a comprehensive public institution located in Flagstaff, AZ (population 65,000; elevation 7000ft) on the southern Colorado Plateau, adjacent to mountains, deserts, and the Grand Canyon. For more about NAU's facilities for studying the interactions on climate change and genetics please see: <http://www.sega.nau.edu/> Support would be through teaching assistantship initially. PhD students may be eligible to apply for additional support through NAU Presidential Fellowship Program: <https://nau.edu/gradcol/financing/presidential-fellowship-program/> Interested candidates should contact Amy and Liza ([amy.whipple@nau.edu](mailto:amy.whipple@nau.edu) and [liza.holeski@nau.edu](mailto:liza.holeski@nau.edu)) by November 15<sup>th</sup>, 2017. Please include a C.V. and a brief description of your background and research interests.

Liza Marie Holeski <[Liza.Holeski@nau.edu](mailto:Liza.Holeski@nau.edu)>

---

## NorthwesternU PlantBiolConservation

PLANT BIOLOGY AND CONSERVATION

The Graduate Program in Plant Biology and Conservation is a partnership between Northwestern University (NU) and the Chicago Botanic Garden (CBG). PhD, MS thesis-based, and MS internship-based degrees are offered. All degree programs offer a unique opportunity

to study ecology, evolution, and environmental issues at the interface of basic and applied plant science. Students apply to the program through Northwestern University and take their courses at both NU and CBG with faculty from both institutions. The Plant Conservation and Science Center at CBG is a valuable resource for students, and the Chicago region provides a vibrant community at the forefront of research in conservation and sustainability.

To learn more, contact program director, Nyree Zerega (nzerega@chicagobotanic.org) or visit our website: <http://www.plantbiology.northwestern.edu/> Application deadlines: PhD: December 1, 2017 MS (thesis-based): February 15, 2018 MS (internship-based): Applications will be reviewed beginning February 15 and review will continue through April 30, 2018. Admissions are on a rolling basis.

Nyree Zerega <nzerega@chicagobotanic.org>

---

## OhioStateU AntVenomEvolution

OhioStateU.AntVenomEvol

Master's or PhD Position

The Adams Lab

Department of Evolution, Ecology, and Organismal Biology

The Ohio State University, Columbus, Ohio

I am currently looking for an exceptional graduate student with interests in symbiotic interactions in ant systems. Preferred applicants will have experience in evolutionary biology, chemical ecology, microbiology and/or behavioral ecology. Although I encourage independence and personal ownership in research direction, I am seeking a student that shares my interest in ant semiochemical evolution and function in the fungus-growing ants and their *Megalomyrmex* social parasites (e.g., alarm compounds, venom alkaloids and cuticular hydrocarbons).

Students in my lab are supported through a combination of internal and external fellowships, personal grants and my research funding. They are expected to actively seek funding and the scope of their research may be influenced by their success.

All students who are accepted into the EEOB Graduate Program receive support for 3 (M.S.) or > 5 (Ph.D.) years by becoming a teaching assistant. More details

on the EEOB Graduate Program can be obtained at our departmental website (<https://eeob.osu.edu/grad/-graduate-program>). Corey Ash is our graduate student coordinator and can answer questions about graduate admissions. The EEOB application materials are due December 1st for programs to begin the following Autumn. By the time of admission, applicants must have earned a B.Sc. or B.A. from an accredited institution with a major in one of the life sciences. Course work in calculus, organic chemistry or biochemistry is required; statistics and physics are strongly recommended.

If you are interested in joining my research group, please send a single pdf including 1) a letter of motivation (your interests, past experience, and why you want to work with me), 2) a CV, 3) an unofficial transcript, 4) GRE scores and percentiles, and 5) the names and addresses of three references. Students from non-English speaking countries should also provide TOFEL scores. PLEASE INDICATE "Graduate position - Fall 2018" in your subject line.

Sincerely,

Rachelle M. M. Adams

adams.1970@osu.edu

Learn more: [megalomyrmex.osu.edu](http://megalomyrmex.osu.edu)

The Ohio State University Rachelle M. M. Adams, PhD Assistant Professor Department of Evolution, Ecology and Organismal Biology Museum of Biological Diversity MBD 1500, 1315 Kinnear Road, Columbus, OH 43212 614-292-6980 Main Office / 614-292-6579 Office / 614-292-9794 Lab

<https://megalomyrmex.osu.edu/> adams.1970@osu.edu

Buckeyes consider the environment before printing.

"Adams, Rachelle" <adams.1970@osu.edu>

---

## OhioStateU CichlidAdaptation

PhD position in Aquatic Physiological & Behavioral Ecology

School of Environment and Natural Resources

The Ohio State University

October 2017

The Gray and Pintor Labs at The Ohio State University's School of Environment and Natural Resources are seeking a PhD student to work on an NSF funded

project starting in Autumn 2018 (with the possibility of a pre-enrollment field season in Summer 2018). The project aims to determine the key drivers and functional significance of sensory and behavioral trait divergence in an African cichlid facing human-induced rapid environmental change (HIREC). Research in Dr. Suzanne Gray's lab aims to understand how fish respond to HIREC, while Dr. Lauren Pintor's lab focuses on the examining the behavioral mechanisms driving species interactions in the face of environmental change.

We are seeking highly qualified students with competitive GPA and GRE scores, experience working in aquatic ecosystems, and who are highly motivated to pursue an advanced degree in this field. The successful candidate will tackle field and lab based experiments that include behavioral and physiological performance tests of fish from different populations that are experiencing different human-induced environmental stressors. In the laboratory, we conduct long-term rearing experiments to help disentangle the role of multiple stressors in shaping divergent sensory and behavioral traits. This means that the student will be expected to spend up to two months each year performing field work in Uganda, Africa, with the rest of the year based in Columbus, Ohio. Field work in Uganda can be extremely rewarding but can also be strenuous: our facilities are very basic (e.g., we have intermittent electricity and no running water) and are shared with a number of other researchers.

The School of Environment and Natural Resources (SENR) is home to ~45 faculty whose specialties range across several natural and social science disciplines. Within a framework of interdisciplinarity, our graduate students take courses that advance their knowledge within their chosen field but also introduce them to diverse fields integral to a holistic understanding of human-natural coupled systems. Students benefit from bi-weekly seminar speakers across this range of fields, funds for travel to conferences, access to computer labs and discipline-specific advanced courses across the University. Columbus is a vibrant and progressive city with lots to do, great food, access to a series of Metro Parks and rivers, and an easy drive to Lake Erie in the North or hiking in Hocking Hills to the south.

Interested students should contact Dr. Suzanne Gray (gray.1030@osu.edu) and Dr. Lauren Pintor (pintor.6@osu.edu) directly via email, with "Graduate position" as the subject line. Please include a cover letter briefly describing your research interests, a curriculum vitae, GRE scores, unofficial undergraduate/graduate transcripts, and contact information for three references - preferably as a single PDF. Review of applicants will begin immediately. Qualified applicants will be invited to apply to SENR by January

1st, 2018 (November 30<sup>th</sup> for international students). SENR offers graduate teaching and research assistantships and competitive fellowships to support admitted students (<http://senr.osu.edu/graduate/prospective-graduate-students>). We are committed to increasing diversity in STEM and so encourage students from diverse and underrepresented communities to apply.

Suzanne M. Gray

Assistant Professor

School of Environment and Natural Resources

The Ohio State University CFAES

210 Kottman Hall

2021 Coffey Rd, Columbus, OH, 43210

Phone: 614-292-4643

Email: gray.1030@osu.edu

"Gray, Suzanne M." <gray.1030@osu.edu>

---

## OhioStateU PlantGenomicEvolution

The Translational Plant Sciences Graduate Program at OSU Now Accepting Applications

The Translational Plant Sciences Graduate Program (TPSGP) at The Ohio State University is accepting applications for the 2017-2018 academic year. This five-year Ph.D. program offers full remission of tuition and fees, as well as a competitive stipend and support for research expenses. TPSGP leverages the strengths of a powerful, interdisciplinary group of participating faculty to create a dynamic program which prepares students to become the next-generation of leaders in Plant Science. Potential research projects include, but are not limited to, evolution of crop domestication, plant genomic evolution and selection, co-evolution among plants and pests (insects, pathogens, etc.), plant stress adaptation (e.g. climate).

This program is designed for highly motivated students from a variety of undergraduate and masters level programs. The application deadline for domestic students is December 15th, 2017. For additional information, including a list of faculty, please visit our website at <https://tpsgp.osu.edu/home>. "Michel, Andrew" <michel.70@osu.edu>

---

## SaintLouisU InsectEvolutionaryEcol

Master's opportunity in thermal evolutionary ecology of insect communication.

The Fowler-Finn lab in the Department of Biology at Saint Louis University is seeking highly motivated students to apply for a Master's position opening in Fall 2018. The student would join our dynamic and diverse research team to work on an NSF funded project investigating thermal effects on reproductive performance and sexual communication in *Enchenopa* treehoppers (Hemiptera: Membracidae). Treehoppers communicate through plant-borne vibrations, and mating behavior as well as male songs and female preferences for the songs are sensitive to changes in temperature.

The project will involve a combination of field work, laboratory experimentation, and outreach education. The student will be trained in how to implement a function-valued approach to characterize phenotypic plasticity, and utilize classic quantitative genetics to measure genetic variation across a latitudinal gradient. Outreach through sound art installations and zoo exhibits capitalizes on the ability of the bizarre and beautiful vibrational songs of treehoppers to capture the public's imagination.

The Fowler-Finn lab is a diverse group of scientists passionate about arthropods, vibrational communication, outreach education, supporting diversity in STEM, and having a ton of fun. We welcome inquiries from folks of diverse backgrounds and training, and encourage underrepresented and underserved groups to apply. The Department of Biology at Saint Louis University, and institutions in the Saint Louis area, provide ample opportunities to interact with a broad range of scientists interested in ecology, evolution, behavior, and physiology.

For best consideration, apply by December 15, 2017. For more information about the lab, or to express interest in the position, visit the Fowler-Finn lab webpage ([fowlerfinnlab.com](http://fowlerfinnlab.com)) or contact Kasey Fowler-Finn ([kasey.fowlerfinn@slu.edu](mailto:kasey.fowlerfinn@slu.edu)).

Kasey Fowler-Finn <[kasey.fowlerfinn@slu.edu](mailto:kasey.fowlerfinn@slu.edu)>

---

## SGN Frankfurt LandscapeGenetics

Job offer ref. #09-17002 The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. SGN conducts natural history research with almost 800 employees and research institutions in six federal states with its main headquarters in Frankfurt am Main. The SGN also administers the UNESCO World Heritage Site "Grube Messel". For the DFG project "Landscape genetics of insect-pollinated forest herbs in changing agricultural landscapes", the Senckenberg Gesellschaft für Naturforschung invites applications for a

Researcher Position / PhD Position (65%)

The SGN is searching for a talented and motivated applicant (m/f) to join the Ecology Section at the Senckenberg Deutsches Entomologisches Institut (SDEI) in cooperation with the Leibniz Centre for Agricultural Landscape Research (ZALF) in the context of this DFG-funded project. The successful candidate will join a highly motivated team of entomologists, landscape ecologists, and molecular ecologists in studying the insect pollinators and plants of forest fragments along a European gradient. The position entails the possibility to conduct research towards a doctoral degree with the thesis' working title "The role of pollinators for the gene flow among fragmented forest herb populations in changing agricultural landscapes".

Your task: - Conducting field and molecular lab work - Contributing to the identification and collection of specimens from selected groups (Hymenoptera-Aculeata, Diptera-Syrphidae, forest plant species) - Conducting plant and pollinator experiments - Analysis of landscape, population genetic, and species data - Contributing to the public outreach of the project

Your profile: - M.Sc./University Diploma in Biology or related field (Ecology, Entomology, Botany, Conservation) - Taxonomic skills in a specific group of insects (preferably within Hymenoptera- Aculeata, Diptera-Syrphidae), and good general knowledge of central European insects - Experience with molecular lab work, especially microsatellite markers preferable - Good computer skills preferable including at least basic GIS knowledge, statistical skills, R - Willingness to work both in the field and in the molecular lab - Outstanding command of spoken and written German and English - Driving license

Salary and benefits are according to public service position in Germany (TV-L E13, 65%). The position will start on February 1st, 2018 and will be limited to January 31th, 2021. The Senckenberg Gesellschaft für Naturforschung supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment will be Müncheberg, Germany.

Are you interested? Please send your application before November 15th, 2017 by e-mail (attachment in a single PDF file), mentioning the reference of this position (ref.#09-17002) and including a cover letter detailing your research interests and experience, a detailed CV, your full credentials, names of two references, and a copy of your Master/Diploma degree to:

Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt am Main E-Mail: [recruiting@senckenberg.de](mailto:recruiting@senckenberg.de) For scientific enquiries please contact Dr. Stephanie Holzhauer, [stephanie.holzhauer@senckenberg.de](mailto:stephanie.holzhauer@senckenberg.de).

Für Ihre Mühen bedanken wir uns bereits im Voraus.

Mit freundlichen Grüßen /Best Regards

Jessica Helm Personalsachbearbeiterin

SENCKENBERG Gesellschaft für Naturforschung (Rechtsfähiger Verein gemäß Â§22 BGB) Senckenberganlage 25 60325 Frankfurt am Main

Besucheradresse: Voltastraße 1, 60486 Frankfurt am Main (5. Obergeschoss)

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

Leiterin Personal & Soziales - 1458 Loke, Uta

Stellv. Leiterin Gruppe Personal & Soziales - 1319 Elsen, Carina

Mitarbeiter/in Personalbeschaffung (Recruiting) - 1313 di Biase, Maria - 1313 Helm, Jessica - 1478 Gajcevic, Isabel

Fax: 0049 (0)69 / 7542-1467 Mail: [recruiting@senckenberg.de](mailto:recruiting@senckenberg.de)

Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Andreas Mulch, Stephanie Schwedhelm, Prof. Dr. Katrin Böhning-Gaese, Prof. Dr. Uwe Fritz, Prof. Dr. Ingrid Kröncke Präsidentin: Dr. h. c. Beate Her-aeus Aufsichtsbehörde: Magistrat der Stadt Frankfurt am Main (Ordnungsamt)

Senckenberg forscht für Ihr Leben gern!  
[www.200jahresenckenberg.de](http://www.200jahresenckenberg.de) recruiting  
[<recruiting@senckenberg.de>](mailto:recruiting@senckenberg.de)

---

## SmithColl UMassAmherst EvolEukMicrobes

The Katz lab at Smith College/UMass-Amherst is seeking PhD students to join projects that focus on biodiversity and genome evolution of eukaryotic microbes. Work in the Katz lab aims to elucidate principles of the evolution in eukaryotes through analyses of microbial lineages, and to assess how these principles apply (or fail to apply) to other organisms. Currently we focus on several interrelated projects including: (1) characterizing evolutionary relationships among eukaryotes; (2) exploring the evolution of germline/soma distinctions in eukaryotic genomes; and (3) describing the forces driving the biodiversity of protists (mainly ciliates and amoebae) in local environments (e.g. bogs and fens, coastal habitats). More details can be found here: <http://www.science.smith.edu/katz-lab/research/>. A graduate student joining the lab would have opportunities to improve skills in field work, single-cell 'omics, both light and fluorescence microscopy, and bioinformatics. Interested students will be put in touch with current/past graduate students who can share their perspectives on the Katz lab, the UMass-OEB program, and Northampton.

Smith College is a member of the Five College Consortium with Amherst, Hampshire, and Mount Holyoke Colleges and the University of Massachusetts Amherst. Hence, Ph.D. students join the Katz lab through the Organismic and Evolutionary Biology (OEB; <http://gpls.cns.umass.edu/oeb>) based at the University of Massachusetts Amherst.

Prospective students are invited to email their c.v. and a brief statement of interest to Laura Katz ([lkatz@smith.edu](mailto:lkatz@smith.edu)), and pursue the formal application through the UMass OEB program (<http://gpls.cns.umass.edu/oeb/admissions>).

[lkatz@smith.edu](mailto:lkatz@smith.edu)

---

## StellenboschU EvolutionFloralHandedness

Graduate position: StellenboschU SouthAfrica EvolutionFloralHandedness

I would like to fill a graduate position (MSc/PhD) researching floral handedness, a stylar polymorphism which gives rise to either left- or right-handed flowers. The project can be tailor-made to the interests of the student and could involve the tracking of pollen grains using fluorescent nanocrystals (quantum dots), natural history observations, pollination studies, inbreeding depression, geographic variation in response to pollinators, and interesting, manipulative field experiments. The field work will take place in the Cape Floristic Region, known for its high endemism and diversity. Stellenbosch University is known for its focus on evolutionary biology, and pollination biology is a particular strong point in our research group (<http://www.biointeractionslab.com/>).

For more information on the project, contact Bruce Anderson (banderso.bruce@gmail.com) and visit the following link: <http://bit.ly/SUHandedFlowers> corneile@sun.ac.za

---

## StockholmU InsectClimateAdaptation

Dear colleagues,

We are looking for a highly motivated PhD-student to join our new research project on the interactions between climate, insect life-history (voltinism) and food webs on oak.

For more information see the project description (below) and the following link:

<http://www.su.se/english/about/working-at-SU/-jobs?rmpage=job> <<http://www.su.se/english/about/working-at-SU/jobs?rmpage=job&rmjob=4100&rmalang=UK>> &rmjobA00&rmclang=UK

and don't hesitate to contact me directly by email, (closing date is November 5)

My best,

Ayco Tack

ayco.tack@su.se

Project description

Climate change has already altered the phenology of plants and organisms at higher trophic levels. Among plants, this has resulted in a temporal shift towards earlier bud burst and/or flowering, and among plant-feeding insects in earlier emergences. But more radical changes can happen than shifts in phenology: with increasing temperature, species may increase the number of generations per year (voltinism). Such changes may be extremely important from an ecological and evolutionary perspective, as an additional generation may accelerate both population growth and rate of adaptation, and may also lead to temporal mismatches between interacting species. However, we lack insight in how climate affects the voltinism of species within natural multitrophic communities, and how this in turn may shape food web structure and dynamics.

The overarching aim of the PhD project is to understand how spatial and temporal variation in climate affects the voltinism of a diverse community of herbivores and parasitoids on oak, and the consequences for food web structure and dynamics. The project will combine several approaches: i) fields surveys describing the spatial and temporal patterns in voltinism of a community of herbivores and parasitoids on oak, ii) heating experiments to disentangle how climatic variation (spring, summer and autumn heating) drives the voltinism of, and synchrony between, herbivores and parasitoids, and iii) detailed climate-chamber and laboratory experiments on five selected species to probe the impact of voltinism on herbivore and parasitoid preference and performance.

Ayco Tack <ayco.tack@gmail.com>

---

## StonyBrookU NY EvolutionaryGenomics

The Veeramah Lab in the Department of Ecology and Evolution at Stony Brook (<http://life.bio.sunysb.edu/ee/veeramahlab/index.html>) is looking to recruit a PhD Students to begin in Fall 2018.

The successful applicant will participate in a project that was recently funded by NIH for 5 years. Whole genome sequencing will be used to understand adaptation of marine Threespine Stickleback that have recently

colonized freshwater lakes. We will study evolutionary trajectories of adaptive alleles by sequencing samples in time-series from young lake populations. The project will involve sample preparation for sequencing, population genetic analyses, and possibly sampling stickleback populations in Alaskan lakes.

Please note that while interested applicants are encouraged to contact Krishna Veeramah before applying, students wishing to join the lab must ultimately apply to the Stony Brook Ecology and Evolution Graduate Program. All relevant information for this program can be found at the website (<http://www.stonybrook.edu/commcms/ecoevo-program/index.html>) and a link to the application can be found at <https://goo.gl/EmQLYH>. Please note that the deadline for receipt of all Ph.D. application materials is December 1st, 2017. Earlier submissions are encouraged, particularly for those wishing to be considered for Campus wide Graduate Council Fellowships and W. Burghardt Turner Fellowships.

Prospective students are encouraged to address specific questions to the Ecology and Evolution Graduate Program Coordinator ([melissa.j.cohen@stonybrook.edu](mailto:melissa.j.cohen@stonybrook.edu)) or to Krishna Veeramah ([krishna.veeramah@stonybrook.edu](mailto:krishna.veeramah@stonybrook.edu)).

"krishna.veeramah@stonybrook.edu"  
<[krishna.veeramah@stonybrook.edu](mailto:krishna.veeramah@stonybrook.edu)>

---

## SwedishU Agriculture Sciences MosquitoEvol

The Department of Plant Protection is an interdisciplinary constellation with good opportunities for strong research collaboration within and outside the departmental area ([www.slu.se/en/departments/-plant-protection-biology/](http://www.slu.se/en/departments/-plant-protection-biology/)). World-leading research is conducted in chemical ecology/sensory biology, and successful research is also conducted in resistance biology and integrated plant protection. The research efforts are directed towards both fundamental and applied research. The Chemical Ecology of Disease Vectors Group at the Department investigates female mosquitoes as major vectors of human disease. The most dangerous of these establish populations in and around human settlements, and preferentially bite humans. Mosquitoes find resources, such as human hosts and egg-laying sites, by using mainly odour mediated behaviours. Understanding the genetic causes

and effects of resource location and choice in disease vector mosquitoes is challenging and of significant practical importance for controlling these rapidly evolving vectors ([www.slu.se/en/cv/sharon-hill/](http://www.slu.se/en/cv/sharon-hill/); [www.slu.se/en/cv/rickard-ignell/](http://www.slu.se/en/cv/rickard-ignell/)). Project: The research project describes the genetic mechanism linking the basic molecular building blocks of the peripheral olfactory system with the egg-laying site preference displayed by the yellow fever mosquito, *Aedes aegypti*, using suitable molecular, physiological and behavioural techniques. *Aedes aegypti* is a successful vector of human viral diseases, including the world's fastest growing transmissible disease, dengue fever, and the potent, but relative newcomer of mosquito-borne diseases to the global stage, Zika. The mosquito's preference for laying eggs and developing high population densities in human settlements makes this species both a dangerous disease vector, and a likely target for control by interfering with females locating egg-laying sites. In this project, the student will investigate the mechanism underlying oviposition site selection by functionally characterising olfactory receptors with a suspected role in the detection of odours from egg-laying sites. These findings will subsequently be investigated at the receptor neuron and behavioural levels. Qualifications: A master degree, or similar university higher degree, in molecular biology, with a keen interest in ecology is required. Knowledge of chemical ecology, including behavioural assays and electrophysiology, is highly valued. Experience working as part of a laboratory research project is preferable. Good knowledge of spoken and written English is required. Upper secondary school grades, equivalent to English B/English 6, are a basic requirement for be admitted to the PhD education at SLU (proof of certification will be necessary). Forms for funding or employment: Employment as PhD student (2 or 4 years education). SLU is an Equal Opportunity Employer. A person has basic eligibility for third cycle education if he or she has taken a second cycle qualification or has completed course requirements of at least 240 higher education credits, including at least 60 higher education credits at second cycle education. Upper secondary school grades equivalent to English B/English 6 are a basic requirement. Selection among applicants meeting the requirements is made with reference to written application including curriculum vitae, copies of degrees and transcripts of academic records, one copy of the dissertation for masters or undergraduate degree, a list of at least two references familiar with the applicant's qualifications, certified knowledge of the English language and an interview. Further information: Docent, FD Sharon Hill, [Sharon.Hill@slu.se](mailto:Sharon.Hill@slu.se), +46 707 726394. <http://www.slu.se/en/education/programmes-courses/>

[postgraduate-studies/new-phd-student/Read-more/?sprak=e&Uid=2218](http://postgraduate-studies/new-phd-student/Read-more/?sprak=e&Uid=2218) – Sharon Rose Hill Associate Professor, PhD

Sveriges lantbruksuniversitet Swedish University of Agricultural Sciences

Unit of Chemical Ecology / Department of Plant Protection Biology PO Box 102, SE-230 53 ALNARP Visiting address: Sundsvägen 14 Telephone: +46 (0)40-41 53 79, mobile: +46 (0)707-72 63 94 [sharon.hill@slu.se](mailto:sharon.hill@slu.se), [www.slu.se/sharon-hill](http://www.slu.se/sharon-hill) Sharon Hill <Sharon.Hill@slu.se>

[biology.syr.edu/graduate/apply.html](http://biology.syr.edu/graduate/apply.html) Grad Studies in Biology: <http://biology.syr.edu/graduate/programs.html> Biology Department: <http://biology.syr.edu/> Center for Reproductive Evolution: <http://cre.syr.edu/> Jannice Friedman Assistant Professor Department of Biology Syracuse University 107 College Place Syracuse NY 13244 315.443.1564 [friedman@syr.edu](mailto:friedman@syr.edu) <http://friedmanlab.syr.edu> [friedman@syr.edu](mailto:friedman@syr.edu)

## SyracuseU PlantEvolution

Graduate position in plant evolutionary genetics or evolutionary ecology

The Friedman lab at Syracuse University is looking for enthusiastic and motivated Ph.D. students beginning in Fall 2018. Students will develop dissertation projects in evolutionary genetics or evolutionary ecology that complement work in the lab. Our lab uses a combination of ecological and genomics approaches to address the evolution of reproductive strategies in plants. Ongoing projects examine local adaptation, quantitative genetics of life history differences in *Mimulus guttatus*, sexual selection and mating in plants (<http://friedmanlab.syr.edu/>). Most projects use a combination of field work, greenhouse or growth chamber experiments, population genomics, and molecular ecology.

The Friedman lab is part of the dynamic and integrative Center for Reproductive Evolution (<http://cre.syr.edu/>) and the Ecology & Plant Biology, and Evolution, Genetics & Genomics research groups in Syracuse University's Department of Biology. Funding is guaranteed through teaching assistantships for 5 years, and there is potential for Research Assistantships. Syracuse University offers excellent benefits, a full tuition waiver, and a generous stipend (~\$25K for 2016). The close proximity to SUNY-Environmental Science & Forestry campus and Cornell makes this a strong and vibrant community.

Interested students should first contact Jannice Friedman ([friedman@syr.edu](mailto:friedman@syr.edu)) with a description of your research interests and experience and a CV or resume. For full consideration, full applications to the department should be received by December 15, 2017.

Additional information: Friedman lab: <http://friedmanlab.syr.edu/> Grad Apply: <http://biology.syr.edu/graduate/apply.html>

## TexasAMU EvolutionaryGenomics

The Blackmon lab at Texas A&M University is recruiting PhD graduate students interested in evolutionary genomics and genetics. My lab studies a variety of questions including genome structure, sex chromosomes, and trait evolution. We use both theoretical and empirical approaches. In our empirical work, we often focus on beetles and other invertebrates.

While the Blackmon lab is in the Department of Biology, graduate students can earn a PhD in Genetics, Ecology and Evolutionary Biology, or Biology through the lab's participation in two interdepartmental programs at Texas A&M. These programs allow students to take courses and interact with faculty from over 19 other departments that share interests in Genetics and EEB.

With approximately 60,000 students Texas A&M is one of the largest universities in the country. It is located in Bryan/College Station which has a population of about 250k. It is within easy reach of Houston and Austin. This part of Southeast Texas is situated close to many distinct biomes and provides excellent opportunities for fieldwork and outdoor recreation. Support for graduate students is provided for five years by a combination of teaching and research assistantships.

Please contact Heath Blackmon directly at [coleoguy@gmail.com](mailto:coleoguy@gmail.com) for more information regarding opportunities and application information. Additional information about the Blackmon lab can be found at <http://coleoguy.github.io/> Heath Blackmon <[coleoguy@gmail.com](mailto:coleoguy@gmail.com)>

---

## TexasAMU TravelGrants

\*To:\*Prospective PhD Students

\*From:\* Ecology and Evolutionary Biology (EEB) Doctoral Program, Texas A&M University

\*Re: \*Travel Grants to visit EEB at Texas A&M\*\*

\*The Ecology and Evolutionary Biology Doctoral Program at Texas A&M is pleased to announce the availability of travel grants for prospective PhD students.\* These travel grants, which will be awarded on a competitive basis, will cover the costs of a domestic flight to and from College Station, hotel accommodations while in College Station, plus a /per diem/ for meals. The aim of the travel grant is to provide prospective PhD students the opportunity to: with faculty and meet current graduate students the department and campus to learn about available resources and facilities College Station and its surrounding areas \*Travel grants will be awarded in January with travel scheduled for February 11-13, 2017. \*Travel grant awardees will spend time together during their visit, thus gaining immediate insights into their future cohort.\*\* \*\_Why should you consider obtaining a PhD at Texas A&M University?\_\* The Ecology and Evolutionary Biology (EEB) Program at Texas A&M is a relatively new doctoral program at one of the largest and best-funded universities in the United States. It has a strong mixture of nationally and internationally recognized junior and senior faculty working across the globe on a diverse range of basic and applied research, spanning physiological, population, community, ecosystem and landscape ecology, genetics, genomics, behavior, and systematics (\*to learn about our /\*faculty visit\*: <http://eeb.tamu.edu/people/faculty/>). Support for graduate study is available through multiple sources, including teaching assistantships, research fellowships, and internal merit fellowships. Texas A&M University is positioned at the interface of the Neotropics and Nearctic, in Blackland Prairie and Post Oak Savannah habitat, which supports great species diversity and a wealth of research opportunities with great climate during the academic year. Its location also provides a good base for access to a broad range of habitats and research sites. Additionally, its proximity to Austin, Dallas, Houston and San Antonio offers easy air travel and a cultural component to a whole graduate experience.

\*\_How to apply?\_\*/\*To be considered for a travel grant/\*, prospective PhD students first need to contact

Jason Martina, the EEB Program Coordinator (email: [jpmartina@tamu.edu](mailto:jpmartina@tamu.edu) <<mailto:rhapes@tamu.edu>>; phone: 979 845-2114). /\*To receive a travel grant/\*, an official Graduate Application package must be submitted to the EEB Program. For additional information about the EEB Program and the graduate application process please visit:<http://eeb.tamu.edu>/\*/\* \*For consideration for merit fellowships, your application needs to be received by December 15, 2017\*

Jessica E. Light Associate Professor and Curator of Mammals Department of Wildlife and Fisheries Sciences Biodiversity Research and Teaching Collections Texas A&M University College Station, TX 77843 979-458-4357 <http://www.jessicalight.org/> “[jligh2@tamu.edu](mailto:jligh2@tamu.edu)” <[jligh2@tamu.edu](mailto:jligh2@tamu.edu)>

---

## TexasTech PlantPhylogenomics

The Johnson Lab at Texas Tech University is looking for Ph.D. or Masters students interested in plant phylogenomics and/or bioinformatics to start Fall 2018. Our lab is motivated by a central question in evolutionary biology: what influences the origin and maintenance of plant biodiversity? Research in the lab integrates field work (collection and field experiments), wet lab (tissue culture, high-throughput DNA/RNA sequencing), and computational analysis to test hypotheses about genome evolution in non-model organisms at both deep and narrow timescales. Topics currently being studied in the lab include:

- Phylogenetic systematics using hundreds of nuclear genes via targeted sequence capture (HybSeq).
- Identifying genomic events (gene/genome duplication, changes in molecular evolution) associated with key innovations in plant evolution.
- Optimization of HybSeq using herbarium specimens.
- Identifying the hybrid origin of polyploid species through targeted sequencing.
- Development of novel bioinformatics tools for sequence analysis and visualization.

We are especially interested in students who would like to employ herbarium specimens in their research. The E.L. Reed Herbarium in the Biological Sciences building contains 20,000 plant specimens including an important collection of the vascular plants of West Texas. Students interested in bioinformatics, genomics, and data visualization are also encouraged to apply. More information about the Johnson lab can be found at: [www.mossmatters.com](http://www.mossmatters.com) \*Requirements\*: (1) Bachelor’s

degree in biological or computer sciences or related field; (2) interest in integrating wet lab, field work, and computational skills; (3) ability to work both independently and collaboratively; and (4) effective communication skills, necessary for both teaching and for sharing results through papers and presentations at scientific meetings. For Ph.D. applicants, prior research experience is preferred but not required.

The lab has financial support for multiple students through a combination of research and teaching assistantships, including summer support. Interested students should first contact Matt Johnson at matt[DOT]johnson[AT]ttu[DOT]edu .

**\*Deadline for applications\*** The Texas Tech Biological Sciences Department has rolling admissions, but students who wish to be considered for scholarships or fellowships must apply by January 15, 2018 for enrollment in Fall 2018.

Texas Tech University is an Equal Opportunity Employer and I welcome applications from qualified persons regardless of nationality, race, sex, disability, religion, sexual orientation, or age. Texas Tech recently received designation as a Hispanic Serving Institution, and we are excited to support Hispanic scholars.

More information about applying for graduate school at Texas Tech can be found here: <http://www.depts.ttu.edu/biology/graduate/-graduatestudies.php> Matthew G. Johnson, Ph.D. Assistant Professor, Biological Sciences Director, E.L. Reed Herbarium Texas Tech University E-mail: matt[DOT]johnson[AT]ttu[DOT]edu [www.mossmatters.com](http://www.mossmatters.com) matt.johnson@ttu.edu

---

## TexasTechU AvianGenomics

The Manthey lab in the Department of Biological Sciences at Texas Tech University is recruiting highly-motivated individuals for graduate studies (PhD or MS) in genomics to begin in Summer or Fall 2018. We use computational biology, fieldwork, and labwork to answer fundamental questions in evolution, ecology, and conservation biology.

The major themes of our current research are: (1) evolutionary genomics and transposable element evolution in woodpeckers, (2) population genomics in North American birds, (3) bird diversification and landscape genomics in sky islands. Graduate students would be ex-

pected to develop research questions under these broad themes. We have financial support for multiple students through research and teaching assistantships, including additional summer support and research funds. For more information about the lab's research and opportunities, please check our site: <https://mantheylab.org/> Interested individuals should email a CV/resume to Dr. Joseph Manthey ( jdmanthey@gmail.com), as well as a short description of how your interests and the research topics of our research group complement each other.

The Department of Biological Sciences has a strong and dynamic group of scientists with a focus in ecology and evolutionary biology. The department has strengths in multiple areas of genomics, bioinformatics, and specialized disciplines of ecology and evolutionary biology. The departmental website can be found here: <http://www.depts.ttu.edu/biology/> ~Deadline for applications~ Our department has year-long open admissions, but has deadlines to be considered for scholarships and fellowships. For Fall 2018, this deadline is January 15, 2018. Please find all application details here: <https://www.depts.ttu.edu/biology/Graduate/-graduatestudies.php> All qualified applicants are encouraged to apply. While academic and GRE scores have a role in admissions, motivation, passion for biology, and research experience are highly valued. Texas Tech University is an Equal Opportunity Employer, and we welcome applications from all qualified persons and will ensure that all applicants are treated fairly, equally, and respectfully.

Joseph D. Manthey, Ph.D. Assistant Professor, Biological Sciences Texas Tech University Email: jdmanthey@gmail.com <https://mantheylab.org/> jdmanthey@gmail.com

---

## TexasTechU PlantClimateAdaptation

PhD Graduate Student Positions Available Olson Lab, Texas Tech University

The Olson lab at Texas Tech University is recruiting PhD Graduate students interested in the field of plant ecological genetics to start in the fall of 2018. Our lab studies a variety of questions including local adaptation to latitude in relation to climate change, the evolution of breeding systems, sex chromosome evolution, and the evolution of gender dimorphism in plants. We use a variety of experimental techniques including common

garden studies, field ecology, transmission genetics, genomics and bioinformatics. For the past decade we have studied these processes in forest trees and expect that this will continue to be the main taxonomic focus of our research.

Our current funding supports research to study the ecological and genetic factors influencing the dynamic movement of sex determination regions and sex chromosome evolution within the Salicaceae (poplars and willows). The overall project focuses on mapping sex determination regions from representatives throughout the family, understanding the genetic basis of gender dimorphism in defense and pollinator attraction chemistry, and the assessment of population genetic patterns across the sex determination and pseudo-autosomal regions of the sex chromosomes. Graduate students working on this project will have the opportunity to choose from a variety of projects including, but not limited to, mapping the locations of previously unknown sex determination regions, development of phylogenies for important plant groups, and studying the evolution of sexual dimorphism in plant defensive and pollinator attraction compounds. Moreover, the grant provides for a unique multi-institutional and international training environment, with potential funding to visit labs at the University of West Virginia, the University of Wisconsin, Cornell University, and Sichuan University and Nanjing Forestry University in China for cross-disciplinary training.

The Olson lab is part of a dynamic Ecology and Evolutionary Biology group at Texas Tech. Courses and focused training in ecology, bioinformatics, and genomics are available from a highly interactive faculty. Texas Tech boasts excellent laboratory and research resources as well as easy access to some of the most beautiful and remote regions of the lower 48 United States.

Please contact Matt Olson directly at [matt.olson@ttu.edu](mailto:matt.olson@ttu.edu) for more information regarding opportunities and application information. Additional information about the Olson lab can be found at [www.faculty.biol.ttu.edu/olson/Research.html](http://www.faculty.biol.ttu.edu/olson/Research.html) and general information concerning the Department of Biological Sciences can be found at [www.depts.ttu.edu/biology/](http://www.depts.ttu.edu/biology/). “Olson, Matt” <[matt.olson@ttu.edu](mailto:matt.olson@ttu.edu)>

---

## UBath Biodiversity

Weblink: <http://www.swbio.ac.uk/files/2017/10/-swbio-18-project-22.pdf> Contact: Dr Araxi Urrutia [A.Urrutia@bath.ac.uk](mailto:A.Urrutia@bath.ac.uk) and Prof. Matt Wills [M.A.Wills@bath.ac.uk](mailto:M.A.Wills@bath.ac.uk) How have gene family duplications shaped the disparity and diversity of mammal clades?

Supervisory team: Main supervisor: Dr Araxi Urrutia (University of Bath) Second supervisor: Prof Matthew Wills (University of Bath) Dr Martin Genner (University of Bristol)

Host institution: University of Bath

Project description: Understanding the forces that shape global biodiversity patterns was identified as one of the 25 greatest challenges for Science in the 21st Century (1, 2). Some mammal clades are enormously diverse, while their sister groups (originating at the same time) are far less so (e.g., 1,500 species of rodents versus 80 species of rabbits, hares and their allies). Why is this, and what might these differences tell us about the likely responses of groups to the present biodiversity crisis? In this strongly inter-disciplinary project, we will investigate the possible role of Small Scale Duplications of genes (SSDs) in shaping patterns of diversity, anatomical complexity (3, 4) and morphological disparity (5-7) of mammals in deep time. As noted by Ernst Haeckel, developmental trajectories tend to become more complex with macroevolutionary time.

Increasing interdependencies between genes and systems, coupled with their co-option for multiple functions (pleiotropy), result in more deleterious collateral consequences of mutations. This predicts that aspects of bodyplan design may become arbitrarily 'locked down' (e.g., seven neck vertebrae in most mammals), and that evolutionary innovation will be commonest when genetic redundancy is highest. Small Scale Duplications of genes (SSDs) increase the number of genes within a given gene family (gene family size, GFS), and are one way in which mammals may circumvent such pleiotropic constraints and facilitate innovation. This project will use a variety of genomic, phylogenetic palaeontological and comparative approaches (8) to investigate the relationship between the timing and phylogenetic placement of SSDs, the diversity (species richness) and disparity (morphological diversity) of clades, and the anatomical complexity (serial differentiation) of the vertebrae and

limbs of the species within those clades.

The successful student would join an established research team and will be part of the newly formed Milner Centre at the University of Bath.

The student should have an interest in evolutionary genomics.

Experience in statistics and or R or Python scripting are desirable.

References 1. Kennedy D & Norman C (2005) *Science* 309:75. 2. Pennisi E (2005) *Science* 309:90. 3. McShea D & Brandon RN (2010) *Biology's First Law* (University of Chicago Press) p 170. 4. Adamowicz SJ, Purvis A, & Wills MA (2008). *PNAS* 105:4786-4791. 5. Hughes M, Gerber S, & Wills MA (2013) *PNAS* 110:13875- 13879. 6. Wills MA, Briggs DEG, & Fortey RA (1994).

*Paleobiology* 20:93-130.4. 7. Oyston J, Hughes M, Gerber S, & Wills MA (2016) *Ann Bot* 117:859-879. 8. Davis KE, Hill J, Astrop TI, & Wills MA (2016) *Nature Comm* 7:13003.

Dr Araxi Urrutia Senior lecturer in genomics Director of International Partnerships Milner Centre for Evolution Department of Biology and Biochemistry University of Bath Bath, BA2 7AY, UK [http://www.bath.ac.uk/bio-sci/contacts/academics/araxi\\_urrutia/](http://www.bath.ac.uk/bio-sci/contacts/academics/araxi_urrutia/) Araxi Urrutia <A.Urrutia@bath.ac.uk>

---

## UBath GenomeEvolution

An ERC funded 3 year PhD position starting January 2018 is available at the Milner Centre for Evolution at the University of Bath, UK. The PhD will be supervised by Prof Laurence Hurst and Dr Araxi Urrutia. The project involves bioinformatic analysis of gene and genome evolution. It will examine the role of errors in both genome evolution and the evolution of novelty. More details, and online application, can be found here:

<https://www.findaphd.com/search/-ProjectDetails.aspx?PJID=89316&LIDi> For enquiries, contact Prof Hurst: [l.d.hurst@bath.ac.uk](mailto:l.d.hurst@bath.ac.uk)

Laurence Hurst <[L.D.Hurst@bath.ac.uk](mailto:L.D.Hurst@bath.ac.uk)>

---

## UBath HostParasiteCoevolution

\*PhD position (University of Bath, UK): How community composition impacts host-parasite coevolution\*

Anticipated start date: 1 October 2018

Understanding the fundamental processes and mechanisms that underpin host-parasite coevolution is a major challenge in evolutionary biology, with significant implications for improving disease management strategies and gaining insights into core biological phenomena. Our knowledge of co-evolution is largely based on studies of pairwise interactions, but hosts and parasites do not exist in isolation; they interact with other potentially harmful or co-operative species in complex communities. Yet precisely how the community affects coevolution is currently unclear.

This project will develop novel theory to understand how the community affects host-parasite coevolution. Using mathematical modelling, the student will address how the nature of the community (e.g. antagonistic/mutualistic) affects the outcome of coevolution (e.g. directional/fluctuating selection, monomorphism/polymorphism). The student will also study how diffuse coevolution unfolds when communities consist of multiple hosts or parasites, and will have the opportunity to test key aspects of the theory using experimental evolution of microbial communities.

The successful student will have a strong background in mathematics and a keen interest in modelling biological systems. Prior laboratory experience would be ideal but is not required.

Candidates should apply using the University of Bath's online application form, selecting PhD programme in Mathematics <https://www.bath.ac.uk/study/pg/applications.pl#math-sci> Full advert: <https://www.findaphd.com/search/ProjectDetails.aspx?PJID=3D89408> For more information contact [benashbyevo@gmail.com](mailto:benashbyevo@gmail.com)

Ben Ashby

Department of Mathematical Sciences University of Bath Claverton Down Bath, UK

[ben.ashby@gmail.com](mailto:ben.ashby@gmail.com)

## UBergen DeepSeaSpeciation

Apologise for cross-posting.

A PhD position in marine malacology is open at the Natural History Museum of Bergen, Norway to work on the systematics of the genus *Scaphander* and deep-sea patterns of biogeography and speciation. Please, spread the word across your networks and students.

Many thanks,

Manuel Malaquias

Link to official announcement and job application (Closing date: October 31, 2017):

<https://www.jobbnorge.no/en/available-jobs/job/-143008/phd-position-in-biosystematics-malacology> Job Description:

The University of Bergen (UiB) is an internationally recognised research university with more than 14,000 students and close to 3,500 employees at six faculties. The university is located in the heart of Bergen. Our main contribution to society is excellent basic research and education across a wide range of disciplines. PhD position in biosystematics (Malacology) There is a vacancy for a PhD position at the Department of Natural History, University Museum of Bergen (University of Bergen, Norway) within the field of biosystematics.

About the project/work tasks: The candidate will be working on a research project related with systematics, phylogeny, speciation, and biogeography of deep-sea organisms. The focal group is the gastropod genus *Scaphander* distributed worldwide. This model-group will be used to address broader questions of marine diversification and historical biogeography in the deep-sea using a combination of morphological characters and molecular phylogenetic methods.

Qualifications and personal qualities: Applicants must have an MSc degree or equivalent education in biology. We seek a candidate ideally with experience in biosystematics of marine invertebrates and with the ability to work independently. Evaluation criteria include grades and relevance of the MSc thesis and other pertinent evolutionary biology subjects. Proven skills on fieldwork, anatomical dissection, electron microscopy, and phylogenetic analysis will be considered as strengths. Availability to carry out fieldwork abroad is a requirement.

About the PhD position: The position is for a fixed-term period of 4 years of which 25% (one full year) is work duty including teaching assistance and curation of scientific collections at the museum. The employment period may be reduced if you have previously been employed in a recruitment position.

About the research training: As a PhD Candidate, you must participate in an approved educational programme for a PhD degree within a period of 3 years. The PhD fellow will also become a member of the Research School in Biosystematics (ForBio). A final plan for the implementation of the research training must be approved by the faculty within three months after you have commenced in the position. It is a condition that you satisfy the enrolment requirements for the PhD programme at the University of Bergen. Application for admission to the PhD study, including progress plan for education and research, will be made together with the project advisors.

Your application must include:

- \* A cover letter (maximum 1 page) describing your motivation to work on the project, and a CV (maximum 2 pages) with personalia, qualifications and working experience.
- \* The names and contact information for two reference persons. One of these must be the main advisor for the master's thesis or equivalent thesis.
- \* Transcripts and diplomas showing completion of the bachelor's and master's degrees.
- \* Relevant certificates/references.
- \* A list of any works of a scientific nature (publication list).
- \* Any publications in your name.

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at Jobbnorge.

We can offer:

- \* A good and professionally challenging working environment, modern laboratories with diverse research activities, comprehensive scientific collections.
- \* Salary at pay grade 50 (Code 1017/Pay range 20) in the state salary scale. This currently amounts to an annual salary of NOK 436.900. Further promotions are made according to qualifications and length of service in the position. A higher salary may be considered for a particularly well qualified applicant.
- \* Enrolment in the Norwegian Public Service Pension Fund.
- \* A position in an inclusive workplace (IA enterprise).
- \* Good welfare benefits.

General information: Additional information on the position is obtainable from Associate Professor Manuel Malaquias (Manuel.Malaquias@uib.no), phone +47 55582582.

The state labour force shall reflect the diversity of Nor-

wegian society to the greatest extent possible. Age and gender balance among employees is therefore a goal. People with immigrant background and people with

— / —

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>

---

## UBern SexChromosomeEvolution

PhD position in Evolutionary Genomics at the University of Bern A funded, 4-yr PhD position is available in the Division of Evolutionary Ecology ([http://www.ee.iee.unibe.ch/index\\_eng.html](http://www.ee.iee.unibe.ch/index_eng.html)) at the University of Bern, Switzerland to study the evolution of sex chromosomes in stickleback fish.

The student will work on a recently funded SNF project entitled Chromosome evolution: molecular mechanisms and evolutionary consequences.

The aim of the project is to use genome sequencing and transcriptome data to characterize the diversity of sex chromosome systems found in the stickleback family to address the following questions: (1) What factors are associated with the transition between homomorphic and heteromorphic sex chromosomes?; (2) What mechanisms contribute to the maintenance of gene dosage on degenerate sex chromosomes?; (3) Do Y and W chromosomes have different evolutionary trajectories? The Division of Evolutionary Ecology is a dynamic and interdisciplinary group. We are part of the Institute of Ecology and Evolution at the University of Bern in Switzerland. The Institute currently has six research divisions spanning a broad range of research in ecology and evolution including conservation biology, community ecology, behavioural ecology, population and evolutionary genomics, and mechanisms of adaptation and speciation. We host a large international community of graduate students and post-doctoral researchers.

Candidates must be highly motivated and creative, able to work independently and collaboratively, have a strong background in evolutionary genetics, and have prior experience with the analyses of large genomic datasets. Previous experience with molecular cytogenetic methods is a plus. The working language of our division is English.

The starting date for the PhD student is as early as

January 2018. A masters degree is required to apply. Starting salary is 47,000 CHF and includes social security contributions.

Please submit your application via email by 30 November 2017 to Prof. Catherine Peichel: [catherine.peichel@iee.unibe.ch](mailto:catherine.peichel@iee.unibe.ch) Applicants must submit one merged PDF file that includes a letter of motivation, a CV, names of two referees who should have sent their recommendation letter separately by email before the deadline, and copies of relevant publications and/or masters thesis. Incomplete or late applications will not be considered.

[catherine.peichel@iee.unibe.ch](mailto:catherine.peichel@iee.unibe.ch)

---

## UCalgary WildHorsesEvolEcolGenet

Graduate student positions in evolutionary ecology and genetics of wildlife health I am seeking highly motivated graduate students with interests in wildlife biology, quantitative genetics, and/or evolutionary ecology of host-parasite interactions to join my new lab at the University of Calgary. Current opportunities include studying the causes and consequences of gut microbiome variation and complex gastro-intestinal parasitic nematode infections (the 'nemabiome') in free-living animals using the Sable Island horse long-term population study as a model system.

Projects will take advantage of thousands of archived samples from hundreds of pedigreed individuals with detailed long-term ecological and life history data. The ideal candidates will have demonstrated skills or interest in at least some of the following: long-term individual-based studies of free-living animals, quantitative genetics, molecular ecology, evolutionary ecology, community ecology, multivariate statistics, DNA metabarcoding, or bioinformatics.

Students will be based at the Faculty of Veterinary Medicine at the University of Calgary where they will benefit from interactions with a large community of researchers focussing on host-parasite interactions, animal health, and bioinformatics, as well as close collaborations in Calgary (Prof. John Gilleard), the University of Saskatchewan (Dr. Philip McLoughlin) and the University of Exeter (Prof. Alastair Wilson).

Students should enjoy curiosity-driven research, working in teams, and be comfortable contributing to physically demanding field work on a remote oceanic island for

a few weeks each year. Financial support is available for 2 years for MSc and 4 years for PhD (minimum of 20,000/year). While all qualified candidates will be considered, priority will be given to Canadians who are competitive for external awards (e.g. NSERC).

Calgary is a vibrant multicultural city that consistently ranks in the World's top 10 most liveable cities. It is located just 1 hour away from Banff National Park and the Canadian Rockies, with outstanding year-round opportunities for outdoor activities.

Start date is flexible, but would ideally be May, July or September 2018.

Information about applying for graduate studies in the Faculty of Veterinary Medicine at the University of Calgary is available at <http://www.vet.ucalgary.ca/-graduate-postgraduate/future-graduate-students>. Interested students should send a brief statement of interest, CV and unofficial copies of transcripts to Dr. Jocelyn Poissant (jocelyn.poissant at ucalgary.ca).

Jocelyn Poissant <Jocelyn.Poissant@ucalgary.ca>

## UCalifornia SantaBarbara NomophilaAdaptation

PhD student recruitment

Mazer lab Department of Ecology, Evolution and Marine Biology UCSB

The Mazer lab in the Department of Ecology, Evolution and Marine Biology at the University of California, Santa Barbara is recruiting one or two highly motivated PhD students (for entry into our graduate program in Fall 2018) to conduct both collaborative and independent research to investigate the process and outcome of adaptive evolution within and among populations of the annual forb, *Nemophila menziesii* (Baby Blue Eyes, Boraginaceae).

Successful candidates will participate in a recently funded NSF grant (Evolutionary adaptation to intensifying drought across a geographic gradient: a comprehensive evaluation of Fisher's Fundamental Theorem with Dr. Amber Nashoba and Dr. Ruth Shaw) in which we are using quantitative genetic methods to test predictions derived from Fishers Fundamental Theorem in wild populations of *N. menziesii* distributed across an aridity gradient in California. Incoming students will also be expected to develop and to conduct independent

research that extends beyond the scope of the research supported by this grant. Promising areas of research include (but are not restricted to):

- (a) the ecological and evolutionary significance of variation within and among populations in prospective fitness-related traits such as germination responses, flowering time, flower size, herkogamy and dichogamy, pollen performance, seed size, and sex allocation;
- (b) pre- and post-pollination sexual selection on primary and secondary sexual traits;
- (c) the functional significance of variation in floral and vegetative pigments, including UV reflectance/absorption;
- (d) the evolution of phenotypic plasticity in life history and morphological traits; and
- (e) the causes and consequences of variation in water use efficiency across an aridity gradient.

Funding packages offered to highly competitive candidates will include a combination of Graduate Research assistantships, Teaching Assistantships, Block Grants, and UCSB-funded graduate fellowships. Students who have already earned a Masters degree in Botany, Evolution, or Plant Ecology, or who have applied for a NSF Graduate Fellowship, would be particularly strong candidates. UCSB and EEMB encourage and welcome applicants who contribute to the diversity of the campus' community.

Prospective students interested in exploring this opportunity may write directly to Professor Susan Mazer (mazer@lifesci.ucsb.edu)

Graduate students may apply electronically to UCSBs Graduate Division via the following URL: <https://www.graddiv.ucsb.edu/eapp/Login.aspx> For more information about UCSB's Department of Ecology, Evolution and Marine Biology, please explore: <https://www.eemb.ucsb.edu/> Susan Mazer Director, California Phenology Project President, California Botanical Society Professor of Ecology & Evolutionary Biology Department of Ecology, Evolution and Marine Biology University of California, Santa Barbara Santa Barbara, CA 93106

office: 805-893-8011 FAX: 805-893-2266 email: mazer@lifesci.ucsb.edu

<https://www.eemb.ucsb.edu/people/faculty/mazer> susan.mazer@lifesci.ucsb.edu

---

## UCambridge BrainEvolution

UniCambridge.BrainEvolution

I am currently looking for dedicated and enthusiastic students to put forward for graduate funding competitions to start an MPhil/PhD in 2018/2019. Work in our lab focuses on understanding how brains evolve in response to different ecological selection regimes, how variation in brain structure and function relates to changes in behaviour, and the genetic and developmental basis of variation in brain size and structure. Currently this includes three main themes: i) the role of brain and behaviour evolution and plasticity during microhabitat divergence, ii) sensory adaptations, iii) the functional significance and regulation of brain size.

Several potential projects on brain and behavioural evolution are listed on my website: <http://www.shmontgomery.co.uk/opportunities.html> FUNDING These projects are listed in competitions for funding from doctoral training grants and scholarships. Further details can be found at: i) the departmental prospectus: <http://www.zoo.cam.ac.uk/grads/prospec> ii) the University's student funding portal: <http://www.student-funding.cam.ac.uk> Key deadlines for funding applications are: i) BBSRC DTP PhD studentships - application deadline 7th December 2017 ii) NERC DTP PhD studentships - application deadline 4th January 2018 iii) Gates Cambridge scholarships - for Overseas/EU (non-UK) applicants: 4th January 2018 iv) The Cambridge Trust - application deadline for International applicants: 4th January 2018

Interested applicants should contact Dr. Stephen Montgomery (shm37@cam.ac.uk) with a CV and description of research interests.

Other projects available with my colleagues in the Dept. of Zoology are listed here: <https://www.zoo.cam.ac.uk/grads/prospec/phd-and-mphil-studentships> Stephen Montgomery <shm37@cam.ac.uk>

---

## UExeter WinnerLoserEffects

Dear all

We are looking for a suitable candidate for a 4-year PhD project investigating the factors influencing winner and loser effects on competitive performance, as part of this year's BBSRC SWBio Doctoral Training Partnership. This interdisciplinary project bridges evolutionary biology and sports science and will be based with me (as the main supervisor) in the Centre for Research in Animal Behaviour at the University of Exeter (<http://psychology.exeter.ac.uk/research/centres/crab/>). Co-supervision will be provided by Prof. Alastair Wilson (Biosciences, Univ. Exeter), Dr Rachel Arnold (Department of Health, Univ. Bath) and Dr Mark Wilson (Sport & Health Sciences, Univ. Exeter).

The project is one of several competing for funding within the SWBio DTP. More details about the project, eligibility requirements and how to apply are available at <http://www.exeter.ac.uk/studying/funding/award/?id=2771>. Please feel free to get in touch with me if you would like any further information before applying.

Best wishes

Tim

–  
Dr Tim W. Fawcett Room 124b Centre for Research in Animal Behaviour Washington Singer Laboratories University of Exeter Exeter EX4 4QG United Kingdom +44 7789 126382 (mobile) +44 1392 725273 (office)

t.w.fawcett@exeter.ac.uk

[www.timwfawcett.com](http://www.timwfawcett.com)

---

## UFlorida SexualSelection

I am looking to recruit a graduate student for Fall 2018 to study the evolutionary interplay of behavior and morphology in the context of sexual selection.

Research in my lab focuses on sexual selection in insects, examining the importance of nutritional and social environments both for the expression of sexually-selected traits and for the process of selection itself. We primarily work on leaf-footed bugs, Family Coreidae. These insects wrestle with their hind legs over territories and have an amazing diversity of hind leg shapes. Ongoing projects in the lab include studies of trade-offs between weapons and testes; the effect of nutrition and social environments on weapon structure, testes size, and male fighting behavior; and the factors influencing mate choice. We are currently reconstructing a phy-

logeny of the group to test hypotheses of weapon shape evolution.

The successful applicant for this position can choose to work locally in Florida or pursue international field work, at a location such as the Smithsonian Tropical Research Institute in Panama. Prospective students are encouraged to email Christine W. Miller at [cwmiller@ufl.edu](mailto:cwmiller@ufl.edu) by November 8th (later inquiries might also be considered). Include in your email a statement including 1) the kinds of research questions that you would like to pursue, 2) how these fit in with current lab research, 3) a brief overview of your previous academic and research experiences, 4) CV or resume, 5) GRE scores (if you have them), and 6) an unofficial transcript.

Accepted students will be provided a tuition waiver and a competitive stipend. For more information please visit [www.millerlab.net](http://www.millerlab.net). Information about Gainesville, Florida:

Situated in the rolling countryside of north central Florida, Gainesville is much more than a stereotypical college town. Home of the University of Florida, seat of Alachua County's government and the region's commercial hub, it is progressive, environmentally conscious and culturally diverse. The presence of many students and faculty from abroad among its 99,000-plus population adds a strong cross-cultural flavor to its historic small-town Southern roots. Its natural environment, temperate climate and civic amenities make Gainesville a beautiful, pleasant, and interesting place in which to learn and to live.

Time and time again, Gainesville has been named one of Florida's most liveable cities and ranked among the leaders in the United States - a reputation created by an exceptional combination of local features. Agreeable weather and lovely landscapes, attractive educational and economic opportunities, varied cultural and recreational resources, and a youthful, energetic ambiance all contribute to the standard of living enjoyed by area residents.

Christine W. Miller | University of Florida Associate Professor of Entomology Entomology & Nematology Department phone: (352) 273-3917 web: [www.MillerLab.net](http://www.MillerLab.net) facebook: @bugweapons

"Miller, Christine W." <[cwmiller@ufl.edu](mailto:cwmiller@ufl.edu)>

## UGreifswald Adaptation

Job offer: 12 PhD positions in Biology at the Univ. Greifswald, Germany (17/Wi23) The Research Training Group "Biological responses to novel and changing environments 'V RESPONSE" (RTG 2010), funded by the Deutsche Forschungsgemeinschaft (DFG), invites applications for 12 PhD positions (salary scale TV-L E13, 65%; including social benefits) for a three year structured Ph.D. program. Start of the Ph.D. positions will be obligatory April 1st, 2018. The RTG is based at the Univ. of Greifswald, Germany (for details see: [www.uni-greifswald.de/RESPONSE](http://www.uni-greifswald.de/RESPONSE)).

### Research Program

The ability to respond to novel and changing environmental conditions, either by phenotypic plasticity, genetic adaptation, or range shifts, is pivotal to the longer-term survival of all organisms. Owing to increasing concerns about the consequences of human-induced global change, such responses have attracted increasing interest in recent years. RESPONSE focuses on the plastic and genetic capacities for in situ responses (cluster A) and on the factors limiting or facilitating dispersal to new habitats (cluster B). The RTG aims at deepening our understanding of the limits to population persistence, enabling more accurate predictions regarding the fate of populations under changing conditions. Our research program spans different levels of biological organization, ranging from molecular and physiological mechanisms to ecological population-level responses, and a wide variety of organisms including lichens, myxomycetes, plants (trees), and animals (snails, crustaceans, insects, spiders, bats). Please refer to [www.uni-greifswald.de/-RESPONSE](http://www.uni-greifswald.de/-RESPONSE) for further information, especially on the available individual research (PhD) projects and specific requirements. Note that all projects involve field work at least to some extent.

### Teaching Concept

A teaching program accompanies the interdisciplinary research strategy. It covers different scientific topics and techniques relevant to the RTG as well as soft skills relevant to career development, and includes summer schools, journal clubs, practical courses, lectures, and individualized educational as well as mentoring programs. Each PhD project involves visiting stays at different laboratories, partly abroad. The participation in the teaching program is mandatory.

## Requirements

We invite applications from highly motivated candidates with above-average qualifications, passion for and experience in research, and the willingness to actively participate in the RTG. Successful applicants will (1) hold a M.Sc. degree (or equivalent) in Biology or another relevant discipline, (2) have a solid background in ecology and evolution, (3) experience with methods and / or organisms relevant to the RTG, (4) an excellent command of the English language, which is the official language of the RTG, and (5) will be motivated to join an interdisciplinary research training environment.

## Applications

To apply please submit an application form, a CV including copies of all degrees, a motivation letter, and two letters of recommendation. Forms (application form, recommendation letter) are available at [www.uni-greifswald.de/RESPONSE](http://www.uni-greifswald.de/RESPONSE). The motivation letter should include your motivation to become a member of RESPONSE, your preferred projects (list three), and a short explanation for your project choice. Applicants should submit the abovementioned documents, except the recommendation letters, as PDF files attached to a single email to the coordinator of the RTG, Kerstin Wulf ([kerstin.wulf1@uni-greifswald.de](mailto:kerstin.wulf1@uni-greifswald.de)), latest by December, 10th 2017. Note that recommendation letters should be sent by the referees directly to [kerstin.wulf1@uni-greifswald.de](mailto:kerstin.wulf1@uni-greifswald.de). The most promising candidates will be invited to Greifswald, and interviews will take place between February 1st and 3rd, 2018. The University of Greifswald is an equal opportunity employer, and the RTG strongly encourages qualified disabled persons, women, and candidates with children to apply.

The University would like to increase the proportion of women in areas in which they are underrepresented and thus applications from women are particularly welcome and will be treated with priority if they have the same qualifications and as long as there are no clear reasons which make a fellow applicant more suitable. Severely disabled applicants with the same qualifications will be considered with preference. This announcement is directed at all persons, no matter which gender. According to "68 Sub-Section 3 PersVG M-V, the staff council will only be involved in staff 4 matters of the academic or artistic staff on request. The costs for applying cannot be reimbursed by the state of Mecklenburg-Vorpommern.

The official version of the advertisement is published at:

— / —

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](http://mcmaster.ca/~brian/evoldir.html)

---

## UHamburg PopGenomicsDaphnia

Universität Hamburg invites applications for a PhD position in evolutionary genomics (Research Associate). Earliest starting date is November 1st 2017. It is remunerated at the salary level TV-L 13 and calls for 50% of standard work hours per week. The initial fixed term is three years.

Responsibilities: Associates will be expected primarily to conduct research and teach. The associate will have the opportunity to pursue further academic qualifications, in particular a doctoral dissertation. At least one-third of set working hours will be made available for the associate's own academic work.

Specific Duties: The group focus on global biodiversity and evolutionary genomics of freshwater zooplankton (Daphnia), using next-generation sequencing data. In particular, we work on a species belonging to a species complex and hybridizing with at least two other very similar species. The doctoral project focuses primarily on establishing a genomic linkage map of *Daphnia galeata* based on data currently generated from single gamete sequencing. This linkage map will be used to refine a genome assembly and compared to data available for other *Daphnia* and/or arthropod species. Another endeavour is analysing the hybridisation dynamics in northern german lakes from resting egg banks. Furthermore, the candidate is encouraged to develop specific projects of her or his own choice as long as they include mining this data and are conducted in collaboration with other members of the group. The current position comprises a teaching duty of 2SWS, to be conducted within the Biology department in pre-existing teaching modules (general biology, population genetics, introduction to bioinformatics).

Requirements: A university degree in a relevant field. Biology, Bioinformatics The candidate should: - have a strong background in evolutionary biology / molecular ecology and be familiar with bioinformatics methods. In addition, knowledge of population genetics will be advantageous. - be familiar with at least one of these scripting languages: python, perl, C++, R - be creative, critical and have conceptual thinking skills. - have good communication and writing abilities in English. - be able to work both independently and as part of a multidisciplinary team. The working language of the group is

English, willingness to learn German is necessary to allow a better integration/communication in the institute and in daily life.

The University aims to increase the number of women in research and teaching and explicitly encourages qualified women to apply. Equally qualified female applicants will receive preference in accordance with the Hamburg Equality Act Hamburgisches Gleichstellungsgesetz, HmbGleiG). Severely disabled applicants will receive preference over equally qualified non-disabled applicants.

For further information, please contact Jun. Prof. Dr. Mathilde Cordellier or consult our website at [www.biologie.uni-hamburg.de/popgen](http://www.biologie.uni-hamburg.de/popgen). Applications should include a cover letter, curriculum vitae, copies of degree certificate(s) as well as an abstract of your Master thesis. The application deadline is October 20th, 2017. Please send applications to: [mathilde.cordellier@uni-hamburg.de](mailto:mathilde.cordellier@uni-hamburg.de).

Official Ad: <https://www.uni-hamburg.de/uhh/-stellenangebote/wissenschaftliches-personal/fakultaet-mathematik-informatik-und-naturwissenschaften/-20-10-17-397en.pdf> – Jun. Prof. Dr. Mathilde Cordellier

Universität Hamburg Zoologisches Institut Martin-Luther-King Platz 3 20146 Hamburg

Tel: +49-40-42838-3933 Fax: +49-40-42838-3937

<https://www.biologie.uni-hamburg.de/popgen>  
[mathilde.cordellier@uni-hamburg.de](mailto:mathilde.cordellier@uni-hamburg.de)

---

## UHawaii GenomicsAndSymbiosis

I am recruiting graduate students for Fall 2018 to study the evolution and genomics of insect-microbe symbioses at the University of Hawaii.

The Chong lab uses a combination of experimental, molecular, and bioinformatic approaches to investigate the evolution and genomics of symbiosis. Research in the lab currently focuses on (1) understanding how accelerated rates of mutation accumulation in symbionts impacts genome evolution and host fitness (2) investigating the processes that shape the evolutionary trajectory of symbiotic lineages. Our lab uses the model system for symbiosis, pea aphids and their symbiont *Buchnera aphidicola*, as well as other insect-symbiont systems to investigate these topics. We also use vertebrate systems to investigate additional questions related to cytonuclear

interactions and genome coevolution.

Students with experience in evolution, genomics, organismal biology, and/or bioinformatics are particularly encouraged to apply.

For more information about the lab please visit: [www.chonglab.org](http://www.chonglab.org) Prospective students are encouraged to email Becky Chong at [rachong@hawaii.edu](mailto:rachong@hawaii.edu). Please include in your email a statement about 1) the research questions that you would like to pursue and how these fit in with current lab research, 2) a brief overview of your previous academic and research experiences, and 3) a CV (and GRE scores if available).

\*\*\*Note: In order to apply for the program you must have taken the GRE, and applicants with a first language other than English must submit scores on the Test of English as a Foreign Language (TOEFL).

The deadline for application to the graduate program is December 15, 2017. For information about graduate admissions visit: <https://manoa.hawaii.edu/biology/-graduate/admissions> For information about the program and department visit: <https://manoa.hawaii.edu/-biology/> Dr. Rebecca A. Chong Postdoctoral Fellow Department of Integrative Biology University of Texas at Austin

Beginning January 2018: Assistant Professor Department of Biology University of Hawaii

“[rachong@hawaii.edu](mailto:rachong@hawaii.edu)” <[rachong@hawaii.edu](mailto:rachong@hawaii.edu)>

---

## UHawaii Hilo TropicalConservation

We are announcing a great opportunity for students interested in an M.S. degree in tropical conservation biology and environmental science. Our program at the University of Hawaii at Hilo provides training in basic, applied, and socio-ecological research that is relevant to careers in research and natural resource management in one of the premier places in the world to study ecology, evolution, and conservation. Based on Hawaii Island, students are immersed in the extraordinary natural and social landscapes that allow for hands-on research and training in a variety of marine and terrestrial environments. The program consists of both thesis and internship tracks.

Please visit us at: <http://tcbes.uhh.hawaii.edu/-documents/TCBESMastersFlier2017.pdf> or <http://tcbes.uhh.hawaii.edu/> We would appreciate it if you

could pass on this information to prospective students. Priority deadline for Fall 2018 is December 1. Please share this with other faculty who advise students about graduate school opportunities.

Matthew Knope <knope@hawaii.edu>

---

## Ullinois EvolutionaryBiology

The Department of Animal Biology at the University of Illinois is accepting applications for graduate students for admission in Fall 2018. We accept applications for both the Master's (M.S.) and Doctor of Philosophy (Ph.D.) degrees. We are an interactive group with expertise in ecology, evolution, behavior, bioinformatics, conservation, genetics & genomics, physiology, neuroscience, endocrinology, and morphology. Students take many approaches to their studies including field work on whole organisms, genomics/bioinformatics, lab experimentation, and theory. The University of Illinois at Urbana-Champaign also offers state-of-the-art research facilities in imaging, genomics, and engineering. Urbana-Champaign is a pleasant, affordable, university town with good music and restaurants. It has its own airport and is close to three major U.S. cities (Chicago, Indianapolis, St. Louis).

Students for the Ph.D. are typically funded for 5-years with a combination of fellowships, research assistantships, and teaching assistantships. The deadline for consideration for fellowship support is December 15, 2017. We will consider to consider students for admission until January 1, 2018. For further information, see <http://www.life.illinois.edu/animalbiology/-graduate.program.htm> The following faculty are actively recruiting students:

Philip Anderson - Comparative evolutionary biomechanics in both vertebrates and invertebrates. Current areas of specific interest include: examining the evolution of biological cutting/puncture systems; biomechanical and morphological diversification in deep-time; evolution of multi-part biomechanical systems.

Alison Bell - Individual variation; animal personality and behavioral syndromes; neurogenomics; transgenerational plasticity; evolution of behavior. We primarily study threespined stickleback fish.

Carla Caceres - Population, community and evolutionary ecology; life-history evolution; ecology of infectious disease; limnology.

Julian Catchen - Evolution of the genome; computational biology and population genomics; identifying large structural variation in populations of threespine stickleback; investigating the evolution of the notothenioid (Antarctic fishes) genome by examining the adaptive radiation of five notothenioid species. RADseq, assembly, and genetic mapping analytical method development.

Chris Cheng - Evolutionary genomic, transcriptomic, physiological and biochemical changes accompanying cold adaptation and cold specialization in Antarctic and Arctic fishes. Genetic origins and molecular mechanisms of evolution of antifreeze proteins and other novel cold-adaptive genes and functions. Marine biodiversity in polar regions. Field research in Antarctica and the Arctic.

Becky Fuller - Evolutionary biology of fishes; evolution of color patterns/color vision; speciation as a function of adaptation to salinity and genomic rearrangements; speciation in darters and killifish

Mark Hauber - Ecology and evolution in birds; brood parasitism; comparative chemistry of egg shell pigmentation, acoustic and visual recognition systems in birds, neuro-ethology and -genomics, seabird conservation

Ken Paige - Plant-animal interaction with an emphasis on understanding the phenomenon of overcompensation from ecological, physiological, genetic and evolutionary perspectives; conservation biology; evolutionary ecology.

Charles Roseman - Evolutionary quantitative genetics, evo-devo, evolution of the g-matrix with emphasis on how small changes in development alter developmental trajectories and adult phenotypes; mammals

fuller@life.illinois.edu

---

## UKentucky EvolutionEcology

# Graduate Recruiting in Evolution and Ecology at the University of Kentucky #

The University of Kentucky < <http://www.uky.edu> > (UK) is recruiting outstanding graduate students in the fields of evolutionary biology and ecology. UK is the home of a diverse set of research groups that use laboratory, field, computational, and mathematical tools to study questions in population and evolutionary genetics and genomics, ecological genetics, phylogenetics, evolutionary ecology, physiological ecology, conservation biology, behavioral ecology, plant ecology, and other

fields in evolution and ecology. These research groups are housed in a number of departments on campus including the Departments of Biology and Mathematics in the College of Arts and Sciences and the Departments of Entomology, Plant and Soil Sciences, Plant Pathology, and Forestry & Natural Resources in the College of Agriculture, Food and Environment.

Research groups that support graduate study are listed below. Please contact individual faculty mentors about opportunities in their group and their department more broadly. Graduate funding depends on the department and research group and includes research and teaching assistantships. For example, the Department of Biology offers teaching assistantship support with competitive stipends for five years contingent upon progress to a PhD.

## Department of Biology ##

\* Carol Baskin. Plant ecology. < <https://bio.as.uky.edu/users/ccbask0> > \* Phil Crowley. Evolutionary ecology. < <https://bio.as.uky.edu/users/pcrowley> > \* Catherine Linnen. Adpatation and speciation genomics. < <http://www.linnenlab.com/> > \* Nicholas McLetchie. Plant reproductive ecology. < <http://www.i-m.mx/McLetchie/McLetchieLab2/welcome.html> > \* Craig Sargent. Behavioral and evolutionary ecology. < <http://darwin.uky.edu/~sargent/> > \* Jeramiah Smith. Genome biology and evolution. < <http://www.i-m.mx/jeremiahsmith/SmithLabUKy/> > \* Jeremy Van Cleve. Theoretical and computational evolution and ecology. < <http://vancleve.theoretical.bio> > \* David Weisrock. Evolutionary genomics and phylogenetics. < [http://sweb.uky.edu/~dweis2/The\\_Weisrock\\_Lab/Front\\_Page.html](http://sweb.uky.edu/~dweis2/The_Weisrock_Lab/Front_Page.html) > \* David Westneat. Behavioral ecology. < <http://www.i-m.mx/DFWestneat/DavidFWestneat/> > ## Department of Mathematics ##

\* David Murrugarra. Mathematical biology. < <http://www.math.uky.edu/~dmu228/> > \* Olivia Prosper. Mathematical biology. < <http://www.ms.uky.edu/~ofpr222/> >

## Department of Entomology ##

\* Charles Fox. Life history evolution and behavioral ecology. < <http://www.uky.edu/~cfox/> > \* Clare Rittschof. Behavioral ecology, neuroscience, and genomics. < <https://clarerittschof.com/> > \* Nicholas Teets. Evolutionary and physiological adaptations to extreme environments. < <http://www.teetslab.com/> > \* Jennifer White. Ecology, evolution, and behavior of symbionts. < <https://entomology.ca.uky.edu/person/jennifer-white> > ## Department of Forestry & Natural Resources ##

\* Mary Arthur. Forest ecology. < <http://forestry.ca.uky.edu/mary-arthur> > \* John Cox. Wildlife and Conservation Biology. < <http://forestry.ca.uky.edu/john-cox> > \* Steven Price. Ecology and conservation biology. < <http://pricelab.ca.uky.edu/> > \* Jian Yang. Landscape ecology. < <https://forestry.ca.uky.edu/jian-yang> >

## Department of Plant and Soil Sciences ##

\* Rebecca McCulley. Grassland ecology. < <http://www.mcculleylab.org/> >

## Department of Plant Pathology ##

\* Christopher Schardl. Evolution of plant and endophyte mutualisms. < <https://plantpathology.ca.uky.edu/lab-schardl> > ## Life in Lexington, KY ##

UK is located Lexington, KY, known for the many bucolic horse farms that

— / —

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>

## UMississippi HostParasiteEvolution

PhD position in evolution/behavior/physiology of host-parasite relationships

The Balenger Lab at the University of Mississippi is seeking a graduate student to join our research group beginning Fall 2018. The student would develop an independent research focus in line with ongoing lab projects. Current topics include 1) the adaptive value of phenotypic plasticity by hosts in mediating effects of parasites, 2) the role of parasites in driving the evolution of host resistance and the expression of sexually selected traits. Our studies utilize relationships between locally common songbirds & the microbial pathogen *Mycoplasma gallisepticum* AND field crickets & the acoustically orienting parasitoid *Ormia ochracea*. Projects will utilize some combination of field, aviary, wet lab, and/or bioinformatic approaches; individuals are encouraged to pursue their own particular strengths and interests.

Funding is guaranteed for 5 years, mostly through teaching assistantships, but research assistantships are also possible. Assistantships include benefits, a tuition waiver, and a competitive stipend (\$22K for PhD stu-

dents in 2017). An additional competitive financial supplement is available for top applicants.

Prospective students with a background in animal behavior, epidemiology, molecular biology, immunology, or bioinformatics are strongly encouraged to apply. However, curiosity, determination and a collaborative attitude are the most important traits. Interested applicants should email the PI, Susan Balenger, at [balenger@olemiss.edu](mailto:balenger@olemiss.edu) after seeking more information at <http://susanbalenger.weebly.com> Susan Balenger, PhD Assistant Professor Dept. of Biology University of Mississippi <http://susanbalenger.weebly.com/> Susan Balenger <[balenger@olemiss.edu](mailto:balenger@olemiss.edu)>

---

## UMontana SpeciationAdaptation

The Good lab at the University of Montana in Missoula is looking to recruit highly motivated Ph.D. students interested in evolutionary genomics.

Current major research projects in the lab are focused on (1) the genetic basis of reproductive isolation and (2) adaptation to novel environments in mammals. Our speciation research utilizes genomic analysis of hybrid rodent model systems to understand the evolution of hybrid inviability and sterility, with an emphasis on sex chromosome evolution and gene expression. We are particularly interested in recruiting students interested in the studying the evolution of genomic imprinting and the disruption of embryonic growth pathways in hybrid mice and hamsters. Current research on adaptation is focused on climate change and the evolution of seasonal coat color camouflage in snowshoe hares and other mammals. Our adaptation research is part of the newly established UNVEIL research and training network and include the possibility of dedicated fellowship support ([www.unveilnetwork.org](http://www.unveilnetwork.org)).

The University of Montana is home to a strong collection of faculty researching ecology and evolution. The Division of Biological Sciences hosts an excellent graduate program in Organismal Biology, Ecology, and Evolution (OBEE) with an emphasis on interdisciplinary training in evolution, genomics, ecology, physiology, and behavior. Missoula is a great college town in the Northern Rocky Mountains. For more information on the Good lab please visit the lab website: ([www.thegoodlab.org](http://www.thegoodlab.org)). Interested students are encouraged to email Jeff Good. Please include a brief description of your research interests and a CV in your email. Note that the target date

for applications for Fall 2018 admission to the OBEE program is December 1, 2017.

[jeffrey.good@umontana.edu](mailto:jeffrey.good@umontana.edu)

Jeffrey M. Good, Ph.D.

Associate Professor Division of Biological Sciences The University of Montana 32 Campus Drive, HS104 Missoula MT 59812 Phone: 406-243-5771 Fax: 406-243-4184 Website: <http://www.thegoodlab.org/> Jeffrey Good <[jeffrey.good@mso.umt.edu](mailto:jeffrey.good@mso.umt.edu)>

---

## UMuenster TemperatureAndReproduction

PhD position: Reproduction in a changing world I invite applications for a PhD position in the research group of Dr. Claudia Fricke (<http://ieb.uni-muenster.de/-evolseco>) at the Institute for Evolution and Biodiversity at the University of Muenster in Germany.

The start date will be as soon as possible, the latest January 2018.

We study the evolution of sexual traits and within this project the interested candidate will study the effects of temperature on male and female reproduction. High temperatures particularly affects male reproductive success and we want to understand the underlying molecular changes that lead to the temperature sensitivity of male fertility.

Using experimental evolution the aim is to test whether this temperature sensitivity can evolve and males remain fertile even at elevated temperatures. This will give insight whether adaption to novel temperature environments is possible or whether a constraint will possibly limit species persistence through a reduce ability to reproduce. For this research work the successful candidate will work with the fruit fly *Drosophila melanogaster*, which is a widely used model organism. This project will combine behavioural and fitness assays with molecular work and an experimental evolution approach to gain more insight into the ecology of reproduction.

WWU is a large vibrant university hosting a number of excellent scientific institutions (<http://www.uni-muenster.de/en/>). The Institute for Evolution and Biology provides a stimulating research environment with a number of scientific groups researching on diverse topics centred on different aspects of the study of Evolution and the student can benefit from the structured

PhD program offered by the Munster Graduate School of Evolution (<http://www.uni-muenster.de/Evolution/-mgse/>). The town of Muenster itself is characterised by its many students and presents a dynamic environment with many cultural and social events throughout the year (<http://www.muenster.de/en/>).

Qualifications: I search a highly motivated student of any nationality and those with the equivalent of a Master's degree in biology are invited to apply. A background in any of the following subjects will be useful: previous experience with practical *Drosophila* or other insect work, good molecular skills, preferably experience with bioinformatics, a good understanding of statistics. Applicants should have excellent communication skills. The working language of the institute and the lab is English and good proficiency in spoken and written English is a requirement.

Please send your application in one single PDF file to Dr. Claudia Fricke (Claudia.Fricke@uni-muenster.de). Included should be 1) a cover letter with a statement of your research interests and motivation (max.

1 page), 2) your CV including details of your research experience (with the abstract of your masters thesis) and 3) contact details of at least two referees.

Applications should be written in English and the deadline is the 10th of November 2017.

The salary will be for 36 months (TV-L E13/65%) with regular weekly working hours of 39 hours and 50 minutes. Applications of women are specially invited. In the case of similar qualification, competence and specific achievements, women will be considered on preferential terms within the framework of the legal possibilities. Preference will be given to disabled applicants in case of equivalent qualification.

Claudia Fricke <Claudia.Fricke@uni-muenster.de>

to the evolution of phenotypic diversity, adaptation to novel climates, and longstanding theories explaining the latitudinal diversity gradient. To this end, the successful applicant will learn and apply phylogenetic, genetic, genomic, and macroevolutionary methods, and be involved with ongoing components of the work including trait assays for thermal tolerance and experimental evolution. The student will also have the opportunity to participate in international field expeditions and will receive cross-disciplinary training in evolution and macroecology.

Qualifications: The successful candidate will have a BA or BS in Biology or a related discipline. Research experience at the Master's level is preferred, and students who have experience with genetic or genomic data and/or qualifications in evolutionary entomology are especially encouraged to apply. We pride our research groups on being safe and inclusive environments, and members of historically underrepresented groups in STEM are encouraged to apply.

Application Materials: To be considered for this position, please submit the following application materials to Dr. Daniel Matute (dmatute@email.unc.edu): 1) A letter describing your research background and interest in the position (no more than 1 page), 2) a current CV, 3) unofficial transcripts, and 4) the names and contact information for 3 references.

Application materials should be sent by 21 November 2017.

Aaron Comeault <aacomeault@gmail.com>

---

## UNorthCarolina DrosophilaAdaptation

A PhD research assistantship is available for an outstanding, motivated student to work in the Matute and Hurlbert Labs in the Department of Biology at the University of North Carolina. The student will work on an NSF-funded Dimensions of Biodiversity project on thermal niche evolution and conservatism across the genus *Drosophila*. This is a multifaceted project, giving the student the opportunity to address questions related

---

## UNorthCarolina Greensboro MicrobialEvolution

The Bobay lab is looking to recruit a graduate student for Fall 2018.

The lab focuses on microbial evolution and genomics. Our research topics currently include: 1) the evolution of recombination in bacteria and archaea 2) the processes of speciation in microbial populations and 3) the evolution of gene diversity in prokaryotes.

We primarily use computational methods but an experimental component is also possible. Students with experience in evolution, microbiology, metagenomics, and/or bioinformatics are particularly encouraged to apply.

For more information about the lab please visit:

<https://biology.uncg.edu/people/louis-marie-bobay-2/>  
<https://louismariebobay.wixsite.com/bobaylab>

Prospective students are encouraged to email Louis-Marie Bobay at [ljbobay@uncg.edu](mailto:ljbobay@uncg.edu) by December 31st (later inquiries might also be considered). Include in your email a statement including 1) the research questions that you would like to pursue, 2) how these fit in with current lab research, 3) a brief overview of your previous academic and research experiences, 4) CV or resume, and 5) GRE scores (if you have them).

\*\*\*Note: In order to apply for the program you must have taken the GRE, and applicants with a first language other than English must submit scores on the Test of English as a Foreign Language (TOEFL).

Students accepted into the Environmental Health Science (EHS) PhD program will be provided a tuition waiver and a competitive stipend.

The deadline for application to the Environmental Health Science (EHS) PhD program is in February 2018. For information about the program please visit <https://biology.uncg.edu/graduate/phd-environmental-health-science/> To find out more information about Greensboro, North Carolina you can visit: <https://realestate.usnews.com/places/north-carolina/greensboro> Louis-Marie Bobay

Assistant Professor

Department of Biology, University of North Carolina Greensboro

Web sites: <https://biology.uncg.edu/people/louis-marie-bobay-2/> and <https://louismariebobay.wixsite.com/bobaylab> Louis-Marie Bobay <[ljbobay@uncg.edu](mailto:ljbobay@uncg.edu)>

---

## UNorthCarolina Greensboro MicrobialGenomics

I am looking to recruit a graduate student for Fall 2018 to study the evolution and dynamics of microbial communities at the University of North Carolina Greensboro.

In the Raymann lab we use the honeybee as a model system to study the evolution and dynamics of host-associated microbial communities. Research in my lab currently focuses on 1) understanding how chemical and environmental perturbations impact the population dynamics of the honeybee gut microbial communities and how these perturbations impact honeybee health and 2) investigating how microbial community imbalance and within-host evolution influences pathogen susceptibility, what role resident microbes play in protecting their host, and how and when opportunistic pathogens become virulent.

Students with experience in microbiology, metagenomics, evolution, and/or bioinformatics are particularly encouraged to apply.

For more information about the lab please visit: <https://biology.uncg.edu/people/kasie-raymann/> and <https://kraymann86.wixsite.com/raymannlab> Prospective students are encouraged to email Kasie Raymann at [krayman@uncg.edu](mailto:krayman@uncg.edu) by December 31st (later inquiries might also be considered). Include in your email a statement including 1) the research questions that you would like to pursue, 2) how these fit in with current lab research, 3) a brief overview of your previous academic and research experiences, 4) CV or resume, and 5) GRE scores (if you have them).

\*\*\*Note: In order to apply for the program you must have taken the GRE, and applicants with a first language other than English must submit scores on the Test of English as a Foreign Language (TOEFL).

Students accepted into the Environmental Health Science (EHS) PhD program will be provided a tuition waiver and a competitive stipend.

The deadline for application to the Environmental Health Science (EHS) PhD program is in February 2018. For information about the program

please visit <https://biology.uncg.edu/graduate/phd-environmental-health-science/> To find out more information about Greensboro, North Carolina you can visit: <https://realestate.usnews.com/places/north-carolina/greensboro> Kasie Raymann

Assistant Professor

Department of Biology, University of North Carolina Greensboro

Web sites: <https://biology.uncg.edu/people/kasie-raymann/> and <https://kraymann86.wixsite.com/-raymannlab>

Kasie Raymann Ph.D. Postdoctoral research fellow Laboratory of Nancy Moran Department of Integrative Biology University of Texas at Austin

Kasie Raymann <kraymann86@gmail.com>

---

## UNotreDame EvolutionPathogens

The Perkins Lab at the University of Notre Dame is seeking exceptional students interested in studying diverse topics related to the epidemiology, ecology, and evolution of vector-borne pathogens. Research activities in the lab involve the use of a wide range of mathematical, statistical, and computational tools to address basic and applied research topics, including

(1) forecasting spatiotemporal variability in pathogen transmission and disease incidence, (2) leveraging pathogen genetic data to make inferences about pathogen spread, (3) coupling mathematical models with empirical studies of vaccines and vector control, and (4) blending modeling and experiments to understand and mitigate the evolution of vector resistance.

In addition to a collegial lab environment with members at a variety of career stages and from diverse backgrounds, students will have opportunities for mentorship from and collaboration with a number of intramural and extramural colleagues. A passion for developing and applying innovative quantitative approaches for extracting meaning from empirical data and/or elucidating new biological understanding using theoretical approaches is essential. Engaging in the collection of empirical data is encouraged, but not required.

Interested applicants should email the PI, Alex Perkins, at [taperkins@nd.edu](mailto:taperkins@nd.edu) after seeking more information at <http://perkinslab.weebly.com>. Top applicants will have prior experience in research and a demonstrated com-

mitment to learning new quantitative and computer programming skills.

Funding is guaranteed via a mixture of research and teaching assistantships for 5 years. The University of Notre Dame offers excellent benefits, a full tuition waiver, and a generous stipend (~\$29K for 2017). A variety of fellowship opportunities are open to top applicants. For more information regarding the Biology Graduate Program, see <http://biology.nd.edu> and <http://-graduateschool.nd.edu>. The deadline for receipt of all application materials for the PhD program is December 1, 2017.

Alex Perkins <taperkins@gmail.com>

---

## UNottingham SticklebackEvolution

Fish in a biogeochemical barrel: taking aim at the evolutionary consequences of nutrient colimitation in freshwater.

How does the abiotic chemistry of the environment affect biotic evolution? We have almost no idea! There is more information available on the genome sequence of most organisms than on their elemental composition! We seek an ecology, biology or chemistry graduate with an interest in evolution, for an exciting, interdisciplinary, collaborative PhD to investigate how fish evolution is affected by the chemistry of the water in which they live and the food they eat. The successful candidate will carry out fieldwork in the Scottish Outer Hebrides and fish husbandry in Nottingham. They will learn advanced chemical/stable isotope techniques to quantify and model the elemental composition of fish, their diet and environment, and use image analysis to quantify variation in fish morphology. Additional opportunities in bioinformatic analysis of genomic datasets are possible depending on the candidates own interests. The student will receive training in advanced statistical methods, and in evolutionary biology, and practical training in quantification of morphological phenotypes. The successful candidate will be based in Nottingham, but will make supervisory visits to Lancaster.

Project eligibility Applicants should have an interest in evolutionary biology and/or ecology and a STRONG background in chemistry (A level at least). Applicants should hold a minimum of a UK Honours degree at 2.1 or equivalent in a STEM subject (science, technology, engineering, maths). Candidates with additional (e.g. Masters) qualifications will be looked on favourably.

Enquiries Further details from, and applications to: Dr Andrew MacColl, [andrew.maccoll@nottingham.ac.uk](mailto:andrew.maccoll@nottingham.ac.uk)  
DEADLINE: 15th December 2017

Associate 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@nottingham.ac.uk](mailto:Andrew.Maccoll@nottingham.ac.uk)

---

## UOregon EcolEvolution

The Institute of Ecology and Evolution is seeking highly-motivated graduate students to join our expanding research group. Our Institute brings together scientists from the Departments of Biology, Anthropology, Geography, and Math applying cutting-edge experimental, computational, and theoretical approaches to diverse areas in ecology and evolutionary biology. More details can be found at <http://ie2.uoregon.edu/>. The University of Oregon possesses outstanding laboratory facilities and proximity to field sites from the Pacific Ocean to the mountains and high desert of Eastern Oregon. Our integrative approach to graduate education is supported by research grants, training grants, and fellowships from federal and privately-funded agencies.

Eugene is a lively college town with access to numerous outdoor activities in the picturesque Willamette Valley. The Oregon coast, mountain ski resorts, and downtown Portland are all accessible within a two hour drive.

Applications to the Department of Biology can be submitted at <http://biology.uoregon.edu/graduate-studies/-apply/>. The deadline for applications is December 1, 2017. For more information on our program, contact Matt Streisfeld ([mstreis@uoregon.edu](mailto:mstreis@uoregon.edu)), Matt Barber ([mfbarber@uoregon.edu](mailto:mfbarber@uoregon.edu)), or faculty members in whose research you are interested. Direct specific inquiries about the graduate application process to the Biology Graduate Program Manager, Jessica Wilson ([wilson21@uoregon.edu](mailto:wilson21@uoregon.edu)).

[mfbarber@uoregon.edu](mailto:mfbarber@uoregon.edu)

---

## UOulu EvolutionaryGenomics StatisticalGenetics

Doctoral student position for Evolutionary Genomics / Statistical Genetics, 4-year position 2018-2021 in Biocenter Oulu and Faculty of Science, University of Oulu

[https://rekry.saima.fi/certiahome/-open\\_job\\_view.html?did=5600&jc=1&id=00004448&lang=en](https://rekry.saima.fi/certiahome/-open_job_view.html?did=5600&jc=1&id=00004448&lang=en)

Applications are invited for a full-time doctoral student position for a maximum of four years, starting at the earliest on 01.01.2018 in a Biocenter Oulu research project headed by Prof. Outi Savolainen, Prof. Mikko Sillanpää and Dr. Tanja Pyhäjärvi in Faculty of Science. The Savolainen-Sillanpää-Pyhäjärvi group is located in two research units: the Ecology and Genetics Research unit (O.S., T.P.) and the Mathematical Sciences Research unit (M.S.).

Our project aims to study genotype and phenotype relationships and the genetics of environmental adaptation, with two approaches. We develop new methods for genomic and statistical analysis and use experimental approaches to unravel the genetic architecture of phenotypic variation. Especially the interplay of gene expression patterns, adaptive variation and quantitative traits is in our focus. These goals can be achieved by utilizing multi-marker variable selection, genomic prediction approaches, Gaussian process models, or network-construction methods on the statistical side. For the empirical work, we use plant phenotypes, DNA sequence variation and gene expression data to achieve these goals. We aim to integrate the statistical and empirical work providing statistical methods for a wide community and tools for efficient use of empirical data.

See

<http://www oulu.fi/biocenter/groups/savolainen-sillanpaa-pyhajarvi/details> <https://wiki oulu.fi/-pages/viewpage.action?pageId=13382392> <http://-cc oulu.fi/~ misillan/> The position is supervised by Mikko Sillanpää and Tanja Pyhäjärvi. The student could have background in genetics, statistics, biology, bioinformatics and/or computational science to allow bridging statistics and genetics. The position is focused on new method development and/or interplay of gene expression patterns, adaptive variation and quantitative traits, depending on the student's background.

## Requirements

To successfully occupy the position of a doctoral student, the candidate must possess a Master's degree or an equivalent degree (e.g. licentiate) preferably in Statistics, Genetics or another suitable field. Degree must have been completed with good grades by 31.12.2017 (or latest before the job contract starts). Ability to pursue independent research and excellent writing and fluency in English is expected. The doctoral student position is intended for an Early Stage Researcher (ESR) who, according to the "European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers", is defined as a researcher in the first four years (full-time equivalent) of his/her research activity, including the period of research training. Applicants will be either starting their doctoral training, or will have completed no more than two full years of training (adjusted for possible previous part-time status) at the time the position is filled. The selected candidate will carry out his/her doctoral studies in one of the doctoral programmes of the University of Oulu Graduate School (UniOGS) and must meet the minimal requirements to receive doctoral study rights as defined in [http://www.oulu.fi/uniogs/requirements\\_for\\_admission](http://www.oulu.fi/uniogs/requirements_for_admission). Salary

The salary of the selected doctoral student will be set on levels 2 - 4 of the national salary scale for the teaching and research staff of Finnish universities. In addition, a supplementary remuneration will be given for personal achievement and performance (max. 46.3%). The total salary for these levels (before tax) currently ranges from about 1985 to 3621 Euros/month for full-time employment.

## Application

Applications must be submitted using the electronic application form by November 23th, 2017, 24:00 (Finnish local time), with the following attachments as three separate pdf files:

1. Complete CV containing contact information of at least two referees (Max. size limit of the attachment: 5 Mbytes)
2. Motivation letter (maximum 1 page) describing prior knowledge and research interests and career plans (1-2 pages; max. size limit of the attachment: 2 Mbytes).
3. Certificates/Diplomas: Scanned electronic copies of diplomas and transcripts of the records of relevant previous degrees. If the original documents are not in English, Finnish or Swedish, each document must

— / —

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>

---

## UOulu SpeciesCoevolution

PhD position in the project "Macroecology and diversity of species interactions" at the University of Oulu, Finland.

Coevolution among species via species interactions is the major driving force of biodiversity. Yet, the concept of and metrics to estimate species interactions is largely missing from biodiversity studies. The project has two major aims. First, our goal is to create a novel community diversity index, which quantitatively grade communities in terms of the sign, strength and variation of interactions. We will then examine how interaction index varies relative to taxonomic, phylogenetic and functional diversity, stability of the communities and the level of disturbance. Second, we aim to estimate a novel species-specific characteristic, which describes species competitive - facilitative interaction abilities. The association of this new metric with species capability to adapt to global changes is then examined. The data to be used in the project is negotiable; comprehensive and long-term bird survey data from Europe and moth data from Finland are available. We will use a state-of-the-art statistical modelling technique, Joint Dynamic Species Distribution Modelling, developed by one of the PIs of the project, Dr. James Thorson, in extracting species associations from the survey data.

The position is for 4 years. The start date of the position is January 2018, with some flexibility. We aim that the chosen candidate will spend 6-12 months at the University of Washington (Seattle, USA) and learn modeling techniques with Dr. Thorson. Funding for the visit will be applied from various sources, such as Fulbright Center. Position involves occasional teaching. The location of the position is at the Research Unit of Ecology and Evolution, University of Oulu, Finland. Salary is based on the University salary system. Starting salary is about 2100-2300 euro and increases with experience. Health care is provided by the employer.

Research Group. Principal Investigators of the project are Dr. Jukka Forsman (University of Oulu, Finland) and Dr. James Thorson (National Marine Fisheries Service, NOAA, Seattle, USA). Other collaborators of the project are Vincent Devictor (University of Montpellier, France), Mikko Mönkkönen (University of Jyväskylä) and Panu Välimäki (University of Oulu, Finland).

Qualification requirements. Applicants must have a Master of Science degree in ecology, evolutionary biology, statistical modeling or related areas. The recruited person is expected to be enterprising and have excellent English communication skills, as well as experience programming in the R statistical environment. Following qualifications and experience is considered as an advantage: managing and analyzing large data sets, species distribution modeling, experience in estimating diversity indexes (taxonomic, functional and phylogenetic), statistical modelling, experience in applying GIS-data on biological systems, and global change studies.

Contact persons for further information. Project leaders Jukka Forsman, email: [jukka.forsman \(at\)oulu.fi](mailto:jukka.forsman@oulu.fi), tel.: +358 2494 481951 and Dr. James Thorson, email: [James.T.Thorson\(at\)gmail.com](mailto:James.T.Thorson@gmail.com)

Please send applications through university recruitment system:

[https://rekry.saima.fi/certiahome/-open\\_job\\_view.html?did=5600&jc=1&id=0004414&lang=fi](https://rekry.saima.fi/certiahome/-open_job_view.html?did=5600&jc=1&id=0004414&lang=fi)

Jukka Forsman <[Jukka.Forsman@oulu.fi](mailto:Jukka.Forsman@oulu.fi)>

---

### UPennsylvania MacroevolutionFishesPaleo

PhD Fellowship in Macroevolution/Paleobiology/Fishes at the University of Pennsylvania

A PhD fellowship in Paleobiology is available in the Department of Earth and Environmental Science at the University of Pennsylvania, starting in Fall 2018. Prof. Lauren Sallan seeks a graduate student to address major questions about evolution using the fossil record. These include: how global change has affected life over time, how life evolves at high levels (macroevolution), how ecology shapes evolution long-term, the relationships of living and dead animals (phylogeny), and the origins of living biodiversity. While research in the lab has focused on fishes, any suitable group of fossils may be used. Potential thesis topics include, but are not limited to: the long-term effects of mass extinctions (e.g. the end-Devonian and end-Ordovician), the roles of predation and competition in marine ecosystem evolution, ecological characteristics of evolutionary radiations past and present, the effects of long-term climate and environmental changes (e.g. the Late Paleozoic Ice Age) on biodiversity, and major transitions in early vertebrate

evolution (e.g. origin of jaws, invasion of land). The student can also develop a novel project that addresses similar questions using quantitative, phylogenetic and/or descriptive methods.

This is fully-funded fellowship with stipend and tuition support guaranteed for the length of the PhD. Applicants are encouraged to contact Prof. Sallan ([lsallan@upenn.edu](mailto:lsallan@upenn.edu)) for more details. Additional information on the fellowship is available on the departmental website: [www.sas.upenn.edu/earth](http://www.sas.upenn.edu/earth). Applications for entry in Fall 2018 are due January 15, 2018, with interviews in February. Applications to graduate school at Penn must be submitted online at <https://www.applyweb.com/upenn/> Lauren Sallan -Martin Meyerson Assistant Professor in Interdisciplinary Studies Earth and Environmental Science University of Pennsylvania -2017 TED Fellow Office: Hayden Hall 162 Phone: (215) 898-5650 Email: [lsallan@upenn.edu](mailto:lsallan@upenn.edu) Website: [www.laurensallan.com](http://www.laurensallan.com) "Sallan, Lauren C" <[lsallan@sas.upenn.edu](mailto:lsallan@sas.upenn.edu)>

---

### UPittsburgh HostMicrobeInteractions

GradStudentPosition: UnivPittsburgh.HostMicrobeInteractions

University of Pittsburgh Principal Investigator: Dr. Kevin Kohl - [kevin.d.kohl@gmail.com](mailto:kevin.d.kohl@gmail.com)

The Kohl Lab is recruiting motivated students to enter the graduate program at University of Pittsburgh. The lab studies the patterns and rules in microbial symbiosis that drive the ecology and evolution of terrestrial vertebrate hosts. We utilize comparative, experimental, and computational approaches to investigate microbe-dependent physiological functions at various levels of biological organization and in diverse systems spanning birds, mammals, and herptiles.

For publications and examples of past research, visit [www.kevindkohl.com](http://www.kevindkohl.com) For details on how to apply, visit [www.biology.pitt.edu/graduate/how-apply](http://www.biology.pitt.edu/graduate/how-apply) Contacting Dr. Kohl is highly recommended prior to applying

Kevin Kohl <[kevin.d.kohl@gmail.com](mailto:kevin.d.kohl@gmail.com)>

---

## UppsalaU HumanEvolGenetics

PhD position in human population genetics of African populations: A PhD position in the field of human evolutionary genetics is available at the Department of Organismal Biology, Uppsala University (Sweden).

The PhD position will be situated in the group of Dr. Carina Schlebusch within the Human Evolution sub-Program at the Department of Organismal Biology (Evolutionary Biology Center, Uppsala University). The Schlebusch group is specifically interested in studying human history on the African continent and uses genetic data from modern day populations and ancient remains as a tool for the inference of African history. The Human Evolution sub-Program, in which the Schlebusch group is situated, has a broad interest in population genetics and human evolution. There are ample opportunities to work closely with post-docs and other PhD students that focus on related projects. The research environment is international with English being the working language. See Dr. Schlebusch web-page for more information on research and recent publications (<http://www.iob.uu.se/research/evolution-and-development/schlebusch/>) and Human Evolution sub-Program web-page for more information on the Program (<http://www.iob.uu.se/research/evolution-and-development/human-evolution/>).

**Project description:** The spread of farming practices has had a marked influence on how humans are distributed around the globe today. Inferences about the spread of farming in Africa are mostly based on linguistic and archeological studies. Genome-wide studies started to make a contribution to research on the history of African farmers but many populations remain poorly represented, making detailed inferences problematic. The present study proposes to investigate spread of farming in Sub-Saharan Africa. The successful candidate will use genomic data (from current day populations and ancient remains) to infer to what extent the spread of farming to the various parts of the African continent, were driven by migrating people, where the people originated from, which routes were followed and the timeframe of the migrations.

**Qualifications:** A Masters degree (or equivalent) in a relevant field is required. The ideal candidate is highly motivated with thorough education and strong interest in evolutionary genetics/genomics, population genet-

ics and human evolution. Previous experience with large-scale genetic data analysis, bioinformatics, and programming is advantageous. Mathematical, computational and statistical training is also advantageous. Field work experience (especially in Africa) and an interest/background in African history is also advantageous. Candidates must be fluent in English.

**How to apply:** The application should include a letter of intent describing yourself and your research interests. The application should also include a CV, copy of master degree diploma and course grades, master thesis and other relevant documents.

**The position:** The PhD student position is for four years. The position can be combined with teaching (up to 20%) that will extend the position with a corresponding amount of time. More information about postgraduate studies at Uppsala University is available at <http://www.teknat.uu.se/education/postgraduate/>. Rules governing PhD studies are set out in the Higher Education Ordinance, chapter 5 §§1-7 and in Uppsala University's rules and guidelines [http://regler.uu.se/-Rules\\_and\\_regulations\\_in\\_English/](http://regler.uu.se/-Rules_and_regulations_in_English/). Uppsala University aims for gender balance and diversity in all activities in order to achieve a higher quality at all levels of the organization. We therefore welcome applicants of any gender and with different birth background, functionality and Life experience.

Uppsala University is an international research university focused on the development of science and education. Our most important assets are all the individuals who with their curiosity and their dedication make Uppsala University one of Sweden's most exciting work places. Uppsala University has 40,000 students, 7,000 employees and a turnover of SEK 6,5 billion.

The Department of Organismal Biology teaches and explores the evolution, development and function of whole organisms. For more information see [www.iob.uu.se](http://www.iob.uu.se). Pay: Fixed pay, According to local agreements. Starting date: 2018-02-01. Working hours: 100 %. For further information about the position please contact Schlebusch, e-mail [carina.schlebusch@ebc.uu.se](mailto:carina.schlebusch@ebc.uu.se). You are welcome to submit your application no later than 19 November 2017

Application link:

— / —

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>

---

## URhodeIsland MarinePopulationGenomics

### PhD Positions(s)

Evolutionary ecology of marine invertebrates

The Puritz Lab of Marine Evolutionary Ecology

Department of Biological Sciences

The University of Rhode Island, Kingston, RI USA

The Puritz Lab in the department of Biological Sciences at the University of Rhode Island is recruiting highly motivated applicants interested in pursuing a PhD in Marine Evolutionary Ecology starting in the Fall of 2018. Students will be expected to develop an independent dissertation research program that extends, compliments, or expands current research in the lab. Possible topics include: exome capture methods and bioinformatics for non-model organisms, comparative genomics of life-history change in sea stars, the evolutionary impacts of multiple anthropogenic stressors, and more!

The College of Environmental and Life Sciences (CELS) has a unified graduate program in Biological and Environmental Sciences < <http://web.uri.edu/cels-gradprograms/bes/> > that offers interdisciplinary, inter-departmental graduate degrees that involve faculty from multiple departments, including Biological Sciences < <http://web.uri.edu/bio/> >; Cell and Molecular Biology < <http://web.uri.edu/cmb/> >; Fisheries, Animal and Veterinary Science < <http://cels.uri.edu/favs/> >; Geosciences < <http://web.uri.edu/geo/> >; Natural Resources Science < <http://web.uri.edu/nrs/> >; Nutrition and Food Sciences < <http://cels.uri.edu/nfs/> >; and Plant Sciences < <http://web.uri.edu/pse/> >; as well as faculty from the Graduate School of Oceanography. Potential students will likely choose to specialize in Ecology and Ecosystems Sciences (EES) or Evolution and Marine Biology (EMB). Application material should be submitted by January 15, 2018 for full consideration.

At a minimum, applicants should have a bachelor's degree in Biological Sciences or a related discipline and have previous research experience. Preference will be given to applicants with strong interests in population genomics with both molecular laboratory experience and basic proficiency in bioinformatics.

Interested students should contact Jon Puritz directly ([jpuritz@uri.edu](mailto:jpuritz@uri.edu)) to discuss research interests and their application. Before doing so, applicants are encouraged to read this excellent guide < <https://contemplativemammoth.com/2013/04/08/so-you-want-to-go-to-grad-school-nail-the-inquiry-email/> > to writing an inquiry email.

[jpuritz@uri.edu](mailto:jpuritz@uri.edu)

---

## USouthampton NHMLondon SpeciationGenomics

Dear Evoldir,

We are currently looking for applicants for a PhD based partly at the University of Southampton and partly at the NHM, London. Please do contact myself ([M.Chapman@soton.ac.uk](mailto:M.Chapman@soton.ac.uk)) or Mark Carine ([M.Carine@nhm.ac.uk](mailto:M.Carine@nhm.ac.uk)) if you have any questions. Pass on to potential students if you know of some. Application deadline is 5th January with interviews in late February/early March.

This project will analyse speciation genomics in a plant genus found throughout the Canary Islands in a wide variety of habitats. Several species are endemics, showing ecological speciation (the origin of species by adaptation to novel environments) within and between islands. A reference genome is being assembled and annotated and the SPITFIRE project will generate and analyse sequencing data from multiple individuals of all the endemic species.

Specific objectives: 1. Phylogenetic analyses of the dynamics of speciation, including the role of introgression in speciation. 2. Measuring divergent adaptation between species through a reciprocal transplant experiment on Tenerife. 3. Identification of candidate genes underlying ecological speciation. 4. Determining the function of a subset of these candidate genes using transgenics.

If you are interested in this studentship and would like more information (note the nationality requirements, funding situation and other requirements) please take a look at:

<http://noc.ac.uk/gsnocs/project/identification-and-analysis-speciation-genes-island-plants-0> Best wishes,  
Mark

Dr. Mark A. Chapman [M.Chapman@soton.ac.uk](mailto:M.Chapman@soton.ac.uk) +44

(0)2380 594396

Biological Sciences University of Southampton Life Sciences Building 85 Highfield Campus Southampton SO17 1BJ

Mark Chapman <markchapman4774@gmail.com>

---

### UStAndrewsEdinburgh EvolutionaryGenetics

PhD position in evolutionary genetics. Universities of St Andrews and Edinburgh, Scotland.

Species grow distinct and adapt to new environments by divergent selection and genetic drift. Detecting and distinguishing selection and drift in genome scale data is challenging and complicated by confounding processes such as gene flow and demographic history. Advances in the availability and methods for the analysis of genomes potentially allow us to reconstruct species evolution with unprecedented resolution. Much new data is emerging on patterns of genomic divergence both within and between species, and debates over the causes of genomic divergence are a major issue in comparative genomics. This project will examine patterns of genomic divergence in one of the best understood of all organisms, the fruit fly *Drosophila*. Genome scale data will be compiled in combination with data on the extent of evolutionary divergence in a range of key traits. These include species distributions, ecology, mating system and the extent of pre- and post-mating reproductive isolation between species. The data will come from both published and novel genome sequences and detailed compilations of the strength of different types of reproductive isolation and ecology exist. The student will integrate this database and use new analytical techniques to accurately quantify genetic divergence and gene flow (inferred as migration rate across different genomic regions). New approaches to outstanding questions in evolutionary divergence can be asked such as; do similar patterns of genomic divergence correlate with sexual or post-mating isolation? Do both influence sex-chromosomes versus autosome divergence similarly? Do ecological generalists show different patterns of genomic divergence from specialists? Do patterns of divergence differ between sympatry and allopatry, and how often do we detect gene flow in sympatric species?

The student will be based at the University of St Andrews and collaborate with a co-supervisor at the Uni-

versity of Edinburgh. The lead supervisor (Mike Ritchie, St Andrews) brings extensive experience of speciation in *Drosophila* and the co-supervisor (Konrad Lohse, Edinburgh) is developing new statistical approaches to the analysis of genome scale data. This 3.5-year studentship (stipend and fees) will be provided at UK/EU citizen rates. International students may apply but will be responsible for the difference in fees; a fee waiver scholarship may be available for outstanding candidates. Enquiries from Chinese nationals are welcomed as the University of St Andrews has additional funding opportunities for Chinese students.

The student will receive advanced training in evolutionary biology, genomic analysis, bioinformatics and biostatistics, and some experience with bioinformatics is desired. A relevant BSc is required, and an MSc is a potential advantage.

Enquiries to Mike Ritchie (mgr@st-andrews.ac.uk).

References: Lohse et al. 2015. Genome-wide tests for introgression between cactophilic *Drosophila* implicate a role of inversions during speciation. *Evolution*. 69: 1178-90.

Ravinet, M., et al. 2017. Interpreting the genomic landscape of speciation: a road map for finding barriers to gene flow. *J. Evol. Biol.*, 30: 1450-1477.

Yukilevich, R. 2014. The rate test of speciation: estimating the likelihood of non-allopatric speciation from reproductive isolation rates in *Drosophila*. *Evolution* 64: 1150-1162.

Links, including application information: <https://www.findaphd.com/search/ProjectDetails.aspx?PJID=-68142&LID=1443> <https://synergy.st-andrews.ac.uk/research/phd-study/phd-study-projects/phd-study-cbd-projects/> Mike Ritchie Centre for Biological Diversity, School of Biology, University of St Andrews, Fife, Scotland KY16 9TH UK

Michael Ritchie <mgr@st-andrews.ac.uk>

---

### UStAndrews WhaleSexualSelection

We are seeking to recruit a PhD student for the following project:

The relationship between song characteristics and reproductive success in humpback whales (*Megaptera novaeangliae*): does song fulfill an intersexual function?

Male humpback whales sing a long and complex vo-

cal display. Thousands of males can rapidly and synchronously change their population-specific song to a new version in as little as two months, a feat which is unparalleled in any other animal except humans. Despite our advances in understanding the cultural aspects of song, the underlying function(s) of humpback whale song are still debated. Using acoustic and genetic data, this PhD project seeks to understand the relationship between song characteristics and reproductive success to assess the contribution of inter-sexual drivers on the function of humpback whale song.

The student will be based at the University of St Andrews under the supervision of Dr Ellen Garland, and co-supervised by Dr Luke Rendell (St Andrews), and Dr Emma Carroll (St Andrews), in collaboration with Dr Claire Garrigue (IRD UMR ENTROPIE), and Assoc. Prof. Mike Noad (University of Queensland). Candidates should have a strong background in behavioural ecology or evolutionary biology. Knowledge or experience in bioacoustics or laboratory genetic analysis is essential, and experience of both desirable. Given the broad nature of the project and the expectation that the candidate will undertake both the acoustic analysis and genotyping of samples, training in molecular or acoustic techniques will be tailored to the candidate's experience. The student will be expected to participate in annual fieldwork lasting two to three months in semi-remote locations. Previous field experience involving small boats, marine mammals, and remote locations would be advantageous. The candidate should have strong communication (oral and written) and interpersonal skills given the collaborative nature of the project and extended fieldwork. The ability to speak French would also be desirable (but not essential).

General requirements include a background in evolutionary and behavioural biology, and a BSc (Hons) or MSc degree (first class) in a relevant discipline. This 3.5-year School of Biology studentship (stipend and fees) will be provided at UK/EU citizen rates.

International students may apply but will be responsible for the difference in fees; a fee waiver scholarship may be available for outstanding candidates. Enquiries from Chinese nationals are particularly welcomed as the University of St Andrews has additional funding opportunities for Chinese students.

For more information see: <https://www.findaphd.com/search/ProjectDetails.aspx?PJD429&LID43> or <https://synergy.st-andrews.ac.uk/research/phd-study/phd-study-projects/phd-study-cbd-projects/>.

Applications close on 3 December 2017.

Please send any enquiries to Dr Ellen Garland at

ecg5@st-andrews.ac.uk with the subject line: PhD studentship - paternity.

Kind regards, Ellen

Ellen C. Garland, Ph.D. University Research Fellow  
Sea Mammal Research Unit (SMRU) Centre for Social Learning & Cognitive Evolution (SLaCE) Centre for Biological Diversity (CBD) Postal Address: Sir Harold Mitchell Building School of Biology University of St. Andrews St. Andrews, Fife, KY16 9TH, UK  
Ph: +44 (0)7478-649964 Email: ecg5@st-andrews.ac.uk  
SLaCE: <https://synergy.st-andrews.ac.uk/solace/> Twitter: @\_SMRU\_

The University of St Andrews is a charity registered in Scotland: No SC013532

Ellen Garland <ecg5@st-andrews.ac.uk>

## UtahStateU MaternalEffectsBees

The Kapheim Lab at Utah State University is recruiting a Ph.D. student for Fall 2018 to study maternal effects in solitary bees, in collaboration with Dr. Theresa Pitts-Singer at the USDA-ARS Pollinating Insects Research Unit. The primary objective of the project is to investigate the molecular mechanisms and phenotypic consequences of trans-generational effects. Graduate students will be encouraged to develop their own research program within the scope of the larger study. Students working on the project will receive training in field biology, physiology, transcriptomics, and bioinformatics. Students will also have the opportunity to participate in outreach and extension activities.

Research in the Kapheim lab addresses the evolutionary processes responsible for the diversity and plasticity of complex traits. We seek to understand the developmental and sociogenomic mechanisms underlying behavior to better understand how it evolves. Our research is integrated across sub-disciplines of biology, including evolutionary biology, behavioral ecology, comparative genomics and transcriptomics, neuroscience, physiology, and metagenomics. For more information, please visit [www.kapheimlab.com](http://www.kapheimlab.com). The USU Department of Biology is home to a superb faculty with a diverse set of research interests. USU is located in northern Utah's Cache Valley. Situated between two mountain ranges and next to beautiful Logan Canyon, there are plenty of opportunities for fieldwork, as well as outdoor recreation, in and around Logan.

This position is supported by a combination of research assistantships and teaching assistantships for a minimum of five years. This includes a tuition and partial fee waiver, health insurance, and stipend.

Prospective students are encouraged to email Karen Kapheim at karen.kapheim@usu.edu. Please include a statement of research and educational goals, overview of previous research experience, and CV. To receive full consideration, applications must be submitted through the USU School of Graduate Studies by December 1, 2017. Please see the USU Biology website for more details ([http://www.biology.usu.edu/education/graduate-program/prospective\\_students](http://www.biology.usu.edu/education/graduate-program/prospective_students)).

Karen M. Kapheim Assistant Professor Utah State University Department of Biology 5305 Old Main Hill Logan, UT 84322-5305

(435) 797-0685 karen.kapheim@usu.edu

Karen Kapheim <karen.kapheim@usu.edu>

---

## UTartu Drosophila Evolutionary Ecol

Ph.D. position: Growth- and Predation-borne Stress in Rapidly and Slowly Developing Insects, Dept. of Zoology, Univ. of Tartu, Estonia. We are seeking one highly motivated Ph.D. student interested in the evolutionary ecology of mostly *Drosophila melanogaster* system. Information concerning different projects at the Department can be found at: <http://www.zoologia.ut.ee/en/about-us>. Position will be available since the beginning of February, 2018. The letter of motivation, CV and the copy of Master's diploma should be sent to Prof. Indrikis Krams (indrikis.krams@ut.ee) by October 18<sup>th</sup>, 2017. The successful student will be supported by a state's scholarship and research fellowship. Support is guaranteed for four years, contingent upon performance. Inquiries are welcome via email to: Prof. Indrikis Krams (indrikis.krams@ut.ee) and Prof. Raivo Mand (raivo.mand@ut.ee).

Indrikis Krams <indrikis.krams@ut.ee>

---

## UTexas Arlington Evolutionary Biology

The Department of Biology at the University of Texas at Arlington (<http://www.uta.edu/biology/>) invites applications for our PhD program beginning in Fall 2018. Ph.D. students are awarded competitive stipends, tuition remission, and health benefits. Research in the department includes a wide range of topics in ecology, evolution, genomics, microbiology, immunology, and cell and developmental biology.

For general inquiries about the program, please contact our graduate advisors: Shawn Christensen (shawnc@uta.edu) or Woo-Suk Chang (wschang@uta.edu). For more specific questions about research directions, please contact potential advisers directly using the contact information on their webpages (<https://www.uta.edu/biology/faculty.php>). We will start reviewing applications on December 15th 2017. The on-line application process requires submission of the formal graduate school application, transcripts, GRE scores (general test required), three letters of reference, and, for non-native speakers of English, TOEFL or IELTS scores. Applications can be submitted via the following link: <http://www.uta.edu/admissions/graduate/apply/how-to-apply.php>. The Department and University have numerous resources including state-of-the-art labs, an Animal Care Facility, a Genomics Core Facility, a Center for Human Genomics, and the newly established Shimadzu Institute for Research Technologies - a major partnership between UT Arlington and Shimadzu Scientific Instruments that offers extensive resources for imaging, proteomics and analytical chemistry. The Department also benefits from access to core UT-system genomics and computational resources at UT Southwestern Medical Center and the Texas Advanced Computing Center (TACC) - one of the leading advanced computing centers in the U.S.

Arlington is a city of approximately 365,000 and is conveniently located in the center of the Dallas-Fort Worth Metroplex. Within a 25-mile radius of the center of Arlington is a workforce of over two million people. The city has 82 public parks, including River Legacy Parks, a 1,300-acre oasis on the Trinity River in the heart of north Arlington. Arlington is the home of the Dallas Cowboys Stadium, the Texas Rangers Ballpark, and

Six Flags Over Texas. Cost of living is relatively low for a major metropolitan area. The Dallas-Fort Worth International Airport is the fourth largest airport in the U.S. More information on the city of Arlington can be found at [www.experiencearlington.org](http://www.experiencearlington.org). Matthew R. Walsh, Ph.D. Assistant Professor Department of Biology University of Texas at Arlington Arlington TX 76019 Office: 817-272-1546 Lab: 817-272-9079 Email: [matthew.walsh@uta.edu](mailto:matthew.walsh@uta.edu)

“Walsh, Matthew” <[matthew.walsh@uta.edu](mailto:matthew.walsh@uta.edu)>

---

## UUtah HostParasiteEvolution

Ph.D. Research: Evolutionary Ecology of Host-Parasite Interactions, Clayton-Bush Lab, Dept. of Biology, Univ. of Utah

We are seeking 1-2 highly motivated Ph.D. students interested in the evolutionary ecology of host-parasite systems, including disease ecology. Projects in our lab focus on host specificity, speciation, co-speciation, competition, adaptive radiation, and reciprocal selective effects between parasites and hosts. We also conduct research on invasive parasites of Darwin’s finches and Galapagos mockingbirds. Information concerning different projects in the lab can be found at: <http://darwin.biology.utah.edu>. Positions are likely to be available starting Fall Semester, 2018. Students in our lab are supported by a combination of fellowships, research assistantships, and teaching assistantships. Support is guaranteed for five years, contingent upon performance.

Our former Ph.D. students have strong track records achieving positions at academic institutions ranging from R1 universities to small colleges.

Please visit [www.biology.utah.edu](http://www.biology.utah.edu) for departmental information. Admission requirements and applications are available at [www.biology.utah.edu/graduate/index.php](http://www.biology.utah.edu/graduate/index.php)

The application deadline for Fall Semester is January 3rd, 2018.

Inquiries are welcome via email to: Dr. Sarah E. Bush ([bush@biology.utah.edu](mailto:bush@biology.utah.edu)) Dr. Dale H. Clayton ([clayton@biology.utah.edu](mailto:clayton@biology.utah.edu)).

[dovelouse@gmail.com](mailto:dovelouse@gmail.com)

---

## UVermont MethylationConservation

Highly motivated and enthusiastic students are invited to apply for an MS or PhD position in the Department of Animal and Veterinary Sciences at the University of Vermont. The overarching goal of the laboratory is to determine the extent to which epigenetic modifications affect phenotypic variation in economically important traits in cattle. To that end, the successful applicant will be working on a project involving the conservation of methylation between two breeds of beef cattle.

Qualifications: Applicants should have an undergraduate degree in genetics, genomics, animal science, biology or related field. For admittance, GRE test scores should be above 300 (combined scores) and a minimum of 100 for the TOEFL (if applicable).

Preferred skills include a working knowledge of epigenetics, ability to construct libraries for Next Generation Sequencing and computational skills necessary for Next Generation Sequencing data analysis. Additionally, applicants should have good communication skills and ability to work as part of a team. Funding for this project is secured and the qualified applicant will receive a stipend. The student will be required to perform Teaching Assistantship duties each semester. A start date of January 2nd is preferable but can be negotiated.

Interested students should submit a CV, cover letter and statement of research interest and goals to Dr. Stephanie McKay at [Stephanie.mckay@uvm.edu](mailto:Stephanie.mckay@uvm.edu) Founded in 1791, UVM is consistently ranked as one of the top public universities in the United States. The University is located in Burlington, Vermont, also rated as one of the best small cities in America. The greater Burlington area has a population of about 125,000 and enjoys a panoramic setting on the shores of Lake Champlain, between the Green Mountains of Vermont and the Adirondack Mountains of New York. Burlington and the surrounding area provide an environment rich in cultural and recreational activities for individuals and families, with multiple opportunities for interactions with local industry and communities.

Stephanie McKay Assistant Professor University of Vermont Department of Animal Veterinary Sciences 304 Terrill Hall 570 Main St. Burlington, VT 05405 Phone:802-656-2075 <http://asci.uvm.edu/labs/mckay/> Stephanie McKay <[Stephanie.McKay@uvm.edu](mailto:Stephanie.McKay@uvm.edu)>

---

## Uvienna 2 CephalopodEvolution

Department of Molecular Evolution and Development, University of Vienna, is looking for two enthusiastic PhD students with background or interest in evolutionary biology to investigate the molecular basis behind ancient transitions in metazoan genome architecture with a special focus on cephalopods. Coleoid cephalopods (octopus, squid, cuttlefish) have large, complex genomes. The regulatory landscape required to establish their complex nervous system and development remains elusive. One of the research directions in our group focuses on applying methods of functional genomics to study genome regulation and its evolution in the emerging small cephalopod model species *Euprymna scolopes* (Hawaiian bobtail squid). We are also generally interested in the mechanisms of genome architecture evolution across metazoans with a special interest in the impact of repetitive elements in large genomes. The candidates are desired to have previous experience with experimental molecular approaches and/or bioinformatic tools in those topics. The positions are funded by a grant from the Austrian Science Fund and run for three years with a possibility of extension to four years.

The work will be integrated and highly collaborative with several groups at the University of Vienna and the Center for Organismal Systems Biology, in particular the Departments of Molecular Evolution and Development, Integrative Zoology, and Neurobiology, as well as other research institutes. Additionally, the students, depending on the project focus, can be associated with either one of the two Vienna Doctoral Schools “Molecules of Life” and “Cognition, Behavior and Neuroscience”. Vienna is an internationally-renowned hub for evolutionary biology with over 50 research groups in the Vienna Evolutionary Biology network (evolVienna). The city harbors several Universities and Research Institutes for biological and biomedical research with a vibrant academic environment. Vienna is a vibrant historic European capital with a high QOL.

Please send your CV, letter of motivation, MSc (or equivalent certificate) and at least two reference letters (or contacts) latest by Dec 1st directly to: Oleg Simakov (oleg.simakov (at) univie.ac.at).— Anticipating starting date: early 2018.

More information on the Department of Molecular Evolution and Development and the group:

<http://molevodevo.univie.ac.at/research/research-focus-dr-simakov/> <http://www.nature.com/nature/journal/v524/n7564/full/nature14668.html> <http://www.nature.com/nature/journal/v464/n7288/abs/nature08830.html> oleg.simakov@univie.ac.at

---

## UYork UK RhizobiaEvolution

Competitively funded PhD position available based at the University of York working with Ville Friman (<http://villefrimanscience.weebly.com/>) and Ellie Harrison (U of Sheffield, <http://www.ellieevolves.co.uk/>). Starting October 2018

“The role of symbiont community diversity for the rhizobia-legume symbiosis”

Link: <https://www.findaphd.com/search/ProjectDetails.aspx?PJID=89673&LID=1597>

Description: Microbes are powerful things. This is particularly true for those engaged in intimate symbiotic interactions with other organisms. The relationship between Rhizobia and legumes, for example, plays a critical role in plant productivity in both natural and agricultural environments. Rhizobia fix atmospheric nitrogen and exchange this for sugars with their legume hosts, a relationship that accounts for ~50% of biological nitrogen fixation in agricultural systems. In agriculture, extensive use of man-made mineral fertilisers has become unsustainable, damaging soils and contributing significantly to greenhouse gas emissions. Harnessing natural processes like the rhizobia-legume interaction has the potential to be a major step towards more sustainable agricultural practice, however, research into the ecology and evolution of these interactions is required.

Research into this interaction has typically focused on pairwise interactions between two genotypes. Yet, we know that plants typically form associations with multiple rhizobia genotypes simultaneously. At present, the relationship between symbiont communities and plant productivity is poorly understood. With this project, we will investigate the impact of rhizobia symbiont diversity on the establishment, resilience and productivity of this important host-microbe symbiosis. We will combine controlled lab and greenhouse experiments to estimate the relationship between rhizobia diversity and symbiotic performance and identify the drivers of this relationship. We will examine the impact of diversity both on short (ecological) and long (evolutionary) timescales to inves-

tigate the impact of symbiont diversity on community stability over multiple host plant generations. Finally, we will work with industrial partners to develop and test the effectiveness of multi-strain inocula as a commercial application.

This project will draw on community ecology and biodiversity theory as well as host-microbe interactions and rapid bacterial evolution. You will have the opportunity to develop expertise in microbiology, experimental evolution, microbial ecology, plant biology and hypothesis-led experimental design. You will also have access to an extensive and fully sequenced strain collection to learn and develop bioinformatics and statistical skills as well as an opportunity to use cutting edge research facilities at both the universities of York and Sheffield. You will be supported and encouraged to develop your own ideas and hypotheses and will be part of larger research groups in both universities.

As this is an interdisciplinary project ideal candidates will have a background in or a demonstrated interest in at least one of the main subject areas - e.g. microbiology, community ecology, agricultural sustainability - and be willing to develop skills in the other areas.

Funding: This is a NERC ACCE DTP studentship fully funded for 3.5 years and covers: (i) a tax-free stipend at the standard Research Council rate (estimated to be 14,533 for 2017-2018), (ii) research costs, and (iii) tuition fees at the UK/EU rate.

Eleanor A Harrison <ellie.harrison@sheffield.ac.uk>

## UZurich MarineAdaptation

\*PhD Position in Evolutionary Ecology\*

\*\*

\*On: Demographic and evolutionary modelling of local adaptation to the tidal environment in *Clunio marinus*/\*

\*\*

\*at the University of Zurich, Switzerland\*

\*\*

A PhD position in evolutionary ecology, of 48 months duration, is available at the University of Zurich working with Prof Hanna Kokko and her international team [www.kokkonuts.org](http://www.kokkonuts.org). *Clunio marinus* is a marine midge that has a unique life history, living in the in-

tertidal zone of the European Atlantic coast. Local adaptation is important, as the timing of low tides differs across coastal locations. Populations indeed differ in their lunar and diurnal rhythms of adult emergence, and the differences are genetic (as known from past crossing experiments and through genomic work by Dr. Tobias Kaiser).

This project, which forms a collaboration between Dr. Kaiser's group at the Max Planck Institute for Evolutionary Biology in Plön and Prof. Kokko's group at the University of Zurich, aims to fill in a knowledge gap considering the evolutionary demography of the species: how is local adaptation maintained, given the different dispersal options leading to different genotypes mating, potentially producing maladapted emergence times with respect to seasonal phenology and/or lunar cycles?

The ideal candidate has a grasp of demographic and/or evolutionary modelling, and a willingness to develop his/her skills further in this regard. The PhD will be awarded by the University of Zurich, which is also the main location of the student's work, but the project also involves visits to Plön and the potentially many coastal field sites.

The working language in the group is English (German skills are not essential). The position is available as soon as the candidate has been found. The evaluation of applications begins on October 18, 2017, and will continue until a suitable candidate has been found.

Applicants should send a cover letter with a

-Statement of their research interests

-C.V., and

-The names and contact details of at least one referee.

Applications should form a single pdf file and this should be sent to: [hanna.kokko@ieu.uzh.ch](mailto:hanna.kokko@ieu.uzh.ch)

Petra Zehetmaier Administrative Assistant Prof. Dr. Hanna Kokko

Department of Evolutionary Biology and Environmental Studies University of Zurich Winterthurerstr. 190 8057 Zurich

Tel.: +41 (0) 44 635 47 61 Email: [petra.zehetmaier@ieu.uzh.ch](mailto:petra.zehetmaier@ieu.uzh.ch) Office: Y13-H-83

Petra Zehetmaier <[petra.zehetmaier@ieu.uzh.ch](mailto:petra.zehetmaier@ieu.uzh.ch)>

## VirginiaTech 2 HoneyBeeEvolution

### Honey bee Foraging Ecology and Pollinator Health

The Couvillon Lab at Virginia Tech seeks highly motivated, independent students with a keen interest in both basic and applied questions related to honey bee foraging and recruitment behavior and/or pollinator health to join our newly established research group (<http://www.freelyflyingbees.com/>) in the late spring or early autumn 2018 under Dr. Margaret Couvillon, Assistant Professor of Pollinator Biology and Ecology in the Department of Entomology, Virginia Tech, Blacksburg, Virginia.

Available positions: One PhD (4 years) and one MSc/MS (2 years) positions studying the foraging ecology of honey bees and other pollinators in the Couvillon Lab.

Application deadline: 15 December, 2017

Start date: late spring or early autumn 2018 (but open to negotiation) Potential applied and basic science projects may include these questions: - How and when do honey bees forage across diverse, representative landscapes? - How do these foraging dynamics relate to the abundance, diversity, and health of non-Apis bees? - How do foraging behaviors affect colony exposure to other stressors, such as pesticides? - What are the evolutionary causes and adaptive / non-adaptive consequences of honey bee waggle dance (mis)communication? (in collaboration with Schurch lab at Virginia Tech)

MSc requirements: - BSc/BS in Biology, Entomology, Evolutionary Biology, Landscape Ecology or related STEM field - An excitement for working with live, whole organisms (that sting!) - A willingness to learn new skills, such as experimental design, scientific reproducibility, statistics, GIS, and insect identification - Proficiency in English and excellent verbal and written communication skills - A collaborative, helpful, team-oriented spirit

Additional PhD requirements: - An MSc/MS in Biology, Entomology, Evolutionary Biology Landscape Ecology, or related STEM field - If you are from an international location where English is not your first language, you will be required to take the TOEFL (see Graduate School requirements)

Please note that the selected candidates for the posi-

tions must then apply and be accepted into the Graduate School at Virginia Tech.

Virginia Tech is an equal opportunity employer.

We offer: - A funded position (MSc/MS or PhD) working with economically vital and scientifically fascinating insects - Training as a well-rounded, critically-thinking scientist - Exciting combination of field studies and experiments with freely flying and behaving bees; new methods in video and landscape analysis with ArcGIS; opportunities to learn experimental design, scientific reproducibility, and statistical modelling - Regular collaborations with other research teams in the department, university, and within the larger field - A Departmental instructional program offering a variety of basic and applied courses

Blacksburg is a lovely college town set between the Blue Ridge and Allegheny Mountains with many outdoor opportunities, high standard of living, and a warm and welcoming community feel.

Application: Please email your application to Dr. Couvillon as a single pdf attachment. Application should include a cover letter (1-2 pages) introducing yourself and describing your background and research interests, a CV, and the contact information for two potential academic references before December 15, 2017. Please remember to indicate which position interests you. A short list of candidates will be invited to interview either in person or over Skype in January 2018, and selection should occur by February 2018.

For more details on the research and our lab, please see [www.freelyflyingbees.com](http://www.freelyflyingbees.com) or contact Dr. Maggie Couvillon ([mjc@vt.edu](mailto:mjc@vt.edu)) directly. You may also "Join" our Facebook page The BeeGroup @ VT.

References Couvillon, Schurch & Ratnieks (2014). Dancing bees communicate a foraging preference for rural lands in High Level Agri-Environment Schemes. *Current Biol* 24(11), 1212-1215.

Couvillon, Schurch & Ratnieks (2014) Waggle dance distances as integrative indicators of seasonal foraging challenges. *PLOS One*, 9 (4), e93495.

Couvillon & Ratnieks (2015). Environmental consultancy: dancing bee bioindicators to evaluate landscape "health". *Frontiers in Ecol and Evol* 3, 44.

Schurch, Ratnieks, Samuelson, & Couvillon (2016). Dancing to her own beat: honey bee foragers communicate via individually calibrated waggle dances. *J Exp Biol* 219 (9), 1287-1289.

Couvillon, Al Toufailia, Butterfield, Schrell, Ratnieks, Schurch (2015). Buzzing bees: caffeinated forage tricks honey bees into increasing foraging and recruitment

behaviors. *Current Biol* 25 (21), 2815-2818.  
Margaret Couvillon <mjc@vt.edu>

---

## Zurich Switzerland EvolutionaryEcol

We have an open 4-yr PhD position to study the evolutionary ecology of aquatic ecosystems, at the Center for Ecology, Evolution, and Biogeochemistry in Switzerland

The student will work on a recently funded SNF project entitled “Eco-evolutionary dynamics in aquatic ecosystems”.

The aim of the project is to understand the interactions between rapid trait evolution, community dynamics, and ecosystem functions. The project can involve a combination of quantitative genetics of functional traits, large-scale experiments in mesocosms and ponds, and comparative work on relationship between functional trait variation of stickleback and the biomass and community composition of their prey. The experimental work will be based in Switzerland, and some of the field work will be conducted in Southern Greenland. Overall, the project will investigate the ecosystem consequences of rapid trait evolution, and the potential for feedbacks between trait and ecosystem dynamics.

We are interested in candidates with a background in community ecology and evolutionary biology, with an interest in ecosystem dynamics. Interest and prior experience with field ecology would be an asset, as would experience with any of genetics, genomics, biodiversity analyses, or time-series analysis.

The starting date for the PhD student is flexible, but earlier start dates are strongly preferred. A masters degree is required to apply.

Eawag’s Center for Ecology, Evolution & Biogeochemistry (CEEB) is located on the shore of Lake Lucerne and is a strong nucleus of Eawag research groups aimed at integrating evolutionary biology, community ecology, and ecosystem science. The PhD student will interact with a diverse range of researchers studying community ecology, evolutionary biology, ecological genetics, ecosystem science, and applied environmental science.

The project is led by Dr. Blake Matthews (<http://homepages.eawag.ch/~matthebl/Welcome.html>), and involves collaborations with other research groups at CEEB, including Prof. Ole Seehausen, Dr. Jakob Brodersen, and Dr. Philine Feulner.

Please submit your application by 15 November 2017. We look forward to receiving your application. Applications should include a cover letter, a curriculum vita, and the names of three references. PDFs of publications or Master’s theses would also be appreciated.

Please submit your application via the Eawag Jobs & Career webpage, any other way of applying will not be considered. Please click on the link below, this will take you directly to the application form : <https://apply.refine.ch/673277/0555/pub/1/index.html> For further information please contact Dr. Blake Matthews by email: [blake.matthews@eawag.ch](mailto:blake.matthews@eawag.ch)

Matthews, Blake [blake.matthews@eawag.ch](mailto:blake.matthews@eawag.ch) <http://homepages.eawag.ch/~matthebl/Welcome.html> Eawag, Aquatic Ecology Department Center for Ecology, Evolution & Biogeochemistry Seestrasse 79 6047, Kastanienbaum Switzerland

[Blake.Matthews@eawag.ch](mailto:Blake.Matthews@eawag.ch)

AmericanUParis EvolutionaryEcol .....	66	UAlabama Tuscaloosa TeachingEvolution .....	85
AuburnU CuratorAquaticInverts .....	66	UCalifornia Berkeley HostMicrobe .....	86
AuburnU PlantPopGenetics .....	67	UCalifornia Davis ClimateAdaptation .....	87
BiK-F Frankfurt ModellingMigration .....	67	UCalifornia Riverside EvolutionaryBiol .....	88
BotanicalResInstTexas PlantSystematics .....	69	UCentralFlorida 2 PlantEvolution .....	89
BrooklynC SystemsComputationalBiology .....	69	UCincinnati CellEvolution .....	89
CambridgeUbotanicGardens AssistantCurator .....	70	UGeorgia EvolutionaryHumanGenetics .....	90
ClemsonU EvolutionaryBiol .....	71	UHawaii Manoa QuantEvolution .....	91
ColoradoStateU ComputationalBiology .....	71	UHawaii StatisticsBiology .....	92
GeorgeWashingtonU EvolMicrobiomeInteractions ..	72	UHongKong EvolutionaryBiol .....	93
GrandValleyStateU EvolutionaryMedicine .....	73	UIdaho 2 ModelingComplexSystems .....	93
Hawaii Tech PopulationGenetics .....	74	UIdaho ArthropodMolecularSystematics .....	94
MaxPlanckforOrnithology TechAssist AvianEvolution	74	UKansas MicrobialMetagenomicsAndBioinformatics	95
MichiganStateU EvolutionPlantResilience .....	75	UMemphis EvolutionaryGenetics .....	96
MississippiStateU EvolutionaryGenetics .....	76	UMichigan MuseumCollectionManager .....	96
MissouriBotanicalGarden Tech PlantConservation-		UMissouri EvolutionaryEcol .....	97
Genetics .....	77	UNorthCarolina Wilmington EvolutionaryBiol .....	98
NCStateU 2 EvolutionaryGenetics .....	77	UNotreDame PathogenEvolution .....	99
NorthwestMissouriStateU PlantEvolution .....	78	UOklahoma EvolutionaryProteomics .....	99
PurdueU PathogenEvolution .....	79	UOregon Genomics Bioinformatics .....	100
SarahLawrenceC EvolutionaryNeuroscience .....	80	UOslo ProjectManager .....	101
StAmbroseU Iowa EvolutionaryBiologist .....	80	Uppsala 2 PlantEcolEvolution .....	102
StonyBrookU VertebrateEvolution .....	80	UppsalaU ResearchEngineer HumanEvolutionaryGenet-	
TBRI SanAntonio ComputationalBiology .....	81	ics .....	103
TBRI SanAntonio ResAssist SchistosomeParasiteEvolu-		URochester GeneticsGenomics .....	104
tion .....	82	USouthCarolina PopulationEvolBiol .....	104
TempleU GenomicsEvolution .....	83	USussex ResTech ConvergentEvolution .....	105
TempleU PostDocs Analysts Programmers .....	83	UToronto Mississauga EvolutionaryMicrobiology .	105
UAlabama Macroevolution .....	84	UWyoming ComputationalBiologist .....	106
UAlabama TeachingEvolution .....	85	YorkU MolecularEvolution .....	106

---

## AmericanUParis EvolutionaryEcol

The American of University Paris is hiring within the broad category of “Environmental Science” and evolutionary ecologists are invited to apply for the position of Assistant Professor of Environmental Science. Full job details available here <https://www.aup.edu/-employment-opportunities> Sinead Foley Executive Assistant to the Provost The American University of Paris 5, blvd de la Tour Maubourg 75007 Paris, France Tel. +33 (1) 40 62 08 23 sfoley@aup.edu [www.aup.edu](http://www.aup.edu) Sinead Foley <sfoley@aup.edu>

---

## AuburnU CuratorAquaticInverts

Curator (Collection Manager) of Aquatic Invertebrates

The Auburn University Museum of Natural History (AUMNH) is seeking a Curator (Collection Manager) for its Aquatic Invertebrate Collection. The successful candidate will have curatorial experience in crustaceans, arthropods, mollusks, echinoderms, annelids, cnidarians, and/or brachiopods. Our collections are currently strong in freshwater crayfishes, molluscs, and insect nymphs and Antarctic invertebrates. Duties of the collection manager will include sorting and identifying collections, maintaining existing collections, processing loans of materials, and maintaining the computer database. The candidate should be familiar with database programs,

particularly Specify, and be committed to the open presentation of collections data on the internet. The candidate will be expected to contribute to AUMNH outreach and education efforts. A BS in 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.org>. Evaluation of applications will begin 27 November 2017 and will continue until a suitable applicant is found. Submit a CV, a statement describing curatorial 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](mailto:Armbrjw@auburn.edu). Auburn University is an equal opportunity/affirmative action employer and actively seeks applications from qualified women and minority candidates.

<https://www.auemployment.com/applicants/jsp/shared/frameset/Frameset.jsp?time=1508444655856>

Dr. Jonathan W. Armbruster Professor and Director Auburn University Museum of Natural History Department of Biological Sciences Office: 131 Biodiversity Learning Center Lab: 212-213 M. White Smith Mailing address: 101 Life Sciences Building Auburn University, AL 36849, USA Office: 334-844-9261 Lab: 334-844-3470 Fax: 334-844-9234 Homepage: <http://www.auburn.edu/~armbrjw> Jonathan Armbruster <[armbrjw@auburn.edu](mailto:armbrjw@auburn.edu)>

---

## AuburnU PlantPopGenetics

The Department of Biology at Auburn University at Montgomery invites applications for a 9-month tenure-track position at the Assistant Professor level beginning August 2018. The Department seeks candidates with an earned doctorate and expertise in plant biology, plant population genetics, plant ecology or a related field; teaching experience and postdoctoral research experience are highly desirable.

Related professional experience in a non-academic setting, such as government or consulting would be desirable but is not a requirement.

Primary teaching responsibilities for this position will include teaching plant biology, field botany, and other introductory and upper level courses such as Population Ecology, Ecological Genetics, or other courses as appropriate to their specialty. The successful candidate will also be expected to develop and maintain a research

program in their area of expertise with the potential to involve students. Student advising and well as a commitment to university, community, and professional service are also expected.

Auburn University at Montgomery is a comprehensive, public institution located in Alabama's capital city. Enrollment is approximately 5000 students. The Department of Biology includes twelve tenure-track faculty and offers undergraduate degrees in Biology and Environmental Science. Graduate level Biology courses are also offered to M.Ed students in the College of Education.

Applicants should apply online at <http://www.jobs.aum.edu/>. Interested candidates must submit an online application, which includes a letter of application (cover letter) addressed to the Hiring Committee and describing qualifications for and interest in the position, a curriculum vitae, a statement of research accomplishments and future research plans, a description of teaching experience and philosophy, unofficial college transcripts, and the contact information for at least three individuals who will serve as references.

Review of applications will begin on November 15, 2017, and continue until the position is filled. Please note that all required documents must be submitted before that date to ensure full consideration.

For more information, you may visit <http://www.jobs.aum.edu/postings/2924> or contact:

Dr. Rosine W. Hall Environmental Biology Search Committee Chair Auburn University at Montgomery Department of Biology P.O. Box 244023 Montgomery, AL 36124-4023 [rhall@aum.edu](mailto:rhall@aum.edu)

Gabriel C. Costa - Assistant Professor 205A Goodwyn Hall - Department of Biology Auburn University at Montgomery Montgomery, AL 36117 Phone: 334-244-3229 Web: <http://costagc.weebly.com> Scholar: <https://goo.gl/5Td8D7> Gabriel Costa <[gcosta@aum.edu](mailto:gcosta@aum.edu)>

---

## BiK-F Frankfurt ModellingMigration

Job posting ref.#11-17021

The Senckenberg Gesellschaft fuer Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. SGN conducts natural history research with almost 800 employees and

research institutions in six federal states. Within SGN, the Senckenberg Biodiversity and Climate Research Centre (BiK-F) explores the interactions between biodiversity, climate, and society.

For the research project “Modelling of the introduction and spread of alien species along German transportation networks”, Senckenberg BiK-F invites applications for a Researcher (m/f) Position (full time)

The project is funded by an expert panel of the German ministry of transportation and the results will be made readily available for the agencies represented by this panel.

The project’s goal is to identify routes and hot spots of alien species spreading along transportation networks in Germany. As a basis, we will use detailed information about flows of traffic and commodities along railways, roads and water ways. These data sets will be combined with environmental data like habitat characteristics or land-use, using a computer model for the spread of alien species. In close cooperation with Dr. Hanno Seebens (PI of this project and developer / publisher of this computer model), the computer model will be adjusted and extended according to the requirements of this project. Scientific publications are planned in addition. The extension of a successful cooperation is envisioned in upcoming projects.

Your tasks - Acquisition and harmonization of relevant data sets like remote sensing data sets or distributions of alien species - Adjustment and scientific development of the existing model written in R - Analysis of model results and writing scientific publications

Your profile - You hold a Master’s, Diploma, or PhD degree and you have a background in biology, geography, physics, scientific programming or in another related field - You have strong experience in data analysis, large data sets and/or modelling, preferably in R or other programming languages like Python or C - You have a strong motivation to implement applied research questions into theoretical models - A strong willingness for interdisciplinary research - German language is helpful, but not mandatory

What is awaiting you?

- An interesting task in an internationally renowned research institution - The opportunity to cooperate in related research projects - The opportunity to gain experience in the abovementioned research topics - The occasion to build a network with scientists in interdisciplinary fields

Salary and benefits are according to a full-time public service position in Germany (TV-H E 13). The position

is a fixed-term post for 15 months. The contract shall start January, 1st 2018 and will be limited until March 31st, 2019. The Senckenberg Biodiversity and Climate Research Centre supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment is in Frankfurt am Main, Germany. The employer is the Senckenberg Gesellschaft fuer Naturforschung.

Please send your application until November 13th 2017 by e-mail (attachment in a single pdf file), mentioning the reference of this position (ref. #11-17021) and including a letter outlining your suitability and motivation, detailed CV, all transcripts and grades, contact details of two potential references, a summary of your Master’s or Diploma thesis and, if available, a list of publications to the address below:

Senckenberg Gesellschaft fuer Naturforschung Senckenberganlage 25 60325 Frankfurt am Main

E-Mail: recruiting@senckenberg.de with cc to hanno.seebens@senckenberg.de

For scientific enquiries please contact Dr. Hanno Seebens, hanno.seebens@senckenberg.de.

In addition please indicate in your application how our job advertisement came to your attention.

– Mit freundlichen Grüßen / Best regards

Isabel Gajcevic, M.A. Personalsachbearbeiterin

SENCKENBERG Gesellschaft für Naturforschung (Rechtsfähiger Verein gemäß §22 BGB) Senckenberganlage 25 60325 Frankfurt am Main

Besucheradresse: Voltastraße 1, 60486 Frankfurt am Main (5. Obergeschoss)

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

Leiterin Personal & Soziales - 1458 Loke, Uta

Stellv. Leiterin Gruppe Personal & Soziales - 1319 Elsen, Carina

Mitarbeiter/in Personalbeschaffung (Recruiting) - 1313 di Biase, Maria - 1313 Helm, Jessica - 1478 Gajcevic, Isabel

Fax: 0049 (0)69 / 7542-1467 Mail: recruiting@senckenberg.de

Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Andreas Mulch, Stephanie Schwedhelm, Prof. Dr. Katrin Böhning-Gaese, Prof. Dr. Uwe Fritz, Prof. Dr. Ingrid Kröncke Präsidentin: Dr. h. c. Beate Her-aeus Aufsichtsbehörde: Magistrat der Stadt Frankfurt am Main (Ordnungsamt)



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>

---

## BotanicalResInstTexas PlantSystematics

The Botanical Research Institute of Texas (BRIT) seeks a highly motivated Research Botanist with a primary focus on plant systematics and complementary interests in floristics, ecology, and/or conservation. Research incorporating a combination of genomics, collections, field work, and/or geographic focus on Texas and the south-central United States is preferred. The target start date for the position is July 1, 2018.

Located in Fort Worth, Texas and adjacent to the Fort Worth Botanic Garden, BRIT is housed in a 70,000 square-foot LEED Platinum building and includes a staff of 39 full time employee equivalents. Research programs currently encompass systematics and evolution, conservation, biodiversity informatics, and floristics, including the Texas Floras Project. Resources include the BRIT herbarium of ca. 1.5 million specimens with strengths in Texas, Louisiana and the Southeastern U.S., Mexico and the Neotropics, and Southeast Asia, as well as a botanical library of ca. 100,000 volumes. The BRIT Press group publishes botanical literature that is international in scope, including the—Journal of the Botanical Research Institute of Texas.—BRIT has recently partnered with TCU and UTA in mentoring and teaching undergraduate and graduate students. Staff are adjunct faculty and have access to their library and laboratory resources, including UTA's North Texas Genome Center. Resources are being actively recruited for the construction of a molecular and structural botanical laboratory at BRIT planned for 2018.

A Ph.D. in plant systematics, biodiversity science, or closely related field is required for this position, and postdoctoral experience is preferred. Applicants will need to show success with grant acquisition and raising funds from foundations, agencies, or other grantors.—The successful candidate will maintain an active research program as measured by scientific peer-reviewed journal publications, grant-funded proposals in support of research, collections development, collaborations with

colleagues, contributions to the institute's outreach activities, and participation in the graduate programs associated with Texas Christian University (TCU) and the University of Texas at Arlington (UTA), including some teaching in specialty areas.

Please send 1) a cover letter addressed to the BRIT Vice President of Research Dr. Peter W. Fritsch, 2) a detailed curriculum vitae, 3) a statement of research and teaching interests, and 4) the names and contact information of three references all in a single pdf document to Angie Peebles ([apeeple@brit.org](mailto:apeeple@brit.org)) by—November 27, 2017. Application review will begin in early December and the position will remain open until filled. Salary is commensurate with experience.

Full job posting: <http://brit.org/employment/research-botanist> “Alyssa B. Young” <[abyoung@brit.org](mailto:abyoung@brit.org)>

---

## BrooklynC SystemsComputationalBiology

Brooklyn College of the City University of New York invites applications for a full-time tenure-track Assistant Professor position in the Department of Biology with a starting date in August 2018. Brooklyn College is a microcosm of the ethnically rich borough of Brooklyn it serves as well as a mirror of the wide diversity in New York City itself. A vibrant, intellectually engaged community, our student body comprises individuals from 150 countries, speaking 105 different languages. The College and the Department of Biology are committed to enhancing and supporting a diverse and inclusive community of students, faculty, and staff. Candidates with demonstrated commitment to diversity and inclusiveness through their research, teaching and/or service are encouraged to apply.

The selected candidate is expected to develop an independent and productive research program with the aim of obtaining extra-mural funding, mentoring scholars in the laboratory and establishing an international presence. Desired areas of focus include: Systems approaches with applications to neuroscience, developmental biology, immunology, cancer research, environmental biology, evolution, ecology, genetics, cell biology, metabolism, and genomics.

The successful candidate will join a vibrant community of researchers in the Department of Biology, with areas of focus including Neuroscience, Ecology Evolution and

Behavior, and Molecular, Cellular and Developmental Biology.

Responsibilities include:

- Teach undergraduate and graduate courses in topic areas including bioinformatics, computational biology, systems biology, neuroscience, immunology, and genetics/genomics.
- Mentor undergraduate, graduate and postdoctoral Scholars in research and work with a diverse team of colleagues.
- Develop a high-impact, nationally recognized, extramurally funded research program and excel in teaching at the Undergraduate, Masters and PhD levels.
- Share responsibility for committee and department assignments, performing administrative, supervisory, and other functions.

**QUALIFICATIONS** - Ph.D. in Biology or related field from an accredited institution. - Post-doctoral fellowship training including evidence of active pursuit of extra-mural funding.

Preference will be given to candidates whose research includes a significant computational component.

**COMPENSATION** CUNY offers faculty a competitive compensation and benefits package covering health insurance, pension and retirement benefits, paid parental leave, and savings programs. We also provide mentoring and support for research, scholarship, and publication as part of our commitment to ongoing faculty professional development.

**HOW TO APPLY** Applicants should prepare the following in .doc, .pdf, or .rtf format:

- An application letter indicating the desired position, and detailing how the applicant's teaching, service and/or scholarship has supported the success of students from racial, ethnic, and gender backgrounds that are underrepresented in their academic fields; applicants who have not yet had the opportunity for such experience should note how their work will further CUNY's commitment to diversity.
- Current curriculum vitae - At least three- five peer-reviewed articles in the applicant's area of expertise

**STEP TWO** - Go to <https://websubmit.brooklyn.cuny.edu/hrref/> Applicants should have three confidential letters of recommendation submitted electronically by their recommenders by visiting the link above and entering the contact information for their recommenders. The online system will automatically email your recommenders a request to submit a letter via the system. Full instructions will be provided. Emailed or hard copy applications will not be considered.

**CLOSING DATE** December 13, 2017

CUNY encourages people with disabilities, minorities,

veterans and women to apply. At CUNY, Italian Americans are also included among our protected groups. Applicants and employees will not be discriminated against on the basis of any legally protected category, including sexual orientation or gender identity. EEO/AA/Vet/Disability Employer.

Tony Wilson Associate Professor, Evolutionary Biology Department of Biology Brooklyn College 2900 Bedford Avenue Brooklyn, NY, 11210 United States 1-718-951-5000 x6953 <http://evolution.brooklyn.cuny.edu> Tony Wilson <TWilson@brooklyn.cuny.edu>

## CambridgeUbotanicGardens AssistantCurator

Dear EvolDir Community

We are looking for an assistant curator at the Cambridge University Botanic Gardens. This is a new post at the Cambridge University Botanic Garden, funded by HEFCE, initially for five years. The post holder will be responsible for assisting in the curation of the living collections, especially through provision of taxonomic expertise. We are looking for an enthusiastic, highly energetic, passionate and team-oriented plant systematist, to improve our living collections, and to enhance the quality of taxonomic provision in the delivery of research, teaching, and conservation. The post holder will occupy a key position in the curation team, and be responsible for leading key components of curation such as taxonomic verification, and for developing new strands such as botanical expeditions and plant collecting.

The candidate should hold a PhD in plant taxonomy or plant-morphology based systematics, and ideally have collections experience.

Apply here: <http://www.jobs.cam.ac.uk/job/15319/>  
N.B. Fixed-term: The funds for this post are available for 5 years in the first instance.

For any questions relating to this recruitment please contact [admin@botanic.cam.ac.uk](mailto:admin@botanic.cam.ac.uk)

Cambridge University values diversity and is committed to equality of opportunity.

Cambridge University has a responsibility to ensure that all employees are eligible to live and work in the UK.

best wishes,

Sam

Samuel Brockington University Lecturer | NERC IRF | Curator of the Cambridge University Botanic Gardens Department of Plant Science | University of Cambridge <http://www.plantsci.cam.ac.uk/research/sambrockington> Samuel Brockington <sb771@cam.ac.uk>

---

## ClemsonU EvolutionaryBiol

Clemson University, Department of Biological Sciences

We seek an organismal biologist using integrative and/or comparative approaches to examine innovative, fundamental biological questions. Applications are welcome from candidates working in any animal or plant system, with research areas of interest including, but not limited to, organismal physiology, morphology, ecology, and evolution. We especially encourage applicants whose work has promise to span scales or approaches, building bridges from studies of structure or functional mechanisms to understanding of organismal diversity and processes of change. Inquiries may be directed to Dr. Richard W. Blob (rblob@clemson.edu). Submit materials via Interfolio at <https://apply.interfolio.com/45158>. For full consideration, applications should be submitted by October 25, 2017. Review will continue until the positions are filled.

Clemson University is an AA/EEO employer and does not discriminate against any person or group on the basis of age, color, disability, gender, pregnancy, national origin, race, religion, sexual orientation, veteran status or genetic information. Clemson University is building a culturally diverse faculty and staff committed to working in a multicultural environment and encourages applications from minorities and women.

“sprice6@clemson.edu” <sprice6@clemson.edu>

---

## ColoradoStateU ComputationalBiology

Computational, Quantitative and/or Theoretical Biologist ASSISTANT PROFESSOR, TENURE-TRACK  
Department of Biology Colorado State University

The Department of Biology at Colorado State University

(Fort Collins, Colorado) is recruiting a new tenure-track faculty member at the rank of ASSISTANT PROFESSOR who is addressing fundamental questions in biology using computational, quantitative and/or theoretical approaches. Relevant areas of interest include (but are not limited to) genomics/metagenomics/epigenomics, systems biology, synthetic biology, population genetics, epidemiology, ecological or evolutionary modeling/theory, and/or quantitative ecology. We envision an independent researcher who will develop a strong, extramurally-funded research program in one or more of these areas of inquiry. In particular, we are seeking applications from scientists who are interested in working in a highly collaborative department and are enthusiastic about teaching at both the undergraduate and graduate levels and contributing to the outreach mission of Colorado State University.

**DEPARTMENT:** The Department of Biology at Colorado State University (CSU) is one of eight departments in the College of Natural Sciences. The Department has a strong commitment to research and undergraduate and graduate teaching. The Department is home to about 1,550 undergraduate majors, 115 graduate students, 35 postdoctoral fellows, 10 non-tenure track faculty, and 30 regular faculty members. Research interests range from molecules to ecosystems. The successful candidate will be housed in a state-of-the-art biological sciences facility that opened in 2017. For more information about the Department, please visit: <http://www.biology.colostate.edu/> **RESPONSIBILITIES:** This tenure-track position involves research (45 percent), undergraduate and graduate teaching (45 percent), and service/outreach (10 percent). The successful candidate will be expected to develop an extramurally funded and innovative research program, and to advance the department's commitment to diversity and inclusion through research, teaching and outreach with relevant programs, goals and activities. The position involves training PhD- and MS-level graduate students, as well as teaching undergraduate and graduate courses in the candidate's area of expertise and in the department's core curriculum.

**REQUIRED QUALIFICATIONS:** Applicants must have a Ph.D. or equivalent degree in Biology or a related field by the time of their application and a research program in computational, quantitative and/or theoretical biology as demonstrated by publications in peer-reviewed journals.

**PREFERRED QUALIFICATIONS:** Postdoctoral experience, intellectual leadership, evidence of successful grant writing, broad background in computational/quantitative/theoretical techniques, biologically-based research program, teaching/mentoring experience,

engagement in service/outreach/inclusivity activities, and experience working in a collaborative setting.

**EMPLOYMENT CONDITIONS:** This is a nine-month, full-time position. Salary and start-up funds will be commensurate with education and experience at the rank of Assistant Professor.

**DATES AND RECORDS:** The computational, analytical, and/or theoretical biology position will be available as early as August 15, 2018. Screening of applications will begin November 20, 2017 and continue until the position is filled.

**TO APPLY,** please submit an application consisting of a cover letter, current CV, statement of teaching philosophy (1-2 pages), statement of research (2-3 pages), and up to three representative publications and/or in-progress manuscripts by November 19, 2017 to <http://jobs.colostate.edu/postings/50952> Reference letter writers will be contacted immediately upon submission of application and will receive an email with a link to submit their letter. Reference letters must be received by November 26, 2017. For full consideration, applications must be complete including reference letters by November 26, 2017. No mail-in applications or letters will be accepted. Application materials of finalist candidates, including letters of reference, will be made available for review by the entire tenure-track faculty of the Department of Biology. Inquiries concerning the position should be addressed to: Melinda Smith, Professor and Chair of the Computational, Analytical and Theoretical Biologist Search Committee, E-mail: [bio\\_searchchair@colostate.edu](mailto:bio_searchchair@colostate.edu) Inquiries concerning the application should be addressed to: Meagan Taverner, Office Manager and Computational, Analytical and Theoretical Biologist Search Staff. E-mail: [bio\\_searchstaff@colostate.edu](mailto:bio_searchstaff@colostate.edu)

**INTERDISCIPLINARY DEGREE PROGRAMS AT CSU:** CSU provides a highly dynamic and interactive environment with opportunities to collaborate with faculty across the campus via several

— / —

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>

---

## George Washington U EvolMicrobiomeInteractions

Assistant Professor of Microbiology

The Department of Biological Sciences at The George Washington University (GWU) invites applicants for a tenure-track faculty position in Microbiology at the rank of Assistant Professor. We are searching for a candidate whose research interests complement our diverse research programs spanning evolution, ecology, systematics, and molecular and cellular biology. Our faculty are employing non-mammalian systems to study microbial diversity and the roles of microbiomes in cognition, immunity, diversification, trophic mutualisms, habitat transitions, and carbon cycling [<http://biology.columbian.gwu.edu>]. We define microbiomes as microbial communities (i.e., viruses, bacteria, archaea, and microbial eukaryotes, including fungi and protists), their genes and gene products. The successful candidate will be expected to establish and maintain an externally funded research program that involves undergraduate and graduate students. Teaching responsibilities will include an introductory undergraduate course in Microbiology and a second course in the candidate's area of expertise.

Office and laboratory space will be located in the GWU Science and Engineering Hall that opened in January 2015 [<http://seh.gwu.edu/about-science-and-engineering-hall>]. Our location in Washington, DC offers superior undergraduate and graduate learning opportunities through access to the Smithsonian's National Museum of Natural History, the National Zoo, and a consortium of DC-area universities, as well as the recently created Computational Biology Institute at GWU.

**Required Qualifications:** A completed PhD and postdoctoral training in an appropriate discipline, and research accomplishments as demonstrated by peer-reviewed publications in high quality journals. In addition to lab-based microbiology techniques, the applicant should have experience in applying bioinformatic and/or computational approaches to the management, analysis, and integration of complex datasets. Applicant should be working on microbiome interactions (i.e., with other microbes, hosts, and/or environments).

**Application Procedure:** To be considered, please complete an online faculty application at the following URL [<http://www.gwu.jobs/postings/46791>]. Upload a cover

letter that describes your interest in and qualifications for the position; a curriculum vitae including a full list of publications; brief research and teaching statements; three recent publications, as well as the names and contact information of three referees. Only long-list candidates will be required to submit final letters of recommendation from their referees. Only complete applications can be considered.

Review of applications will begin on 20 November, 2017 and continue until the position is filled, pending final budgetary approval. Employment offers are contingent on the satisfactory outcome of a standard background screening. Questions should be directed to Dr. Amy Zanne, Search Committee Chair, via email at [azanne@gwu.edu](mailto:azanne@gwu.edu).

The George Washington University is an Equal Employment Opportunity/Affirmative Action employer that does not unlawfully discriminate in any of its programs or activities on the basis of race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity or expression, or on any other basis prohibited by applicable law.

Dr. Amy Zanne Department of Biological Sciences  
George Washington University

Science and Engineering Hall

800 22nd Street NW

Suite 6000

Washington, DC 20052 Office: 6690 SEH Office Phone: (202) 994-8751 Lab: 6420 SEH Lab Phone: (202) 994-9613 Fax: (202) 994-6100 Website: <http://www.phylodiversity.net/azanne/> Amy Zanne <[aezanne@gmail.com](mailto:aezanne@gmail.com)>

---

## GrandValleyStateU EvolutionaryMedicine

The Department of Biomedical Sciences currently has multiple faculty members engaged in evolutionary biological research (see [gvsu.edu/bms](http://gvsu.edu/bms)). Thus, it should be noted that we are accepting applications from qualified candidates with an evolutionary biology background or research program.

---

Department of Biomedical Sciences, Grand Valley State University Assistant Professor of Anatomy and Physi-

ology - The Biomedical Sciences department at Grand Valley State University is pleased to announce a search for a new tenure-track faculty member to join our growing department in Fall 2018.

**Qualifications and Education:** Qualified applicants will be committed to both classroom teaching and collaborative research involving undergraduate and graduate students. Applicants with the capability to teach an integrated human anatomy and physiology course and associated labs are encouraged to apply. In addition, experience teaching cadaver-based anatomy or advanced physiology is desired. The area of research emphasis is open, although we encourage candidates whose research complements foci of existing faculty to apply. The successful candidate must have obtained a Ph.D. or equivalent in anatomy, physiology, biological anthropology, biology, or a related field.

**Responsibilities:** Duties include a 9-contact hour teaching load per semester, scholarship, and service. The primary teaching duties for this position will be an integrated anatomy and physiology course, although faculty may be asked to teach in other areas of expertise, including cadaver-based anatomy or advanced physiology, depending on past experience and educational background.

**Salary:** Competitive and commensurate with qualifications. Startup funds for research are available.

**Department:** The Biomedical Sciences department has been a rapidly expanding department at Grand Valley State University. The department has approximately 1,300 undergraduate majors, 42 full time faculty members, a Master's degree program, and offers courses that support other undergraduate majors, the university's general education program, and select graduate programs. Along with our primary teaching and research facilities, a new science building was recently completed to support laboratory opportunities for students and faculty, including a vivarium, aquatic facility, plastination lab, and advanced microscopy suite including a confocal microscope. For more information, see <http://www.gvsu.edu/bms>. **University:** Grand Valley State University is a public institution with 22,209 undergraduate and 3,251 graduate students located in Grand Rapids, Michigan. The university is committed to creating an inclusive and diverse environment for faculty and students while promoting enrichment of society through excellent teaching, active scholarship, and public service. More information can be found here: <http://www.gvsu.edu/>. Grand Valley State University is an EOE, which includes protected veterans and individuals with disabilities. See <http://www.gvsu.edu/affirmative/>. **How to Apply:** A complete application must include:

(1) a cover letter; (2) curriculum vita; (3) research statement that addresses how undergraduates and/or graduate students will participate in your research program; (4) teaching statement that addresses relevant teaching experience and philosophy; (5) contact information for three references; and (6) graduate transcripts (unofficial). Please apply at: <http://jobs.gvsu.edu/>. If you have questions about applying online or need assistance, call Human Resources at 616-331-2215. Email questions about the position to: Dr. Laura Stroik, Search Committee Chair ([stroikl@gvsu.edu](mailto:stroikl@gvsu.edu)). The review process will begin on November 3rd and will continue until the position is filled.

Laura Stroik <[stroikl@gvsu.edu](mailto:stroikl@gvsu.edu)>

---

## Hawaii Tech PopulationGenetics

Aloha! The University of Hawaii, Manoa and USDA-ARS Pacific Basin Agricultural Research Center have funding for a highly experienced technician in the area of population genetics/phylogenomics/molecular systematics. This position is currently posted at the University of Hawaii, 0078996T and closes on October 31st, 2017 (<http://workatuh.hawaii.edu/Jobs/NAadvert/27762/4598809/1/postdate/desc>). This research project is focused on analyzing populations of tephritid fruit fly species using genome-wide analysis techniques towards marker discovery and developing assays for determination of source populations.

The duties include but are not limited to: high throughput extraction of DNA/RNA; generation of NGS libraries (DNA, RNAseq, ddRAD, etc) for Illumina, single molecule (e.g. PacBio/Nanopore), and linked-read (e.g. 10x Genomics) sequencing; and traditional genotyping (e.g. TaqMan assays) etc. A strong background in wet-lab techniques in population genetics and phylogenetics or genomics is required, including high-throughput sequencing library preparation. Additional tasks may include assisting in microinjections for functional genomic studies (CRISPR/RNAi), assisting in maintenance of fruit fly colonies and performing experimental crosses, laboratory maintenance, etc. Knowledge of linux/unix, scripting, and light programming in some language is preferred but not required. We have in-house automated laboratory equipment for nucleic acid extraction and library prep as well as HPC computing resources and a very active research program. Salary starts at ~\$42,000/yr with benefits, hired through the University

of Hawaii at Manoa, and the job will be stationed at the USDA-ARS Pacific Basin Agricultural Research Center in Hilo, Hawaii (on the Big Island of Hawaii). Appointment is for 1 year, with extension annually, based on performance and funding. Currently, at least 2 years of funding is available. Master's degree or undergraduate with extensive experience is required.

To learn more about our research program, you can view: <https://youtu.be/dU2kFhI6bYI> If you have any questions, please contact Dr. Scott Geib at [scott.geib@ars.usda.gov](mailto:scott.geib@ars.usda.gov). To apply, complete and submit an application package following instruction at <http://workatuh.hawaii.edu/Jobs/NAadvert/27762/4598809/1/postdate/desc> before the October 31st closing date

"Geib, Scott" <[Scott.Geib@ARS.USDA.GOV](mailto:Scott.Geib@ARS.USDA.GOV)>

---

## MaxPlanckforOrnithology TechAssist AvianEvolution

The Max Planck Institute for Ornithology is an internationally oriented research institute dealing mainly with the fields of behavioral neurobiology, behavioral ecology, evolutionary biology, immunocology and animal migration. The research group of Dr. Aplin at the Max Planck Institute for Ornithology (Radolfzell, Germany) is looking for a Biological technical assistant (10/17) in part time (75%) or full time. The position is to assist in research of the ecology and evolution of social behaviour and cognition in birds, helping with a variety of tasks including captive experiments and fieldwork.

Main tasks:

The technical assistant will be an integral part of the lab group, supporting the research by carrying out a range of tasks related to animal handling, data management and data collection. First, they will assist in lab organization, helping with the construction and maintenance of technical equipment, as well as data entry and management. Second, they will assist with animal handling/observation in the aviary complex and laboratory at the institute. Third, they will help with observation and monitoring of wild birds. This will primarily involve monitoring a breeding population of tits (*Parus major*, *Cyanistes caeruleus*) located around the institute: catching, tagging and taking measurements on birds. The technical assistant may also potentially assist in other fieldwork projects, including on wild parrots, and will have the opportunity to engage with public outreach.

**Requirements:**

Applicants should have a degree in a relevant subject. Ideally candidates will also have (or will shortly have) a Master's degree in Biological Sciences or completed training as a biochemical assistant. Previous experience in scientific work is desirable. The project will involve capture and handling of wild birds, and experience in bird ringing is an absolute must. The work will involve creative engineering, electronics and hardware construction, and so while previous experience is not necessary, an interest in electronics or programming is of advantage.

We are looking for candidates who are pro-active, responsible and reliable, with good time management and the ability to work in a team. The work will occasionally involve unusual hours, physically demanding fieldwork and creative problem solving, and so the ability to thrive in this environment is vital. An interest in science and the scientific process is an advantage, and there will be lots of opportunity for the candidate to be involved in active research. Proficiency in German is required. However, the working language of the lab-group is English, and so English language skills are highly desirable.

The starting date will be early 2018, ideally in January, but no later than 30th March. The position is initially planned for two years and can be extended up to five years subject to satisfactory performance.

The remuneration is paid according to the collective agreement of the public service TVoD according to the qualification and the activity to be transferred, either part time or full time.

The Max-Planck society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals.

For further information, please contact Dr. Lucy Aplin, e-mail: [laplin@orn.mpg.de](mailto:laplin@orn.mpg.de).

Please send your application, preferably as one pdf-file, by November 6th, 2017 (quoting reference number 10/17) to: [personal@orn.mpg.de](mailto:personal@orn.mpg.de)

Lucy Aplin <[laplin@orn.mpg.de](mailto:laplin@orn.mpg.de)> Max Planck for Ornithology; Radolfzell, Germany. <http://www.orn.mpg.de/person/54450/660919> "Aplin, Lucy" <[laplin@orn.mpg.de](mailto:laplin@orn.mpg.de)>

---

## MichiganStateU EvolutionPlantResilience

Note that even though the listing does not mention evolution, candidates asking evolutionary questions about the physiology of plants stress resistance are encouraged to apply. Also, while the mission of the PRI is focused on crop plants, research using non-crop species to address questions of relevance to agriculture is appropriate.

**Three Faculty Positions in Plant Resilience** The departments of Biochemistry and Molecular Biology, Horticulture, and Plant Biology in collaboration with the newly created Plant Resilience Institute at Michigan State University are inviting applications for three tenure-system positions. These positions are part of MSU's Global Impact Initiative, designed to address the grand challenges through the creation of over 100 new faculty positions in some of the most promising and exciting fields of research. MSU has a world-class plant science community and support infrastructure comprising more than 150 faculty members conducting a wide range of plant research spanning the lab-to-field continuum in both natural and agricultural ecosystems.

The mission of the Plant Resilience Institute (PRI) is to conduct basic laboratory and field research on plant resilience with the goal of improving the productivity and nutritional quality of agronomic and horticultural crops. Research programs center on mechanisms that enhance plant resistance to biotic and abiotic stresses associated with changing environmental conditions. The PRI is an interdisciplinary cross-departmental program, with PRI members belonging to a range of home departments. The following academic departments are inviting applications from individuals working on various aspects of plant resilience.

The Department of Biochemistry and Molecular Biology invites applications for a position at the Assistant or Associate Professor level from individuals addressing fundamental aspects of plant response and adaptation to global environmental change. Specific research areas of interest include, but are not limited to, environmental signal transduction and mechanisms of plant stress tolerance to biotic stresses, water deficit, high salinity, nutrient deprivation, and temperature extremes. Candidates whose research program integrates a broad spectrum of biochemical, molecular, and genomic technologies, including gene-editing approaches applied to

model or agriculturally relevant plants, are especially encouraged to apply.

Applicants should provide a cover letter, curriculum vitae, a 2-to-3-page statement of current and future research interests, a brief description of teaching philosophy, and the names of three persons who can provide a letter of reference. The complete application package should be compiled into a single PDF document and submitted through the MSU Human Resources site at [careers.msu.edu](http://careers.msu.edu) (posting #468293). To ensure full consideration, applications should be submitted by November 15, 2017. Questions regarding this position may be emailed to Professor Gregg Howe, search chair, at [howeg@msu.edu](mailto:howeg@msu.edu).

The Department of Horticulture invites applications for an Assistant or Associate Professor from individuals using innovative experimental approaches to study fundamental plant responses to the environment with a focus on abiotic and biotic constraints relevant to horticultural crop productivity. The department seeks applicants with expertise in areas including, but not limited to, the impacts of temperature extremes, elevated carbon dioxide, water stress and other environmental factors on vegetative and reproductive development, particularly growth cycle/dormancy regulation, nutrient utilization, and plant-rhizosphere/-phyllosphere interactions.

Qualified applicants should submit: a letter of application including a personal statement; curriculum vitae; summary of research accomplishments and future research objectives; description of teaching experience and interests; summary of experience or philosophy fostering diversity and inclusion in your professional roles; and contact information (address, e-mail and phone) for three references. The complete application package should be compiled into a single PDF document and submitted through the MSU Human Resources site at [careers.msu.edu/](http://careers.msu.edu/) (posting #465448). Review of application will begin November 15, 2017 and continue until the position is filled. Questions can be directed to Professor Rebecca Grumet, search chair, at [grumet@msu.edu](mailto:grumet@msu.edu).

The Department of Plant Biology invites applications for an Assistant Professor position from individuals using physiological approaches to study fundamental problems in plant resilience to environmental conditions. We seek applicants addressing compelling research questions within the broad area of ecophysiology, including studies from the whole-plant to the ecosystem scale. These questions should focus on plant resilience to abiotic or biotic stresses including, but not limited to,

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>

---

## MississippiStateU EvolutionaryGenetics

The Department of Biological Sciences at Mississippi State University invites applications for a 9-month tenure-track Assistant Professor position in Evolutionary Genetics.

We are seeking candidates that use empirical and/or theoretical approaches to study heritable variation and its role in facilitating evolutionary change. The successful candidate will be expected to develop an externally funded research program, teach courses for the undergraduate and graduate programs (M.S. and Ph.D), and contribute to the service mission of the department. Appointment will be at the rank of Assistant Professor, with an anticipated start date of August 16, 2018. Minimum requirements include a Ph.D. in a relevant area of Biology, post-doctoral experience, evidence of sustained scholarly productivity, and evidence of teaching competence.

Mississippi State University is a comprehensive land-grant university that serves more than 21,000 students. Campus research infrastructure includes a High Performance Computing Collaboratory (<http://www.hpc.msstate.edu/>), proteomics and genomics equipment at the Institute for Genomics, Biocomputing & Biotechnology (<http://www.igbb.msstate.edu/>), computational and statistical expertise at the Center for Computational Sciences (<http://www.ccs.msstate.edu/>), Center of Biomedical Research Excellence (COBRE, NIH), remote sensing and GIS expertise in the Geosystems Research Institute (<http://www.gri.msstate.edu/>), and microscopy and imaging through the Institute for Imaging and Analytical Technologies (<http://www.i2at.msstate.edu/>). Faculty in the Department of Biological Sciences have diverse research interests and active collaborations with MSU faculty in the Departments of Anthropology, Chemistry, Computer Science, Geosciences, Biochemistry, Molecular Biology, Plant Pathology & Entomology, Biological Engineering and the College of Veterinary Medicine.

The Department of Biological Sciences is housed in Harned Hall on the MSU-Starkville Campus, which

was recently renovated providing modern facilities for cutting-edge research. The department offers degrees at the B.S. (Biological Sciences, Medical Technology, and Microbiology), M.S. (Biological Sciences thesis and non-thesis) and Ph.D. (Biological Sciences) levels. For more information please visit: <http://www.biology.msstate.edu>. Instructions for Applying: Applicants must apply online at <http://explore.msujobs.msstate.edu> (search job #496272 under Careers tab). Attach (in one pdf file) a cover letter, a CV, statement of research expertise and goals (2-page maximum), a statement of teaching interests and competency (2-page maximum), contact information for three references and reprints of up to 3 publications. Screening of applications will begin November 1, 2017 and will continue until the position is filled.

Equal Employment Opportunity Statement: MSU is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, ethnicity, sex (including pregnancy and gender identity), national origin, disability status, age, sexual orientation, genetic information, protected veteran status, or any other characteristic protected by law. We always welcome nominations and applications from women, members of any minority group, and others who share our passion for building a diverse community that reflects the diversity in our student population.

Brian A. Counterman Associate Professor Department of Biological Sciences Mississippi State University

bcounterman@biology.msstate.edu

[www.counterlab.org](http://www.counterlab.org) "Counterman, Brian"  
<bc650@igbb.msstate.edu>

to collect samples and monitor natural populations of endangered plant species. Lab work will consist mainly of genetic analyses but will also include seed germination experiments. Funding is available for 2.5 years.

I am hoping to find someone with 1) a strong interest in plant ecology and evolution, conservation biology and/or applied conservation genetics, 2) at least a bachelor's degree with coursework in genetics, evolution, ecology, conservation biology, botany, or a related discipline, 3) previous lab and field experience, and 4) the ability to travel to conduct field work to monitor endangered plant populations.

A description of the lab and its members can be found here:

<http://www.missouribotanicalgarden.org/plant-conservation/plant-conservation-in-action/conservation-genetics.aspx>

A detailed position description can be found here:

<https://missouribotanicalgarden.applicantpro.com/-jobs/538994.html> Applications are only accepted online at the link above

Please contact Christy Edwards: Christine.edwards@mobot.org for questions!

– Christine E. Edwards, PhD Stephen and Camilla Brauer Conservation Geneticist Center for Conservation and Sustainable Development Missouri Botanical Garden Mailing address: PO Box 299 | St. Louis MO 63166 Shipping address: 4344 Shaw Blvd. | St. Louis MO 63110 Phone: 314-577-9457 | Fax: 314-577-0847

Christine.Edwards@mobot.org

---

## MissouriBotanicalGarden Tech PlantConservationGenetics

I am hiring a <sup>3</sup>Lab Specialist<sup>2</sup> (I.e. Lab technician) in the Conservation Genetics Lab at the Missouri Botanical Garden.

The Lab Technician will be working on a project investigating the relationship between fecundity and genetic diversity in the federally threatened *Mead's milkweed* (*Asclepias meadii*) The technician will conduct both field work and lab work to help provide information that will contribute to the management of plant species of conservation concern. Field work will require travel

---

## NCStateU 2 EvolutionaryGenetics

The Department of Biological Sciences in the College of Sciences at North Carolina State University seeks outstanding candidates for two tenure-track faculty positions in genetics at the preferred rank of Assistant Professor although outstanding candidates for Associate Professor will be considered. The ideal candidates will have expertise using genetic approaches to study 1) evolutionary processes and/or 2) the genetics of complex traits and systems. Candidates studying standard or non-traditional model organisms and/or natural populations are encouraged to apply, augmenting the university's current and historical strengths in these areas. The successful candidates will be expected

to develop and/or maintain extramurally funded, nationally recognized, independent research programs and also support the academic mission of the department including undergraduate, graduate, and postdoctoral training programs. We seek candidates who will integrate with diverse researchers within the department and participate in interdisciplinary research centers and training programs throughout the university.

A PhD or equivalent degree in genetics, biological sciences, evolution, or related field is required. Support will include competitive start-up packages, laboratory space, and an interactive research environment.

NC State University provides a vibrant environment for research, teaching and mentoring across disciplines. Opportunities exist for collaborations with faculty in the Department as well as with those in other departments across our campus. Our location in the Research Triangle facilitates interaction with faculty at other institutions as well as with industry and government agencies.

NC State University is an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, national origin, religion, sex, gender identity, age, sexual orientation, genetic information, status as an individual with a disability, or status as a protected veteran. Persons with disabilities requiring accommodations in the application process please call (919) 515-3148.

For more information and to apply for this position, please visit: <https://jobs.ncsu.edu/postings/-91360> – Reade B. Roberts Assistant Professor North Carolina State University Department of Biological Sciences <http://readerobertslab.weebly.com/> “rbrober2@ncsu.edu” <rbrober2@ncsu.edu>

---

## NorthwestMissouriStateU PlantEvolution

Assistant Professor - Botany - Northwest Missouri State

**POSITION SUMMARY:** Plant Biologist with the ability to teach courses in plant diversity, taxonomy, and local flora. The applicant may also be required to contribute to the teaching of other courses such as introductory biology courses for majors and non majors, and Evolution (12 hour load per semester). Applicants whose expertise and background add to the existing variety of coursework and research opportunities for our students

are preferred.

**Essential Functions: ESSENTIAL FUNCTIONS:** 1. Teach upper level courses, with associated labs, suitable for junior and senior level undergraduate biology majors, including Local Flora and Plant Anatomy. 2. Teach core courses in Botany and Biological Diversity and Evolution, with associated labs, suitable for lower level Biology majors. 3. Teach either General Biology (non majors) or Principles of Biology (majors) as a part of the general education curriculum. 4. Manage the departmental greenhouse and herbarium. 5. Provide student support through advisement and service to the University and College through committee work. 6. Establish undergraduate / graduate research in the applicant’s area of expertise 7. Hold seven office hours/week 8. Meet with students outside of class time for additional instruction as appropriate 9. Perform other duties as assigned by the Department

**Qualifications: MINIMUM QUALIFICATIONS:** Education: Ph.D. in applicable discipline. ABD candidates will be considered Skills: Good classroom management and lecture skills; ability to conduct scholarly research

**PREFERRED QUALIFICATIONS:** Education: Ph.D. with postdoctoral experience Experience: Demonstrated potential for excellence in teaching Skills: Demonstrated proficiency in skills applicable to the discipline Additional Job Information: **WORKING CONDITIONS:** Typical university classroom, office, and laboratory conditions

**EQUIPMENT/MATERIALS USED:** Compound and dissecting microscopes. Common classroom teaching equipment.

**COMMUNITY:** Northwest Missouri State University is located in Maryville, Missouri, a community of 12,000 with a diverse economy, and a strong industrial base. Maryville is located 45 miles north of St. Joseph, Missouri and 90 miles north of Kansas City, Missouri. For more information visit the website at [www.maryville.org](http://www.maryville.org). **UNIVERSITY:** Founded in 1905, Northwest is a co-educational, primarily residential four-year university that offers a broad range of undergraduate and selected graduate programs on its Maryville campus as well as its Northwest-Kansas City location and through Northwest Online.

With an enrollment of about 6,500 students, Northwest has met all measures of the state’s performance-based funding initiative during four of the model’s first five years, and U.S. News and World Report has ranked it as the top moderately selective regional university in Missouri during three of the last four years. Safewise ranks the city of Maryville as one of the “Safest College Towns

in America,” while BestCollegesOnline.org has named the Northwest campus one of the “50 Most Amazing University Botanical Gardens and Arboretums in the U.S.” The University boasts a 59 percent graduation rate, which is in the 89th percentile of Northwest’s national peer group. In addition, 96 percent of Northwest bachelor’s degree earners and 97 percent of master’s degree earners secure employment or continue their education within six months of graduation, according to the most recent data. Zippia, a career website, recently named Northwest the best college in Missouri for getting a job.

Northwest places a high emphasis on profession-based learning to help graduates get a jumpstart on their careers.

Students have opportunities to build their resumes with experiences on campus in nearly every area of study, including the Horace Mann Laboratory School, National Public Radio affiliate KXCV, the R.T. Wright Farm, Mozingo Outdoor Education Recreation Area or Knacktive, a student-driven integrated digital marketing communications agency. For more information, visit [www.nwmissouri.edu](http://www.nwmissouri.edu). COLLEGE: The College of Arts and Sciences is one of three academic colleges at Northwest. Comprised of five departments and 16 academic areas, the College offers 104 different major and minor programs. The College is the home of Northwest’s General Education program and serves all students across campus, regardless of their major. For more information visit our website at <http://www.nwmissouri.edu/academics/arts/index.htm>. DEPARTMENT: The Department of Natural Sciences is composed of 28 full time faculty in the disciplines of biology, chemistry, geology, and

— / —

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>

## PurdueU PathogenEvolution

The Department of Biological Sciences invites applicants for a tenure-track faculty position (academic year appointment at the Assistant Professor level) in Vector Ecology, addressing fundamental questions on the relationships among vectors, pathogens, and hosts. We

seek candidates with research interests including (but not limited to) emerging infectious diseases, zoonotic diseases, epidemiology, vector and pathogen evolution, biodiversity-disease relationships, short- and long-term impacts of climate change, population genetics, and land-use changes.

Applicants must have a Ph.D. or equivalent in Biology or related field and relevant postdoctoral experience. The successful applicant is expected to maintain an externally funded research program in Vector Ecology, teach undergraduate and graduate students, and participate in ongoing programs in the Ecology and Evolutionary Biology area and the Department of Biological Sciences.

Extensive opportunities for collaboration exist across the Purdue campus. The Department of Biological Sciences has over 50 faculty members conducting research in ecology and evolutionary biology, structural biology, neurobiology, virology, microbiology, molecular and cell biology, bioinformatics, and biology education <http://www.bio.purdue.edu>. These opportunities are enhanced by a highly interactive community of scientists within the Colleges of Science, Agriculture, Pharmacy, Health and Human Sciences, Veterinary Medicine and Engineering and interdisciplinary centers in the life sciences including the Purdue Center for the Environment, the Purdue Institute of Inflammation, Immunology and Infectious Diseases, the Purdue Institute for Integrative Neuroscience, and the Purdue Institute for Drug Discovery.

Applications should be submitted electronically to <https://hiring.science.purdue.edu/> as a single PDF file containing a letter of interest, a detailed curriculum vitae, contact information for three references, a two to three page summary of research interests, and a one-page teaching statement. Purdue University’s Department of Biological Sciences is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction and engagement. Candidates should address at least one of these areas in their cover letter, indicating past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion. Purdue is an ADVANCE institution.

Inquiries should be directed to Prof. Esteban Fernandez-Juricic, Chair, Vector Ecologist Biology Search Committee at [search@bio.purdue.edu](mailto:search@bio.purdue.edu) or \*Vector Ecologist Biology Search Committee, Department of Biological Sciences, Purdue University, 915 W. State St., West Lafayette, IN 47907 < <https://maps.google.com/?q=-915+W.+State+St.,+West+Lafayette,+IN+47907&entry=gmail&source=g> >-2054\*. Review of applications will continue until the position is filled. A background check is required for employment in this position.

[www.bio.purdue.edu/People/faculty/positions.html](http://www.bio.purdue.edu/People/faculty/positions.html)  
Mark Christie <christ99@purdue.edu>

---

### SarahLawrenceC EvolutionaryNeuroscience

Sarah Lawrence College invites applications for a tenure track position in Biology beginning Fall 2018. The successful candidate will be broadly trained in neurobiology; sub-fields can include a wide range of disciplines, including behavior, development, evolutionary neuroscience, neurogenetics, neuroimmunology, or other fields. The successful candidate must be a dedicated teacher who will be responsible for developing a wide curriculum in neurobiology-related courses, and will be expected to work closely with students to develop writing and critical thinking skills in both the class and lab setting. Preference will be given to those candidates who are also able to teach courses outside neurobiology. A Ph.D. in Biology and prior college level teaching experience are required. Sarah Lawrence is a small liberal arts college with a unique pedagogy based on small classes and individual tutorials; interdisciplinary work is a central component of the curriculum.

Application materials must include: cover letter, CV, copy of graduate transcript, statements of teaching philosophy and research interests, two course descriptions, and three letters of recommendation. Deadline for applications is November 17, 2017.

For information on Sarah Lawrence College, our curriculum, teaching methods, and philosophy of education, please visit our web site at <http://www.sl.c.edu>. Sarah Lawrence has a strong commitment to the principle of diversity. In that spirit, we especially welcome applications from under-represented groups.

Posting: <https://slc.peopleadmin.com/postings/937>  
Michelle Hersh <mherish@sarahlawrence.edu>

---

### StAmbroseU Iowa EvolutionaryBiologist

Evolutionary Biologist

The Department of Biology at St. Ambrose University, Davenport, Iowa, invites applications for a full-time tenure-track Assistant Professor position, beginning August 2018. We particularly seek a candidate with strong field biology skills. Primary teaching responsibilities include: majors' Introductory Biology, majors' Evolution, and the possibility to develop a course in the area of their expertise. The successful candidate will be responsible for mentoring inquiry-based projects conducted at a local field site as part of the Introductory Biology curriculum. Ph.D. is required, teaching experience preferred. Priority will be given to applicants showing a strong commitment to teaching and scholarly engagement, as well as a willingness to teach in multiple delivery formats. St. Ambrose University is an independent, comprehensive, and Catholic diocesan university firmly grounded in the liberal arts. An institution of 3,200 graduate and undergraduate students, the University's Core Values include: Catholicity, Integrity, the Liberal Arts, Life-Long Learning, and Diversity. See [www.sau.edu](http://www.sau.edu) for further information. Review of applications will begin November 30th and continue until the position is filled. Please apply online at [http://www.sau.edu/Human\\_Resources/Jobs.html](http://www.sau.edu/Human_Resources/Jobs.html) and upload your cover letter, statement of teaching philosophy, curriculum vitae, and unofficial graduate transcript. Three letters of reference should be sent directly to HumanResources@sau.edu. EOE

Kathy Levetzow Human Resources Coordinator St. Ambrose University 518 W. Locust Street Davenport, IA 52803 (563) 333-6364

"Levetzow, Kathy" <levetzowkathyr@sau.edu>

---

### StonyBrookU VertebrateEvolution

Dear All,

The Department of Ecology and Evolution is recruiting a motivated Assistant Professor, please post and dissem-

inate (full details here: <https://academicjobsonline.org/ajo/jobs/10164>, interest in conducting research in the Turkana Basin is a requirement, but experience onsite is not):

TENURE-TRACK ASSISTANT PROFESSOR: VERTEBRATE EVOLUTION AND ITS ENVIRONMENTAL CONTEXT DEPARTMENT OF ECOLOGY AND EVOLUTION STONY BROOK UNIVERSITY

As part of a university-wide initiative involving the Turkana Basin Institute, the Department of Ecology and Evolution at Stony Brook University invites applications for a tenure-track faculty position at the rank of Assistant Professor whose research concerns vertebrate evolution and/or its ecological and climatological context. Areas of particular interest include, but are not limited to, phylogenetics, comparative vertebrate morphology, vertebrate paleontology, paleoecology, and paleo-community ecology.

This position is one of five faculty lines being created across campus for researchers whose interests intersect with the goals and resources of the Turkana Basin Institute. We seek a candidate with the potential to augment or build upon one or more of the Department of Ecology and Evolution's current research strengths, while taking advantage of Stony Brook's unique relationship with the Turkana Basin Institute and related programs across campus. The Turkana Basin is a premier site for the discovery and understanding of hominid and vertebrate evolution and the ecological and climatological context of these processes. Candidates need not at present have a research program in the Turkana Basin.

We seek a candidate who will be an effective teacher in undergraduate and graduate courses in the areas of ecology and evolution, and who will develop programs that will enhance the department's tradition of interdisciplinary research. Details of the department's areas of research emphasis and current facilities may be found at <http://www.stonybrook.edu/commcms/ecevo/>. The successful candidate must have a Ph.D. in ecology and evolution or closely related field at the time of appointment; preference will be given to those with related post-doctoral experience. The successful candidate must also have the clear potential to establish an internationally recognized, externally funded research program that would include mentoring of graduate and undergraduate students.

Applications are due by December 1, 2017 through AcademicJobsOnline.org at <https://academicjobsonline.org/ajo/jobs/10164> (Position ID: 10164). Applications must include a cover letter, CV, research and teaching statements and the names and contact information of three references.

Applications should be addressed to Search Committee, Department of Ecology and Evolution, Stony Brook University, Stony Brook, NY, 11794-2100, USA. Questions should be directed to the Chair of the Search Committee, Prof. Jeffrey Levinton ([Jeffrey.Levinton@stonybrook.edu](mailto:Jeffrey.Levinton@stonybrook.edu)).

Stony Brook University is an affirmative action / equal opportunity employer and educator. If you need a disability-related accommodation, please call the University Human Resources Services Department at (631) 632-6161 or the University Hospital Human Resources Department at (631) 444-4700. In accordance with the Title II Crime Awareness and Security Act, a copy of our crime statistics is available.

Liliana M. D'valos

Office phone: 631 632 1554

[http://lmdavalos.net/lab/The\\_Lab.html](http://lmdavalos.net/lab/The_Lab.html) News & updates: <https://www.facebook.com/DavalosLab/> Liliana M. D'valos

Office phone: 631 632 1554

[http://lmdavalos.net/lab/The\\_Lab.html](http://lmdavalos.net/lab/The_Lab.html) News & updates: <https://www.facebook.com/DavalosLab/>

---

## TBRI SanAntonio ComputationalBiology

Texas Biomedical Research Institute, San Antonio, Texas (<https://www.txbiomed.org/>)

17-090 Open Rank Faculty Position - Computational Biology & Data Science - Genetics

The Department of Genetics invites applications for an open rank faculty position in the areas of computational biology. Applications will be considered for Assistant to Full Scientist (equivalent to Assistant-Full Professor). We are particularly interested in candidates with active research programs in the following areas:

\* Integrative systems biology \* Statistical and quantitative genetics \* Evolutionary and population genomics

In addition to fostering an independent research program, the candidate will have the opportunity to work closely with other investigators in the Department of Genetics, the Department of Virology and Immunology, and the Southwest National Primate Research Center. These house vigorous research programs on infectious disease biology (including work on Ebola, Zika, HIV,

TB, malaria and schistosomiasis), on human and non-human primate genomics and complex disease genetics. The investigators and their teams will have access to the AT&T Genomics Computing Center (GCC), a dedicated facility at the Texas Biomedical Research Institute. The GCC includes a high performance parallel computing cluster with over 6000 processors and extensive data storage capability to support genomic, proteomic, metabolomic, and bioinformatic analyses of large and complex datasets. Applicants with both wet lab and computational programs are encouraged to apply and those focusing on proteomic or metabolomics analysis will have access to cutting edge mass spectrometry equipment housed in the Department of Genetics. The new investigators will have a generous startup package including personnel, hardware, and laboratory support.

Texas Biomed is located in San Antonio, Texas, a vibrant expanding city with a strong scientific community frequently ranked among the top cities in which to live in the US. Texas Biomed is undergoing dynamic change and growth (including data sciences). It has longstanding partnerships with regional institutions, such as UT Health San Antonio, and the University of Texas at San Antonio.

**EDUCATION/EXPERIENCE/SKILLS:** Qualified applicants must have a doctoral degree, (e.g., Ph.D., D.V.M., M.D., etc.) in any biological discipline, statistics, or computational sciences, and proven record of a federally funded independent research program in the areas of computational analysis of biological data, statistical genetics, bioinformatics, or related areas of research, as evidenced by appropriate funding and publications. Experience in high performance computing, and cluster infrastructure support and usage will be highly beneficial.

**OTHER:** This is a full-time salaried (exempt) position. Texas Biomed business hours are Mondays through Fridays - 8:00 a.m. to 5:00 p.m. Central Time. Submit curriculum vitae, a description of research interests, and a portfolio summarizing past research experience with your application. Application packets are accepted electronically or in hard copy. A completed application packet is a requirement for all positions. Texas Biomed is committed to a drug free workplace. Equal Employment Opportunity/M/F/Disability/Protected Veteran Status.

<https://www.txbiomed.org/employment/-job-opportunities/open-rank-faculty-position-computational-biology-data-science-17090/>

Anderson <tanderso@txbiomed.org>

Tim

## TBRI SanAntonio ResAssist SchistosomeParasiteEvolution

TEXAS BIOMEDICAL RESEARCH INSTITUTE, San Antonio, Texas (<https://www.txbiomed.org/>)

RESEARCH ASSISTANT - Schistosome Parasite Evolution. We are searching for an enthusiastic Research Assistant to conduct laboratory experiments with parasitic blood flukes (schistosomes) that are the causative agents of schistosomiasis. These parasites, which require both aquatic snail intermediate and vertebrate definitive hosts, infect over 200 million people worldwide and kill an estimated 200,000 people each year. As schistosomes can be maintained in the laboratory, they also provide an excellent system for investigating parasite co-evolution with the host snail, and evolution of drug resistance. The successful candidate will play a critical role in a dynamic research team examining the genetic basis and evolution of parasite virulence, drug resistance, and host specificity in this important parasite. The research project will require excellent organizational skills, meticulous record keeping, and will involve maintenance of the schistosome parasite lifecycle in snails and rodents in the laboratory. The successful candidate will report to Dr. Tim Anderson, and will work under the direct guidance of Dr. Winka Le Clec'h and Dr. Frédéric Chevalier.

**PAPERS:** Valentim, C.L., Cioli, D. Chevalier, F.D., Cao, X., Taylor, A.B., Holloway, S.P., Pica-Mattoccia, L., Guidi, A., Basso, A., Tsai, I.J., Berriman, M., Carcahlo-Queiroz, C., Almeida, M., Aguilar, H., Frantz, D., Hart, P.J., LoVerde, P., Anderson, T.J. Genetic and molecular basis of drug resistance and species-specific drug action in schistosome parasites. *Science* 342:1385-1389, 2013.

Chevalier FD, Valentim CL, LoVerde PT, Anderson TJ. Efficient linkage mapping using exome capture and extreme QTL in schistosome parasites. *BMC Genomics*. 2014 Jul 21; 15(1): 617.

Chevalier FD, Le Clec'h W, Eng N, Rugel AR, Assis RR, Oliveira G, Holloway SP, Cao X, Hart PJ, LoVerde PT, Anderson TJ. Independent origins of loss-of-function mutations conferring oxamniquine resistance in a Brazilian schistosome population. *Int J Parasitol*. 2016 Jun; 46(7): 417-424.

**EDUCATION/EXPERIENCE/SKILLS:** Required: Bachelor's or Master's degree in a biological science or

related field. Good organizational skills, a strong work ethic, and an ability to work effectively with others are essential. Preferred: Experience with basic molecular methods and a passion for parasite biology.

**POTENTIAL HAZARDS:** This position will involve potential exposure to infectious agents. Participation in a medical monitoring and surveillance program is required. Immunization against hepatitis B is required unless waived by the employee. Safety training and protective clothing, equipment and supplies will be provided.

**OTHER:** This is a full-time salaried (exempt) position. Texas Biomedical Research Institute business hours are Monday through Friday - 8:00 a.m. to 5:00 p.m. Occasional weekend or evening hours may be required. Texas Biomed is committed to a drug-free workplace. Pre-employment drug screen is required.

Application packets are accepted electronically or in hard copy. A completed application packet is a requirement for all positions. Incomplete applications will not be accepted. Equal Employment Opportunity/M/F/Disability/Protected Veteran Status

Please see online Application instructions at: <https://www.txbiomed.org/employment/job-opportunities/-research-assistant-schistosome-parasite-biology-17093/>. This job is only open to US-CITIZENS OR PERMANENT RESIDENTS.

Tim Anderson <tanderso@txbiomed.org>

---

## TempleU GenomicsEvolution

Faculty Position in Genomics, Evolution and Complex Traits (assistant and associate professors)

The Institute of Genomics and Evolutionary Medicine (iGEM) at Temple University anticipates hiring tenured/tenure-track faculty members whose interests are in Genomics, Evolution and Complex Traits. Possible research areas include functional genomics, population genetics, genetic epidemiology, epigenetics, and complex traits in human populations, including cancer and other diseases. We are interested in recruiting both computational (data science, statistics, or theory) and empirical (high-throughput data generation) researchers.

The selected candidates will become a core faculty member of the Institute for Genomics and Evolution-

ary Medicine (iGEM; <http://igem.temple.edu>) and of the Center for Computational Genetics and Genomics (CCGG; <http://ccgg.temple.edu/>) at Temple University.

Applicants should submit to [igem@temple.edu](mailto:igem@temple.edu) a single pdf containing a cover letter, a curriculum vitae, a summary of current and future research interests, a statement of teaching philosophy, and contact information for referees. Please include in the cover letter a link to a Google Scholar profile. Review of applications will begin on October 30, and continue until suitable candidates are found.

Temple University is located in the heart of historic Philadelphia, and is the sixth largest provider of graduate school education in the USA. Situated in close proximity to New York City and Washington DC, Philadelphia is home to a large biotech industry and has many outstanding academic and research institutions.

Temple University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community (AA, EOE, m/f/d/v).

Sudhir Kumar, Ph.D. Director, iGEM@Temple Institute for Genomics and Evolutionary Medicine Carnell Professor, Biology Temple University 1925 N. 12th Street Philadelphia, PA 19122

Sudhir Kumar <[s.kumar@temple.edu](mailto:s.kumar@temple.edu)>

---

## TempleU PostDocs Analysts Programmers

Postdoc, Data Analyst, and Programmer positions

Multiple positions are available for individuals with skills to assist in the application of standard research practices and bioinformatics techniques in genomics and evolution. Responsibilities include analysis of various types of sequence and related data, including high throughput data for empirical research. We require proficiency in one or more of the following: (a) statistical or computational tools for molecular evolutionary analysis using genome scale sequence datasets, (b) large-scale data analysis, including the building of pipelines for data retrieval and analysis, and (c) software development. Knowledge of principles of molecular evolution, population genetics, biomedical data, or next generation sequencing is important.

The level of appointment will be made based on the educational level and interest of the candidate. Interested

applicants should send a CV and cover letter detailing related experience to [igem@temple.edu](mailto:igem@temple.edu)

For any scientific or other questions, please write to [s.kumar@temple.edu](mailto:s.kumar@temple.edu)

Sudhir Kumar [www.kumarlab.net](http://www.kumarlab.net) [igem.temple.edu](mailto:igem.temple.edu)

Sudhir Kumar <[s.kumar@temple.edu](mailto:s.kumar@temple.edu)>

---

## UAlabama Macroevolution

The Department of Biological Sciences at The University of Alabama invites applications for three full-time (9-month) tenure-track faculty positions at the rank of Assistant Professor in Ecohydrology, Macroevolutionary Comparative and Quantitative Biology, and Cellular & Molecular Physiology to begin August 2018.

For the Ecohydrology position, the successful applicant will establish an extramurally funded and internationally recognized research program centered on the interactions and feedbacks between ecological and hydrological processes through any component of the water cycle. Applicants should employ integrative, multi-scale approaches that combine field-based work and modeling to characterize relationships between the water cycle, regional climate, and the dynamics of terrestrial and/or aquatic ecosystems, and must be committed to excellence in teaching and mentoring undergraduate and graduate students. We are particularly interested in applications from individuals with a strong foundation in biological and ecological sciences and a demonstrated record of research in improving our understanding of coupled processes at scales ranging from watersheds to regions and in the context of global environmental change. The successful candidate will be encouraged to leverage Alabama's unique and diverse water resources to support an innovative research program, and to forge collaborations with the new NOAA National Water Center, which opened on the UA campus in 2014, and the diverse faculty at UA and Dauphin Island Sea Lab with interests in water-related research.

For the Macroevolutionary Comparative and Quantitative Biology position, the successful candidate will have a strong background in comparative evolutionary analyses and quantitative genetics. The successful applicant will join a growing research core in computational biology and will be expected to develop and apply statistical comparative methods that link micro and macro processes to further our understanding evolutionary

processes, such as linking quantitative genetic process models with phylogenetic comparative methodologies. Applicants with experience in mathematical modeling of evolutionary processes including advanced population genetics, game theory modeling, or optimality modeling are especially encouraged to apply. Applicants must have a Ph.D. and post-doctoral or equivalent experience. Evidence of significant contributions to the field of macroevolution and a demonstrated commitment both to collaborative research and teaching at the undergraduate and graduate levels is also required. The successful applicant will be expected to establish an extramurally funded and internationally recognized research program in the field(s) of macroevolution and quantitative genetics. Teaching responsibilities will include basic undergraduate courses in genetics and macroevolution and graduate courses in the successful candidate's area of expertise.

For the Cellular & Molecular Physiology position we seek applicants with a broad focus on understanding mechanisms by which cell signaling gives rise to complex physiological functions in response to environmental factors (biotic or abiotic). Applicants using model or non-model organisms with expertise in optogenetics, in vivo genetic techniques, and/or systems biology approaches are encouraged to apply. The successful applicant will be expected to establish an extramurally funded and internationally recognized research program in Cellular and Molecular Physiology. Teaching responsibilities will include basic undergraduate courses in cellular physiology and biology, as well as graduate courses in the successful candidate's area of expertise. Depending on the applicant's expertise, he or she may also have the opportunity to teach a course in microscopy research applications and serve as Director of the UA Optical Analysis Facility.

Candidates for all positions must have a Ph.D. in the Biological Sciences or a related field and postdoctoral (or equivalent job) experience. Evidence of significant intellectual contributions to their respective fields and a demonstrated commitment to teaching at both the undergraduate and graduate levels are also required. The successful applicants will also be expected to establish extramurally funded and relevant research programs.

A complete application includes (1) an application letter; (2) CV; (3) statement of research interests and goals; (4) statement of teaching interests and philosophy; and (5) a list of at least four references (including contact information). Letters of reference will be requested by the search committee as appropriate. To apply, go to <https://facultyjobs.ua.edu>, complete the online application (Job # 0810972 for the Ecohydrology position; Job # 0810973 for Macroevolutionary Comparative and

Quantitative Biology position; or Job # 0810974 for

— / —

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>

## UAlabama TeachingEvolution

The Department of Biological Sciences at The University of Alabama seeks to hire three assistant teaching professor positions for Fall 2018 start dates. These are non-tenure track renewable contract (NTRC) faculty, each with three-year contracts, subject to annual reviews.

Position 1: Assistant Teaching Professor Job # 0810897 Primary teaching duties will entail large-enrollment undergraduate courses, such as Introductory Biology, Microbiology, and / or non-majors Human Anatomy and Physiology. A course in the successful candidate's own specialization may be considered, depending on the department's needs. This position will be a 9-month appointment with optional summer teaching.

Position 2: Assistant Teaching & Biology Education Professor Job #0810992 Responsibilities will include teaching lower division service, coordinating biology outreach programs, developing and teaching a course in pedagogy for graduate students and coordinating lower division advising. This position will be a 12-month appointment.

Position 3: Assistant teaching professor & Lab Coordinator Job # 0810993 The successful candidate will develop and teach a course in laboratory methods for teachers, supervise and organize graduate teaching assistants, maintain inventories of material required for lab instruction, monitor lab sections for consistency in instruction and assessment, and assist in updates of lab exercises. This position will be a 12-month appointment.

As faculty members, NTRC's also serve on department, college, or university committees participate in undergraduate advising, with a typical work load of 80% teaching / 20% service. Pursuit of internal and external funding towards research on improved pedagogy is encouraged. The position is structured as a renewable 3-year contract (9 month appointment, with optional additional summer teaching) with annual performance

review. The NTRC position is not tenure-eligible, however promotion through the academic ranks can be expected based on performance review.

Applicants must hold a Ph.D. in Biology, or a related field and submit the following materials with their application: 1) A cover letter outlining their qualifications (e.g. courses taught, innovative teaching practices, academic experience); 2) CV; 3) 3-4 letters of recommendation; 4) A statement of teaching philosophy; 5) One sample course syllabus; 6) Evidence of teaching effectiveness (e.g., summary of numerical and narrative student evaluations, peer or supervisor observations); and 7) evidence of instructional development (e.g., teaching-related workshops attended, teaching-related conferences and presentations, or publications).

Applicants should upload their materials to <https://facultyjobs.ua.edu>, (with position job number ??? NTRC 1 job # 0810897, NTRC 2 job # 0810992, or NTRC 3 job # 0810993 ) except letters of recommendation. Letters of recommendation should be emailed as attachments directly to the chair of the search committee Jason Pienaar (jpienaar@ua.edu). If preferred, hard copies can be mailed to Jason Pienaar, Department of Biological Sciences, University of Alabama, Box 870344, Tuscaloosa, AL 35487-0348. Review of applications will begin on 20th October and continue until the position is filled.

Applications from women and members of traditionally under-represented groups in Biology are especially encouraged. The University of Alabama is an Equal Opportunity/Equal Access Employer and actively seeks diversity among its employees. For more information about our department, please visit us at <https://bsc.ua.edu/>. Pienaar, Jason

"Pienaar, Jason" <jason.pienaar@ua.edu>

## UAlabama Tuscaloosa TeachingEvolution

Assistant Teaching Professor ??? University of Alabama, Tuscaloosa

The Department of Biological Sciences at The University of Alabama seeks to hire an assistant professor to fill an open teaching professor position on a non-tenure track renewable contract (NTRC) starting Fall 2018. Primary teaching duties will entail large-enrollment undergraduate courses, such as Introductory Biology, Microbiology,

and / or non-majors Human Anatomy and Physiology. As faculty members, NTRC's also serve on department, college, or university committees participate in undergraduate advising, with a typical work load of 80% teaching / 20% service. A course in the successful candidate's own specialization may be considered, depending on the department's needs. Pursuit of internal and external funding towards research on improved pedagogy is encouraged. The position is structured as a renewable 3-year contract with annual performance review. The NTRC position is not tenure-eligible, however promotion through the academic ranks can be expected based on performance review.

Applicants must hold a Ph.D. in Biology or a related field and submit the following materials with their application: 1) A cover letter outlining their qualifications (e.g. courses taught, innovative teaching practices, academic experience); 2) CV; 3) 3-4 letters of recommendation; 4) A statement of teaching philosophy; 5) One sample course syllabus; 6) Evidence of teaching effectiveness (e.g., summary of numerical and narrative student evaluations, peer or supervisor observations); and 7) evidence of instructional development (e.g., teaching-related workshops attended, teaching-related conferences and presentations, or publications).

Applicants should upload their materials to <https://facultyjobs.ua.edu>, (Job #0810897) except letters of recommendation. Letters of recommendation should be emailed as attachments directly to the chair of the search committee Jason Pienaar (jpienaar@ua.edu). If preferred, hard copies can be mailed to Jason Pienaar, Department of Biological Sciences, University of Alabama, Box 870344, Tuscaloosa, AL 35487-0348. Review of applications will begin on 20th October and continue until the position is filled.

Applications from women and members of traditionally under-represented groups in Biology are especially encouraged. The University of Alabama is an Equal Opportunity/Equal Access Employer and actively seeks diversity among its employees. For more information about our department, please visit us at <https://bsc.ua.edu/> "Pienaar, Jason" <jason.pienaar@ua.edu>

---

## UCalifornia Berkeley HostMicrobe

Recruitment Period Open August 31st, 2017 through October 31st, 2017 Apply to this recruitment by October 31st, 2017

### Description

The Department of Molecular and Cell Biology at the University of California, Berkeley, is soliciting applications for a faculty position in the area of Host/Microbe Interactions at the level of Assistant Professor (tenure track). We seek applicants who are studying how interactions with microbes shape the biology (at all levels) of animals and other eukaryotes. The expected start date is July 1, 2018.

A Ph.D. and/or M.D. or equivalent degree in Molecular and Cell Biology or a related field is required at the time of application. Our preference is for applicants who would use molecular, cell biological, genomic, and/or systems biology methods to study how microbes associate with and affect the physiology, development, behavior or function of the host. We seek candidates who have demonstrated excellence, originality and productivity in research.

Preferred qualifications (by start date): Interest and experience in undergraduate and graduate teaching in molecular and cell biology, including microbiology.

Applications must be received by October 31, 2017. To apply, please go to the following link: <http://apptrkr.com/1078012>. Please direct questions to MCB-Search.committee@berkeley.edu, with a note indicating this Search # JPF01440.

Applicants should include: - Cover Letter - Summarize your interest and qualifications for this position. - Curriculum Vitae - Your most recently updated C.V. - Summary of Major Research Accomplishments - A summary of major research accomplishments of approximately 250 words - Publication List - A complete list of publications. - Ongoing and Planned Research Program - A summary of approximately 1,500 words of the applicant's ongoing and planned research program, plus up to one page of figures and a list of essential publication citations. - Significant Publication #1 - In addition to your publication, provide a statement that begins with the manuscript title and author list and then summarizes, in approximately 300 words, the significance of the selected publication. - Significant Publication #2 - In addition to your publication, provide a statement that begins with the manuscript title and author list and then summarizes, in approximately 300 words, the significance of the selected publication. - Significant Publication #3 - In addition to your publication, provide a statement that begins with the manuscript title and author list and then summarizes, in approximately 300 words, the significance of the selected publication. - Statement of Teaching - Summary of teaching interests, as well as any prior teaching and mentoring experience, of approximately 500 words. - Statement of Contribu-

tions to Diversity - Statement addressing past and/or potential contributions to diversity through research, teaching and/or service.

Applicants should arrange to have three letters of reference submitted online. All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are produced via a third party (i.e. dossier service or career center), to the UC Berkeley statement of confidentiality (<http://apo.berkeley.edu/evalltr.html>) prior to submitting their letters.

The Department of Molecular and Cell Biology, UC Berkeley, is committed to addressing the family needs of faculty, including dual career couples and single parents. The Department is interested in candidates who will contribute to diversity and equal opportunity in higher education through their teaching, research, and service. For information about potential relocation to Berkeley, or career needs of accompanying partners and spouses, please visit: <http://ofew.berkeley.edu/new-faculty>. The department seeks candidates whose research, teaching, or service has prepared them to contribute to our commitment to diversity and inclusion in higher education.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. The department is also interested in individuals who may have had non-career paths or who may have taken time off for family reasons (e.g., children, disabled, or elderly), or who have achieved excellence in careers outside academe (e.g., in professional or industry service). The University is responsive to the needs of dual career couples." For the complete University of California nondiscrimination and affirmative action policy see:

— / —

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

---

## UCalifornia Davis ClimateAdaptation

The Departments of Public Health Sciences and Veterinary Medicine and Epidemiology at the University of California-Davis are recruiting for a Tenure-Track Assistant Professor of Epidemiology in Climate Adaptation Health.

POSITION AVAILABLE: Tenure-Track Assistant Professor of Epidemiology in Climate Adaptation Health

SALARY: Dependent on qualifications and experience.

QUALIFICATIONS: PhD in epidemiology or closely related discipline, or a DVM or MD or equivalent with a Master's degree in epidemiology or a closely related public health discipline, is required. Demonstrated experience, productivity, and creativity in research in the epidemiology of climate change and impacts on health are required. Desirable areas of research experience include risks to animal and human health, vulnerable populations, disease surveillance, disaster epidemiology, zoonotic infectious disease and environmental change, harmful algal blooms, water quality and quantity, and other climate-induced food and/or water concerns, quantitative methods, trans-disciplinary research, and global health research. Demonstrated experience working at the interface of human, animal, and environmental health is preferred. Demonstrated record of effective teaching is desired. Must possess excellent interpersonal and communication skills and a demonstrated ability to work with others in a collegial team atmosphere.

RESPONSIBILITIES: Teaching: Responsibilities include: 1) teaching graduate professional (MD and/or DVM) and/or MPVM/MPH, PhD and/or graduate academic course(s) in some of the following: epidemiology, epidemiologic study design, infectious disease epidemiology, surveillance, environmental health science, and modeling of human and/or animal diseases and their risks, and 2) mentoring and directing graduate students.

Research: The development of a creative, independent, and productive basic and/or applied research program in epidemiology related to climate adaptation is a requirement of the position, including publication of results in scientific journals.

Service: University and public service through commit-

tee work, participation in professional organizations, continuing education and other appropriate means is required.

**APPLICATION PROCESS:** To receive fullest consideration, applications must be received by October 30, 2017, position open until filled. Interested applicants should submit 1) a letter of intent outlining special interest in the position, overall related qualifications and experience and career goals; 2) curriculum vitae; 3) the names and addresses of three professional references; and 4) a statement summarizing experience and professional contributions in the area of equity and diversity. Application materials may be submitted by using the University's online submission program, <https://recruit.ucdavis.edu/apply/JPF01735>. The University of California, Davis and the Department of Medicine and Epidemiology, School of Veterinary Medicine, and the Department of Public Health Sciences, School of Medicine are interested in candidates who are committed to the highest standards of scholarship and professional activities, and to the development of a campus climate that supports equality and diversity. The University of California is an affirmative action/equal opportunity employer.

Pamela Mazanet Belleau <pmbelleau@ucdavis.edu>

---

## UCalifornia Riverside Evolutionary Biol

Assistant Professor of Evolutionary Biology  
University of California, Riverside

The Department of Evolution, Ecology and Organismal Biology invites applications for a 9-month tenure-track faculty position in the area of Evolutionary Biology, starting July 1, 2018. Candidates should employ an evolutionary approach in the study of the interface between behavior and physiology and its consequences for adaptive evolution. Research areas include, but are not limited to, behavioral ecology, evolution of behavior, sociobiology, behavioral physiology, sensory behavior, genomics of behavior, behavioral immunology, mate choice, parental care, social behavior, animal learning, and foraging behavior.

The successful candidate will join a vibrant community of researchers in the Department of Evolution, Ecology and Organismal Biology, the Evolution, Ecology and Organismal Biology Graduate Program, the Genetics,

Genomics, and Bioinformatics Graduate Program, the Center for Conservation Biology, the Center for Invasive Species Research, the Institute for Integrative Genome Biology, and the Environmental Dynamics and GeoEcology Institute. Consult <http://eeob.ucr.edu/> for details about the department. Applicants will be expected to vigorously pursue extramurally-funded research and contribute to teaching in our undergraduate and graduate core curricula. A Ph.D and demonstrated excellence in research are required.

Applications, including a cover letter, curriculum vitae, separate statements of research and teaching interests, a statement of contributions to diversity, and up to three selected reprints of publications must be submitted through: <https://aprecruit.ucr.edu/apply/JPF00723>. In addition, applicants should request that three letters of recommendation be submitted through this site. Evaluation of applications will begin November 19, 2017, but the position will remain open until filled.

UCR is a world-class research university with an exceptionally diverse undergraduate student body. Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission is a preferred qualification. Advancement through the faculty ranks at the University of California is through a series of structured, merit-based evaluations, occurring every 2-3 years, each of which includes substantial peer input.

The University of California is an Equal Opportunity / Affirmative Action Employer with a strong institutional commitment to the achievement of excellence and diversity among its faculty and staff. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by law.

Mary Stuart <mary.stuart@ucr.edu>

---

## UCentralFlorida 2 PlantEvolution

Two Tenure-Track Assistant Professor Positions: Integrative Plant Biology and Ecoinformatics

The Department of Biology at the University of Central Florida (UCF) invites applications for two nine-month, tenure track Assistant Professor positions: one in Integrative Plant Biology and one in Ecoinformatics. Successful applicants will be colleagues who show promise of: building prominent and high-quality, productive research programs; facilitating collaborations; and complementing departmental strengths. Teaching one course per semester and mentoring students in our undergraduate and graduate programs is expected. Laboratory and office space and competitive startup funding will be provided. Applicants must have a Ph.D. from an accredited institution and appropriate postdoctoral training in an appropriate field. For more information about the department, please visit <http://sciences.ucf.edu/biology>. Application reviews will begin on December 8, 2017 and continue until positions are filled. Both positions are anticipated to begin August 2018.

**Integrative Plant Biology:** All areas of plant biology will be considered, including plant physiology, molecular systematics, evolutionary biology, or population, community or landscape ecology, in terrestrial or aquatic environments. Successful candidates are expected to contribute to our new undergraduate plant science track. Send questions to Patrick Bohlen (Patrick.Bohlen@ucf.edu). (position #32623) (<http://www.jobswithucf.com/postings/51128>)

**Ecoinformatics:** We define ecoinformatics broadly as the collection, organization, analysis, and interpretation of environmental, ecological, &/or evolutionary datasets. Research should address interesting and important questions related to environmental, ecological, &/or evolutionary processes across spatial and/or temporal scales. Software & database development can be considered toward tenure and promotion, akin to publications. An ability to teach graduate ecoinformatics and GIS will be viewed favorably. Send questions to David Jenkins (David.Jenkins@ucf.edu). (position #37965) (<http://www.jobswithucf.com/postings/51129>)

**How to Apply:** Applicants must e-mail to respective contacts (shown above) a single PDF document that includes a letter of intent, curriculum vitae, statements of research and teaching interests, and contact information

for three professional references. Also, an application must be submitted separately through the UCF Human Resources website (shown above).

The University of Central Florida (<http://ucf.edu>) has grown in size, quality, diversity, and reputation since its inception in 1963. Today, the university offers 212 degree programs to 66,000 diverse students. UCF is a research university of very high research activity (RU/VH), per the Carnegie Foundation. As an equal opportunity/affirmative action employer, UCF encourages all qualified applicants to apply, including women, veterans, individuals with disabilities, and members of traditionally underrepresented populations. As a Florida public university, UCF makes all application materials and selection procedures available to the public upon request.

David Jenkins <David.Jenkins@ucf.edu>

---

## UCincinnati CellEvolution

Dear Evolutionary Biologists,

The Department of Biological Sciences has a strong interest and presence in evolutionary biology, and is seeking a new faculty member complimenting our existing strength in this area. Candidates investigating evolutionary questions at the cellular/ molecular level are encouraged to apply. Please don't hesitate to contact me if you have questions.

Elke Buschbeck Professor - Biological Sciences  
elke.buschbeck@uc.edu

Tenure-track position in cell biology/ cell physiology, University of Cincinnati.

The Department of Biological Science in the College of Arts & Sciences at the University of Cincinnati is seeking an Assistant Professor in CELL BIOLOGY/CELL PHYSIOLOGY. Ideal candidates will conduct research on molecular, cellular, developmental, or genetic mechanisms that address evolutionary, neurobehavioral, or ecological questions, and complement current faculty interests in one or both of our two areas of research strength (Sensory Biology, Behavior and Evolution [SBBE], or Environmental Change and Biological Resilience [ECBR]) (<http://www.artsci.uc.edu/departments/biology.html>).

Development of a rigorous, externally funded research program is expected. Teaching duties will include a course in basic cell biology for undergraduate majors as well as other courses in areas of the candidate's expertise. **MINIMUM QUALIFICATIONS:** A Ph.D. or equivalent

degree and postdoctoral experience are required.

All interested and qualified applicants must apply online at <https://jobs.uc.edu/> (Requisition #22765) by submitting cover letter, curriculum vita, statements of research interests and teaching philosophy, and a one-page diversity and inclusion statement summarizing your contributions or potential contributions to diversity and inclusion as they relate to teaching, research, and/or mentoring.

Reference letters will be expected from semi-finalists within 7 days upon notification. Review of applicants will begin November 6, 2017 and will continue until position is filled.

The University of Cincinnati is the recipient of the National Science Foundation ADVANCE Institutional Transformation Award to increase the participation of women in academic science and engineering careers.

FOR ALL FACULTY HIRES OFFICIAL ACADEMIC TRANSCRIPTS WILL BE REQUIRED AT THE TIME OF HIRE

The University of Cincinnati, as a multi-national and culturally diverse university, is committed to providing an inclusive, equitable and diverse place of learning and employment. As part of a complete job application you will be asked to include a Contribution to Diversity and Inclusion statement. The University of Cincinnati is an Affirmative Action / Equal Opportunity Employer / M / F / Veteran / Disabled.

“Buschbeck, Elke (buschbek)”  
<buschbek@ucmail.uc.edu>

---

## UGeorgia EvolutionaryHumanGenetics

### ASSISTANT PROFESSOR IN HUMAN GENETICS

The Department of Genetics at the University of Georgia invites applications for a tenure-track assistant professor faculty position in the area of human genetics. The ideal candidate will establish an active and independent research program grounded in the genetic analysis of human populations related to human biology, development, evolution, and/or disease, and may also use computational and/or model experimental systems to address mechanistic questions. UGA Genetics is strong in evolution, molecular genetics, and genomics, and we are looking for a colleague who will both strengthen and

diversify our core areas.

Candidates must hold a Ph.D. or equivalent in a biological science or a relevant field; a strong record of scientific productivity and at least 1 year of postdoctoral experience is preferred. The candidate will be expected to maintain a rigorous, externally funded research program. Teaching will be at both the undergraduate and graduate level, with an expectation of participation in graduate training. For information about the department, see <http://www.genetics.uga.edu>. Please submit applications online at <https://facultyjobs.uga.edu/postings/-3011>. Applications should include a cover letter, CV, and no more than 2 page (each) statements of research and teaching interests, and copies of up to three publications. Applicants will be asked to provide names and e-mail addresses of three letter-writers who will receive an online link for submitting letters of reference. Review of applications will begin on November 20, 2017 and continue until the position is filled. Informal enquiries and questions may be addressed to one of the co-chairs of the search committee, Drs. Kelly Dyer (kdyer@uga.edu) and Doug Menke (dmenke@uga.edu).

The University of Georgia is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, gender identity, sexual orientation or protected veteran status. Persons needing accommodations or assistance with the accessibility of materials related to this search are encouraged to contact Central HR (facultyjobs@uga.edu). Please do not contact the department or search committee with such requests. The Franklin College of Arts and Sciences, its many units, and the University of Georgia are committed to increasing the diversity of its faculty and students, and sustaining a work and learning environment that is inclusive. Women, minorities and people with disabilities are encouraged to apply. Faculty members are expected to support the college's goals of creating and sustaining a diverse and inclusive learning environment. Georgia is well known for its quality of life in regard to both outdoor and urban activities (<http://exploregeorgia.org>). UGA is a land- and sea-grant institution located in Athens, 70 miles northeast of Atlanta, the state capital ([www.visitathensga.com](http://www.visitathensga.com); [www.uga.edu](http://www.uga.edu)).

Kelly Dyer Associate Professor Department of Genetics  
University of Georgia Athens, GA 30602-7223 email:  
kdyer@uga.edu phone: 706 542 3154

Kelly A Dyer <kdyer@uga.edu>

---

## UHawaii Manoa QuantEvolution

Title: Assistant Professor (Quantitative Evolution/Ecology in Botany)

Position Number: 0085019

Hiring Unit: College of Natural Sciences, Department of Botany

Location: Manoa

Date Posted: October 18, 2017

Closing Date: Continuous - application review begins November 24, 2017

Salary Information: Commensurate with qualifications and experience.

Monthly Type: 9 Month

Tenure Track: Tenure

Full Time/Part Time: Full Time

Temporary/Permanent: Permanent

Funding: General Funds

Other Conditions: \* University of Hawai'i at Manoa, College of Natural Sciences, Department of Botany, invites applications for a full-time, general funds, tenure track, faculty position, pending position clearance and availability of funds. To begin approximately August 1, 2018 or as soon thereafter as possible. The University of Hawai'i is a Carnegie doctoral/research-extensive university with a strong emphasis on research and graduate education. The Department offers B.A., B.S., M.S., and Ph.D. degrees in Botany. For more information on the department, please visit [www.botany.hawaii.edu/](http://www.botany.hawaii.edu/).  
Duties and Responsibilities

1. We are searching for a highly creative and interactive scholar who fits into our multidisciplinary department. The area and system of study are open, although we are most interested in candidates who will address fundamental topics in ecological and/or evolutionary theory through the use of quantitative approaches. We encourage applications from candidates who adopt an integrative approach in their research. The competitive applicant will conduct conceptually oriented research that uses quantitative or computational approaches such as mathematical modeling, genomics/metagenomics, or network science.

2. Duties will include: instruct assigned courses and seminars in topics such as biostatistics, bioinformatics, mathematical modeling, computational ecology and/or evolutionary biology that teach students strong quantitative and analytical skills for the analysis of large datasets to address complex ecological questions. The development of courses that teach tools such as complex network analyses of living systems, plant genomics, metagenomics, and/or plant phylogenetics and employ evidence-based, active learning pedagogy; to incorporate concepts of sustainability into courses taught. Additional duties include: supervise student independent study/research activities; to train and mentor undergraduate and graduate students; to serve on departmental, college, and university committees; to render service to the professional and lay community relevant to the individual's academic specialty; to participate in curriculum development activities such as course materials and special instructional methods; to participate in graduate committees; to develop an externally funded research program in one or more areas of quantitative ecology/evolution leading to publication in leading scholarly journals; and to perform related tasks as assigned.

### Minimum Qualifications

1. An earned Ph.D. in Botany, Biology, or a closely related field, and expertise in an emerging research area of computational science applicable to plants, algae, and/or fungi.
2. Candidates must show ability to teach undergraduate and graduate courses in the life sciences and one or more aspects of computational science. Candidates must also provide evidence of research productivity and publication of scholarly materials. Candidates must also demonstrate poise and good address for meeting and conferring with others.

### Desirable Qualifications

1. Post-Doctoral research and/or teaching experience. Track record of and interest in collaborative research. Interest in island ecosystems and biodiversity. Ability to work in an ethnically rich, multicultural environment.

### To Apply:

Applicants must submit as a single pdf file: 1) a cover letter specifying the position and the research area; 2) a 2-page statement of research interests, activities, and plans; 3) a 2-page statement on teaching philosophy, interests, and plans; 4) a curriculum vitae detailing research, teaching, and service accomplishments; 5) copies of up to 4 relevant publications; and 6) the names, addresses, e-mail, and telephone numbers of 4 professional references. Email applications to: [botsrch@hawaii.edu](mailto:botsrch@hawaii.edu).

Inquiries:

1. Dr. Anthony Amend; amend@hawaii.edu
2. biosrch@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,

— / —

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>

## UHawaii StatisticsBiology

The position described below is for a new faculty member that integrates statistical and biological research. The biological focus for the position is open and we encourage evolutionary biologists to apply. The University of Hawaii is conducting several searches at the interface of the life sciences and quantitative research, see [workatuh.hawaii.edu](http://workatuh.hawaii.edu) to access all open positions.

Title: Assistant Professor (Statistics in Biology) Hiring Unit: College of Natural Sciences, Department of Biology Location: Manoa Date Posted: October 25, 2017 Closing Date: Continuous - application review begins November 27, 2017 Salary Information: Commensurate with qualifications and experience Monthly Type: 9 Month Tenure Track: Tenure Full/Part Time: Full time Temp/Perm: Permanent Funding: General Funds

Other Conditions: University of Hawai'i at Manoa, College of Natural Sciences, Department of Biology, invites applications for a full-time, general funds, tenure track faculty position, pending position clearance and availability of funds to begin approximately August 1, 2018 or as soon thereafter as possible. The University of Hawai'i at Manoa is a Carnegie "Doctoral University with Highest Research Activity" and has a strong emphasis on research and graduate education. For more information on the department, please visit [manoa.hawaii.edu/biology](http://manoa.hawaii.edu/biology).

Duties and responsibilities: The Department of Biology at the flagship campus of the University of Hawai'i seeks a tenure-track assistant professor in biological statistics to begin as early as August 1, 2018. We seek applicants that conduct research in statistical methods applied to fundamental problems in the life sciences. The successful candidate will join an integrative biology department with interests in evolution, ecology, behavior, genetics, marine biology, biological imaging, and cell and molecular biology. This position is part of a University-wide initiative focused on strengthening research and instruction in data and computational science.

The duties of this position include establishing a vigorous extramurally funded research program in one or more areas of statistics and the life sciences, and providing mentoring for undergraduate and graduate students and postdoctoral scholars. The successful candidate will also contribute to the Biology curriculum by developing courses in quantitative methods for undergraduate and graduate students in the life sciences, assisting in strengthening the teaching of quantitative reasoning throughout the curriculum, serving on university committees and performing related tasks as assigned, and collaborating with scientists in the Biology department and the College of Natural Sciences.

Minimum Qualifications: An earned Ph.D. in Statistics, Biology, or a related field, with a strong research record in statistics. Candidates must have demonstrated ability to teach undergraduate and graduate courses in one or more aspects of statistics, and have a track record of collaborative research with biologists. Candidates must also provide evidence of research productivity, publication of scholarly materials, and poise and good address for meeting and conferring with others.

Desired Qualifications: Postdoctoral research and evidence of ability to obtain extramural funding. Interests that complement existing strengths in the department. Ability to work in an ethnically rich, multicultural environment.

To Apply: Applicants must submit as a single pdf file: 1) a cover letter specifying the position and the research area; 2) a statement of research interests, activities, and plans; 3) a statement on teaching philosophy, interests, and plans; 4) a curriculum vitae detailing research, teaching, and service accomplishments; 5) copies of up to four relevant publications; and 6) the names, addresses, e-mail, and telephone numbers of four professional references. Email applications to biosrch@hawaii.edu.

Inquiries: Bob Thomson, thomsonr@hawaii.edu, (808) 956-6476, or biosrch@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.

Employment is contingent on satisfying employment eligibility verification requirements of the Immigration Reform and Control Act of 1986; reference checks of previous employers; and for certain positions, criminal history record checks.

In accordance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, annual campus crime statistics

— / —

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>

## UHongKong EvolutionaryBiol

Dear Friends,

HKU's Faculty of Science is on a hot-streak and we are seeking to fill 30 positions across the board. Specific to this audience are positions in Ecology & Biodiversity, and Molecular and Cell Biology. Several of the positions will be connected to our Swire Institute of Marine Science which is undergoing a major renovation and expansion.

The job advert is here: <http://jobs.hku.hk/jd.php?id=201701228> The University supports central facilities (Stable Isotope Lab, Animal House, Greenhouses) and we have our own Genomics Sciences Centre as well as incredible capacity in the private sector for advanced NGS and all-you-can-omics platforms. We are also developing cross-border research facilities with SUSTech in Shenzhen, China, and there is fantastic support for technology innovation and startup companies.

Hong Kong has a surprising biodiversity with >25% of China's recorded marine species alone. A territory-wide trawling ban in 2013 aims to restore our benthic

fisheries, and progressive environmental management plans are in place through our implementation of the Convention on Biological Diversity. >40% of our land mass is protected country park and we are centrally located to exciting field sites in China and SE Asia.

The funding climate in HK is superior to many other places. We have ~40% success rate for government (NSF-style) grants in Physical Sciences and about 25% success in the Biological Sciences and access to funding via other government agencies, NGOs and contract research. Just recently, the new government administration announced a plan to triple funding to University research and development.

If anyone has questions about the positions or life in HK I am happy to answer them.

'XDave

David M. Baker, Ph.D. Assistant Professor The Swire Institute of Marine Science School of Biological Sciences The University of Hong Kong Kadoorie Biological Sciences Building Pokfulam Road, Hong Kong, PRC

dmbaker@hku.hk

[www.thelifeisotopic.com](http://www.thelifeisotopic.com) dmbaker <dmbaker@hku.hk>

## UIIdaho 2 ModelingComplexSystems

Two Faculty Positions: Modeling Complex Systems at the University of Idaho

<https://uidaho.peopleadmin.com/postings/19513> The University of Idaho seeks to hire two tenure track faculty at the assistant or associate level who have modeling skills that can be applied to biological systems. We seek modelers who are creative in applying their skills to new problems, who are good at communicating across disciplines, and who see themselves thriving in our highly collaborative environment. Faculty appointments and teaching assignments will be in academic units appropriate to the training and expertise of the successful candidates. The area of modeling expertise is open, but we are particularly interested to grow research capacity in mathematical biology (including both deterministic and stochastic processes); data analytics; machine learning; systems modeling; or molecular modeling.

The successful candidates will have the opportunity to collaborate with empirical researchers and other modelers in the Center for Modeling Complex Interactions (CMCI). CMCI is funded by the National Institutes of

Health and serves as an epicenter for a vibrant research community at the University of Idaho. The concept behind CMCI is that interdisciplinary research is enhanced by regular interactions among researchers with diverse expertise. The current research projects within CMCI are numerous and diverse. These are formalized as CMCI Working Groups, which include faculty, post-doctoral and student modelers and empiricists. These grassroots groups create a powerful feedback between theory, empirical work, and analysis. Some current examples include using molecular modeling to predict immune escape mutations and spectral shifts in opsin proteins; studying the pathogenic effects of viral coinfection in *Drosophila* and mice; modeling how human social dynamics such as attitudes toward vaccination generate feedbacks with disease dynamics; using microbiome data to model population dynamics of microbial communities; and modeling the reproducibility crisis in science. Successful candidates will have an opportunity to join existing groups or form new groups aligned with their research interests. CMCI also works synergistically with the Institute for Bioinformatics and Evolutionary Studies (IBEST).

The University of Idaho is located in Moscow, Idaho, only eight miles from Washington State University in Pullman, Washington, providing an academically and culturally rich community. Moscow is a friendly mid-sized community on the rolling hills of the Palouse, with great parks, bike paths, restaurants, farmers market and fantastic opportunities for recreation in the adjacent mountains and rivers. For more information about the University of Idaho, CMCI, IBEST and Moscow, go to <http://www.uidaho.edu/>, <http://www.cmciuidaho.org/>, <http://www.ibest.uidaho.edu/>, and <https://www.ci.moscow.id.us/>.

For a complete job description and to apply, go to <https://uidaho.peopleadmin.com/postings/19513>. Applications should include a cover letter addressing the required and preferred qualifications, a CV, a list of 3-4 people who can be contacted to provide references, and PDFs of up to 3 peer reviewed publications or submitted manuscripts. Review of applications will begin November 15, 2017.

The University of Idaho is an equal opportunity employer and does not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, disability, sexual orientation, gender identity/expression or any other reason prohibited under Federal, State, or local laws. EOE AA/M/F/D/V

James A. Foster Distinguished Professor, U. Idaho  
foster@uidaho.edu

---

## UIdaho ArthropodMolecularSystematics

Department of Entomology, Plant Pathology, and Nematology College of Agriculture and Life Sciences, University of Idaho

Assistant/Associate Professor of Arthropod Molecular Systematics

<https://uidaho.peopleadmin.com/postings/19511> The Department of Entomology, Plant Pathology, and Nematology is hiring an Assistant or Associate Professor of Arthropod Molecular Systematics. Rank is negotiable. The successful candidate is expected to develop an innovative, externally funded, internationally recognized program in molecular systematics. Potential research focus areas could include use of molecular phylogenetic techniques to study life history evolution, biodiversity, invasion biology, or evolutionary relationships among arthropod groups. Responsibilities will include teaching undergraduate and graduate courses in the use of molecular techniques in systematics and taxonomy, and supervision and development of the collections of the W. F. Barr Entomology Museum as a regional resource for education and research.

The University of Idaho is located in Moscow, Idaho, only eight miles from Washington State University in Pullman, Washington, providing an academically and culturally rich community. Moscow is a friendly mid-sized community on the rolling hills of the Palouse, with great parks, bike paths, restaurants, farmers market, and fantastic opportunities for recreation in the adjacent mountains and rivers. For more information about the University of Idaho, the Department of Entomology, Plant Pathology, and Nematology, the W. F. Barr Entomology Museum, and Moscow, go to <http://www.uidaho.edu/>, <https://www.uidaho.edu/cals/entomology-plant-pathology-and-nematology>, <https://www.uidaho.edu/cals/entomology-plant-pathology-and-nematology/research/entomological-museum>, and <https://www.ci.moscow.id.us/>. For a complete job description and to apply, go to <https://uidaho.peopleadmin.com/postings/19511>.

Applications should include a cover letter addressing your qualifications (for both the minimum and preferred qualifications listed) and interests, including a clear description of your research and teaching philosophies, a CV, and the names and contact information for at

least three professional references.

The University of Idaho is an equal opportunity employer and does not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, disability, sexual orientation, gender identity/expression or any other reason prohibited under Federal, State, or local laws. EOE AA/M/F/D/V

Please contact Search Committee Chair, Nilsa Bosque-Perez (nbosque@uidaho.edu) for questions.

“dtank@uidaho.edu” <dtank@uidaho.edu>

---

### UKansas MicrobialMetagenomics AndBioinformatics

The Department of Ecology and Evolutionary Biology at the University of Kansas (KU) seeks outstanding applicants for an Assistant Professorship in Microbial Metagenomics and Bioinformatics, tenure track, expected to begin as early as August 18, 2018.

**Required Qualifications:** Qualifying candidates must have a Ph.D. in environmental genomics, bioinformatics, microbial ecology, or a closely related field and relevant postdoctoral experience. We are particularly interested in candidates addressing fundamental questions about the structure and function of microbiomes as well as the informatics challenges associated with these analyses. We consider microbiomes to include diverse members of microbial communities (e.g., bacteria, archaea, fungi, microbial eukaryotes, and viruses), and are especially interested in candidates examining microbiome function in natural environments, including those associated with plants, soil and water. A strong record of research and demonstrated commitment to excellence in teaching are required. We especially encourage applicants with a strong record of collaboration. A complete online application includes the following materials: cover letter, curriculum vitae, a research statement, a teaching statement, and the names and contact information for three professional references. In your cover letter, please address how you would contribute to advancing diversity, equity, and inclusion through your past, present and/or future activities. For additional information about the position, please contact Professor Jim Bever at jbever@ku.edu. Initial review of applications will begin November 14, 2017 and will continue as long as needed to identify a qualified pool.

The Department of Ecology and Evolutionary Biology (EEB) (<http://eeb.ku.edu>) has research foci in Ecology and Global Change Biology, Evolutionary Mechanisms, and Biodiversity and Macroevolution. Its graduate program includes students seeking Masters or Ph.D. degrees. EEB is large, diverse, and dynamic, including ~40 faculty with research programs ranging from population genomics to ecosystem function to phylogenetics. The department has close affiliations with the Kansas Biological Survey, the KU Biodiversity Institute, Center for Computational Biology, and the KU Department of Molecular Biosciences. KU faculty benefit from several fully-staffed core facilities, including the Genome Sequencing Core, the Microscopy and Analytical Imaging Laboratory, and Nanofabrication facility. The School of Engineering bioengineering program and the ITTC/Bioinformatics and computational life science laboratory offer additional opportunities to collaborate. The KU Center for Research Computing supports a campus-wide High-Performance Computing cluster. The 3,000 acre KU Field Station, located 15 miles from campus, offers access to diverse ecosystems for field-based research.

For complete announcements and to apply online, go to <https://employment.ku.edu/academic/10108BR..> The University of Kansas is especially interested in hiring faculty members who can contribute to the climate of diversity in the College of Liberal Arts and Sciences and four key campus-wide strategic initiatives: (1) Sustaining the Planet, Powering the World; (2) Promoting Well-Being, Finding Cures; (3) Building Communities, Expanding Opportunities; and (4) Harnessing Information, Multiplying Knowledge. For more information, see [www.provost.ku.edu/planning/themes/](http://www.provost.ku.edu/planning/themes/)

The University of Kansas prohibits discrimination < <https://documents.ku.edu/policies/IOA/-Nondiscrimination.htm> > 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 person has been designated to handle inquiries regarding the non-discrimination policies and is the University's Title IX Coordinator: the Executive Director of the Office of Institutional Opportunity and Access, IOA@ku.edu, 1246 W. Campus Road, Room 153A, Lawrence, KS, 66045, (785)864-6414, 711 TTY.\*\*

“jbever@ku.edu” <jbever@ku.edu>

---

## UMemphis Evolutionary Genetics

Position announcement: Tenure-track Assistant Professor in Genetics, beginning in August 2018.

The University of Memphis Department of Biological Sciences ([www.memphis.edu/biology](http://www.memphis.edu/biology)) invites applications for a tenure-track faculty position in Genetics at the level of Assistant Professor. Candidates must have a PhD, relevant postdoctoral training, and a record of peer-reviewed publications and other scholarly accomplishments commensurate with experience. We are interested in accomplished candidates from all relevant research areas, studying any organism(s), but the demonstrated research focus must be Genetics.

The successful candidate will be expected to develop an internationally recognized independent research program, pursue extramural funding, mentor graduate students, and teach graduate and undergraduate courses (including Genetics for biology majors). Competitive startup funds and salary are available and salary will be commensurate with experience.

The University of Memphis is a leading metropolitan research institution. The Department of Biological Sciences has over 25 faculty members specializing in diverse sub-disciplines of the biological sciences, and serves approximately 500 majors and over 50 MS and PhD students. The W. Harry Feinstone Center for Genomic Research ([www.memphis.edu/feinstone/](http://www.memphis.edu/feinstone/)), the interdepartmental Program in Bioinformatics ([www.memphis.edu/binf/](http://www.memphis.edu/binf/)), the Integrated Microscopy Center ([www.memphis.edu/imc/](http://www.memphis.edu/imc/)), the Ecological Research Center ([www.memphis.edu/erc/](http://www.memphis.edu/erc/)), and the Meeman Biological Station ([www.memphis.edu/meeman/](http://www.memphis.edu/meeman/)), are all administered through the department and offer outstanding opportunities for research, teaching, and collaboration.

Applications must be submitted online at <https://workforum.memphis.edu/> and include a cover letter, CV, statements of research and teaching interests, three representative publications, and contact information for at least three professional references. Review of applications will begin November 5th, the closing date for application. Inquiries should be directed to Duane McKenna, search Co-Chair, [dmckenna@memphis.edu](mailto:dmckenna@memphis.edu) The University of Memphis is an Equal Opportunity/Affirmative Action Employer. We urge all qualified applicants to apply for this position. Appointment will be based on

qualifications as they relate to position requirements without regard to race, color, national origin, religion, age, sex, disability or veteran status.

[dmckenna@memphis.edu](mailto:dmckenna@memphis.edu)

---

## UMichigan Museum Collection Manager

\* Please note that there is the possibility of a research scientist appointment, which means the position will include developing independent research projects and securing grant funding, for applicants with a doctorate (even though this is not stated in the job add for the Collection Manager).

Please contact L. Lacey Knowles, Professor and Curator, for any questions about the position at [knowlesl@umich.edu](mailto:knowlesl@umich.edu)

---

Research Museum Collection Manager 'V Insect Division, University of Michigan Museum of Zoology

[http://careers.umich.edu/job\\_detail/149249/-research\\_museum\\_collection\\_manager\\_-insect\\_division](http://careers.umich.edu/job_detail/149249/-research_museum_collection_manager_-insect_division)

How to Apply A cover letter is required for consideration for this position and should be attached as the first page of your resume. The cover letter should address your specific interest in the position and outline skills and experience that directly relate to this position.

Responsibilities\* - Growth, Maintenance and Digitization (GMD) of the insect collections, including pinned, slide-mounted, fluid preserved and frozen specimens, and paper archives. Activities may include organizing and participating in field expeditions (which will include international collecting), coordinating and contributing directly to digitization efforts, as well as writing collection-based grants to support GMD of the insect collection.

Responsibilities also include working with faculty curators to develop and implement policies, standards, and procedures for the scientific and technical work performed within the research collections; reviewing, updating, and enhancing the insect collections management plan.

- Confer with faculty and student researchers to plan and develop research projects utilizing the research collections and/or that enhance collection resources. Author

or co-author articles / book chapters for publication; present or co-present with faculty in class settings or at scientific conferences; secure grant funding for research projects that enhance collection resources.

- Accessioning of new specimens. Activities involve preserving new specimens in the appropriate manner and cataloging them in the electronic database, with taxonomic identities to order and family (minimally). When needed, use DNA barcoding to classify unknowns.
- Maintenance and growth of the insect genomic resources in the Liquid Nitrogen Facility. This activity involves the accessioning of new specimens and maintenance of database records on genomic resources in the Insect Division.
- Coordinate and process inter-departmental and inter-institutional loans and exchanges. Activities include the packing and unpacking of loans (specimens and tissues) and providing federal and international permit information when appropriate, and the electronic exchange of digitized information.
- Routine maintenance of the data portal through which our holdings are made accessible to researchers across the world. This activity requires regular attention to both our electronic, searchable database and a server that connects us to the international community.
- Training and supervision of staff volunteers, work-study students and graduate research assistants in all aspects of specimen preparation and conservation practices, georeferencing and digital imaging of specimens and routine collections maintenance tasks.
- Maintenance of the collection areas and equipment to make them suitable for research, outreach, and use by visitors, either on site or remotely through online communication.
- Coordination of research visits and educational tours of the collections; participation in museum outreach activities.

#### Required Qualifications\*

An advanced degree (master's or doctoral) in biology, zoology, or related fields with 3-5 years of museum experience and/or insect systematics is required. Experience with database construction, use, and management is strongly preferred, and molecular experience is highly desirable. Familiarity with research collections is required, as is expertise with insects; expertise with arachnids is desirable.

**Additional Information** The College of Literature, Science, and the Arts seeks to recruit and retain a diverse workforce as a reflection of our commitments to serve the diverse people of Michigan, fulfill the College's

Guiding Principles, and sustain the excellence of LSA.

To learn more about diversity, equity, and inclusion visit <http://lsa.umich.edu/lsa/about/diversity-equity-and-inclusion.html> To learn more about LSA's Guiding Principles visit <http://lsa.umich.edu/lsa/faculty-staff/-human-resources/lsa-staff-guiding-principles.html>

**Background Screening** The University of Michigan conducts background checks on all job

— / —

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

## UMissouri Evolutionary Ecol

We are searching for an ecologist, broadly defined. Specifically for this list, we would welcome applications from candidates who integrate evolution and ecology in their research.

Ecology Faculty Search at the University of Missouri:

The Division of Biological Sciences at the University of Missouri, Columbia, invites applications for a tenure-track faculty position in ecology at the Assistant or Associate Professor level (<http://biology.missouri.edu/-ecology-faculty-search/>). Potential areas of interest include: climate change, land transformation, and species interactions. The candidate's research can incorporate field experiments, lab experiments, and/or theoretical and computational approaches in any group of organisms. We encourage applications from candidates who have a record of collegial and collaborative relationships with peers, who integrate perspectives from multiple disciplines, and who are prepared to capitalize on the broad range of research themes within the Division and Colleges at the University of Missouri. Faculty in the Division of Biological Sciences encompass strengths in plant biology, microbial biology, ecological and evolutionary genetics, behavior, and conservation biology. The successful candidate is expected to establish a vigorous, externally funded research program, and to teach at the graduate and undergraduate levels.

The University of Missouri and Division of Biological Sciences place a high value on diversity and inclusivity. We especially seek candidates with outstanding mentoring skills who welcome and appreciate the racial and

cultural diversity of our academic community. We encourage applications from individuals who demonstrate a commitment toward inclusiveness and access to higher education for groups underrepresented in the sciences.

We offer a competitive salary and start-up package, an active doctoral program with institutional support for students, a highly interactive faculty, and outstanding core facilities. Columbia, Missouri, is ranked among the top-ten college towns in the U.S.

The University of Missouri is fully committed to achieving the goal of a diverse and inclusive academic community of faculty, staff, and students. We seek individuals who are committed to this goal and our core campus values of respect, responsibility, discovery, and excellence.

**TO APPLY:** Click on the Apply for a Job button from the the job posting on the MU HR Careers Web site. You can find the job position also by performing a search for Ecology or 24584 .

The following documents/materials are required for the application to be complete:

- cover letter - CV - a description of research plans and teaching interests - a diversity statement addressing contributions to diversity through research, teaching, and service - names and contact information of three referees willing to write a letter if solicited

Application materials should be compiled and saved as a single PDF with the applicants name as the file name. You will upload this document when prompted to link your CV.

**CLOSING DATE** Review of application materials will begin November 10, 2017. To ensure full consideration, applications should be complete by this date. The position will remain open until filled.

**QUESTIONS** Questions about the position can be sent to bioscifacultysearch@missouri.edu.

Technical questions about the application/HR system for uploading materials should be addressed to MU Human Resource Services at muhrs@missouri.edu.

**ADDITIONAL INFO** The Division of Biological Sciences has 35 faculty members with diverse research interests as well as strong interdisciplinary connections.

Considered one of the nations top-tier institutions, the University of Missouri has a reputation of excellence in teaching and research and is the flagship campus of the four-campus University of Missouri System. It is one of only 34 public universities to be selected for membership in the Association of American Universities. MU offers more than 280 degree programs and is designated as

comprehensive doctoral with medical/veterinary by the Carnegie Foundation for the Advancement of Teaching.

Columbia, MO, is ranked as one of the 10 Best College Towns to live and work. Located two hours from both Kansas City and St. Louis, Columbia is home to the University of Missouri as well as two private colleges and local, county, and regional medical centers. Columbia has excellent schools, health care, recreational facilities, arts, and cultural opportunities.

An Equal Opportunity/Access/Affirmative Action/Pro Disabled & Veteran Employer

“King, Elizabeth G.” <kingeg@missouri.edu>

## UNorthCarolina Wilmington EvolutionaryBiol

Tenure-Track Faculty Position in Integrative Biology

The Department of Biology and Marine Biology at the University of North Carolina Wilmington invites applications for a tenure-track Assistant Professor position in Integrative Biology beginning in August 2018. Desired areas of expertise include, but are not limited to, Functional Morphology, Comparative Physiology, Ecological Physiology, Evolution and Development. Resources and facilities will support research from molecular to ecosystem levels of organization. The primary teaching assignment will be in our Human Anatomy and Physiology course sequence. The successful candidate may also contribute to other courses, such as Animal Physiology, Comparative Vertebrate Anatomy, or upper level courses related to his/her research expertise. Candidates must have a Ph.D. and postdoctoral experience. Successful applicants will be expected to maintain a vigorous, extramurally-funded research program involving undergraduate and graduate students.

The department has an excellent record of faculty development and mentorship, and is committed to assisting new faculty to succeed. The department is especially interested in qualified candidates who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community. Graduate curricula in the department include M.S. programs in Biology and Marine Biology, as well as a Ph.D. program in Marine Biology. Preference will be given to candidates able to complement existing disciplinary strengths and leverage departmental facilities. Excellent support for research is provided in departmental facil-

ities on campus (<http://www.uncw.edu/bio/>) and at the CREST Research Park (<http://uncw.edu/CREST/>), including the Center for Marine Science, Shellfish Research Hatchery, and Biotechnology Center.

Full applicant instructions can be found at <https://jobs.uncw.edu/postings/9515>. Dual career couples are welcome to apply, and we encourage all job seekers to visit <http://www.uncw.edu/hr/employment-epa.html> to learn about other openings in our department and at UNCW. Questions regarding the application process can be directed to Ms. Debbie Cronin ([cronind@uncw.edu](mailto:cronind@uncw.edu)), while questions regarding the position can be directed to the Search Committee Chair, Dr. Richard Satterlie ([satterlier@uncw.edu](mailto:satterlier@uncw.edu)). The priority consideration date is November 1, 2017, but applications will be accepted until the position is filled.

UNCW actively fosters a diverse and inclusive working and learning environment and is an equal opportunity employer. Qualified men and women from all racial, ethnic, or other minority groups are strongly encouraged to apply.

["dannerr@uncw.edu"](mailto:dannerr@uncw.edu) <[dannerr@uncw.edu](mailto:dannerr@uncw.edu)>

---

## UNotreDame PathogenEvolution

Assistant Professor of Human Pathogen or Vector Biology. The Department of Biological Sciences seeks faculty candidates who study the biology of human pathogens or vectors of importance to global health. Individuals with expertise in any area involving the biology of a human pathogen, pathogen vector, or the response of the human host to infection, particularly those with cross-disciplinary research programs, are encouraged to apply.

Assistant Professor of Infectious Disease Epidemiology. The Department of Biological Sciences in concert with the Eck Institute for Global Health (<http://www.nd.edu/~eigh>) seeks faculty candidates who use quantitative approaches to study mechanisms that influence the dynamics and/or control of human pathogen transmission. Candidates with cross-disciplinary interests in areas including epidemiology, quantitative modeling, disease ecology, or evolutionary approaches are encouraged to apply.

Both new faculty will contribute to the undergraduate and graduate teaching mission of the Department of Biological Sciences. The successful candidate will be ex-

pected to establish a vigorous externally funded research program that complements active interdisciplinary research in the department and across the University.

New faculty will join an integrative and collaborative research community with expertise that spans the breadth of the life sciences. Several faculty have active research partnerships with international field sites and associated partners, including in Africa, Latin America, Asia, and the South Pacific. Department faculty have access to state-of-the-art genomics, bioinformatics, computing, mass spectrometry and proteomics, and imaging cores, specialized BSL-3 containment laboratories, insect rearing and research facilities, and an AAALAC-accredited animal facility. Information on department and other college faculty and facilities can be found at <http://biology.nd.edu> and <http://science.nd.edu>. Opportunities also exist for collaboration with faculty at the adjoining Indiana University School of Medicine-South Bend.

The University of Notre Dame seeks to attract, develop, and retain the highest quality faculty. The University is an Equal Opportunity Employer committed to building a culturally diverse workplace. We strongly encourage applications from female and minority candidates.

Review of applications will commence November 27, 2017, and will continue until suitable candidates are identified. Qualified individuals should submit in PDF format, a cover letter, curriculum vitae, separate statements of research and teaching interests, and contact information for three references to <https://apply.interfolio.com/45883> for the Pathogen/Vector Biology position, or to <https://apply.interfolio.com/45903> for the Epidemiology position.

The University of Notre Dame, an international Catholic research university, is an equal opportunity employer.

["tperkin1@nd.edu"](mailto:tperkin1@nd.edu) <[tperkin1@nd.edu](mailto:tperkin1@nd.edu)>

---

## UOklahoma EvolutionaryProteomics

Title of Position: Tenure Track Assistant Professor

Start Date: Fall 2018

The Biology Department at the University of Oklahoma invites applicants for a tenure-track faculty position at the Assistant Professor level. The successful candidate will establish a leading-edge research program applying modern proteomic technologies to fundamental or

translational biological questions.

This broad search is the third phase of an interdisciplinary cluster-hire initiative that will build on growing strengths at OU, which include molecular genetic and physiological mechanisms of behavior, host-microbe/microbiome interactions, and ancient biomolecules. Candidates who complement OU's Biology of Behavior initiative ([www.ou.edu/bb/](http://www.ou.edu/bb/)) or research in molecular anthropological sciences (<http://lmamr.org/>) are especially encouraged to apply.

The ideal candidate will demonstrate a commitment to proteomics approaches, facilitated by access to equipment including a state-of-the-art mass spectrometry facility, and to excellence in teaching at the undergraduate and graduate levels (one course per semester). Candidates must have earned a Ph.D. (postdoctoral experience preferred) by the appointment start date (August 2018). A review of applications will begin December 1, 2017 and continue until filled.

The University of Oklahoma is a Carnegie-R1 comprehensive public research university known for excellence in teaching, research, and community engagement, and was recently named among the top 50 public universities in the US. The institution serves the educational, cultural, economic, and health-care needs of the state, region, and nation from three campuses: Norman, Health Sciences Center in Oklahoma City, and Tulsa Schusterman Center. The University of Oklahoma enrolls over 30,000 students and has more than 2,700 full-time faculty members in 21 colleges. Norman is a culturally rich and vibrant community located just outside of Oklahoma City. With outstanding schools, amenities, and a low cost of living, Norman is often cited in "best places to live" rankings in the US. The greater Oklahoma City metropolitan area has a population of over 1.25 million residents and offers all of the culture, dining, entertainment, and amenities typical of a modern metropolis.

Interested individuals should post the following at <http://apply.interfolio.com/44555>: 1) a cover letter describing their interest in this position, 2) a full curriculum vita, 3) a description of research accomplishments and future research plans as they relate to this focused search, and 4) a statement of teaching experience and interests. 5) Candidates should provide names and contact information of three references.

The University of Oklahoma, in compliance with all applicable federal and state laws and regulations does not discriminate on the basis of race, color, national origin, sex, sexual orientation, genetic information, gender identity, gender expression, age, religion, disability, political beliefs, or status as a veteran in any of its

policies, practices, or procedures. This includes, but is not limited to: admissions, employment, financial aid, and educational services. Women, minorities, protected veterans, and individuals with disabilities are strongly encouraged to apply.

"Lewis, Cecil M. Jr." <cmlewis@ou.edu>

---

## UOregon Genomics Bioinformatics

University of Oregon Data Science Initiative: Genomics and Bioinformatics

As part of a recently announced Presidential Initiative in Data Science, the University of Oregon seeks two tenure track faculty at the assistant professor level in computational and/or mathematical biology focusing within the areas of computational genomics, bioinformatics, and statistical genetics. We seek candidates developing quantitative approaches to address fundamental questions in genetics, cell biology, molecular biology, development, microbiology, neuroscience, evolution, ecology and/or human health. As part of the broader presidential initiative, the university is building a cross-disciplinary curricular and research program for data science writ large (see <https://provost.uoregon.edu/data-science>). This program is supported by the supercomputing cluster in the university's recently launched High Performance Computing Research Core Facility. There is also the potential to interface directly with the recently announced \$1 billion Knight Campus for Accelerating Impact.

We seek candidates developing and implementing novel computational and/or statistical approaches for the analysis of complex, large-scale genetic and genomic datasets, including those who use these data in conjunction with other sources of data (e.g., geospatial, developmental, metagenomic). Successful candidates will have an appointment in one or more host departments (e.g. Biology, Computer Science, Mathematics, Knight Campus) and may join one of the interdisciplinary research institute on campus, which include the Institute of Molecular Biology, the Institute of Ecology and Evolution, the Institute of Neuroscience, and the Prevention Science Institute, as appropriate. Depending on their interests, candidates may choose to affiliate with other ongoing research programs including the META Center for Host-Microbe Systems Biology and the Center for Genome Function, Integrated Analysis of Biological Networks, Neurons to Minds, and Health Promotion and Obesity Prevention cluster initiatives.

Minimum qualifications for candidates are a Ph.D. in an appropriate field, commitment to excellent teaching at the undergraduate and graduate levels, and an outstanding research record. Candidates should apply online to the University of Oregon GENOMICS SEARCH at <https://academicjobsonline.org/ajo/job/-10048>. Candidates are asked to submit a cover letter, a curriculum vitae including a publication list, a statement of research accomplishments and future research plans, a description of teaching experience and philosophy (including past efforts and future plans to promote diversity, equity and inclusion), and three letters of recommendation (sent independently). Submission of 1-3 selected reprints is encouraged. The University of Oregon is dedicated to the goal of building a culturally diverse and pluralistic faculty committed to teaching and working in a multicultural environment and strongly encourages applications from minorities, women, and people with disabilities. To be assured of consideration, application materials should be uploaded by November 15, 2017, but the position will remain open until filled.

The University of Oregon is one of only two Pacific Northwest members of the Association of American Universities and holds the distinction of a “very high research activity” ranking in the Carnegie Classification of Institutions of Higher Education. The UO enrolls more than 20,000 undergraduate and 3,600 graduate students representing all 50 states and nearly 100 countries. In recent years, the university has increased the diversity of its student body while raising average GPAs and test scores for incoming students. The UO’s beautiful, 295-acre campus features state-of-the-art facilities in an arboretum-like setting. The UO is located in Eugene, a vibrant city of 157,000 with a wide range of cultural and culinary offerings, a pleasant climate, and a community engaged in environmental and social concerns. The campus is within easy driving distance of the Pacific Coast, the Cascade Mountains, and Portland.

The University of Oregon is an equal opportunity, affirmative action institution committed to cultural diversity and compliance with the ADA. The University encourages all qualified individuals to apply, and does not discriminate on the basis of any protected status, including veteran and disability status. UO is dedicated to the goal of building a culturally diverse and pluralistic faculty committed to teaching and working in a multicultural environment and strongly encourages applications from minorities, women, and people with disabilities. Applicants are encouraged to include in their cover letter information about how they will further this goal. UO prohibits discrimination on the basis of race, color, sex, national or ethnic

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>

---

## UOslo ProjectManager

Project Manager / Research Administrator There is a vacant temporary position as Project manager/research administrator at the Natural History Museum. The position is available from 01.01.2018 to the project end at 31.12.2021. The position will be part the Plant Evolution and DNA Metabarcoding (PET) group at the Natural History Museum (NHM), a leading research group of 10-15 people with backgrounds in systematic biology, phylogenetics, bioinformatics, macroevolution, and modeling. The PET group addresses cutting-edge research questions in plant speciation, phylogenomics, and biogeography using genomic and DNA metabarcoding data from modern and ancient samples, and contributes to the development of metabarcoding as a next-generation biodiversity assessment tool for society. For more information see <http://www.nhm.uio.no/english/research-groups/pet/> The University of Oslo is Norway’s oldest and highest ranked educational and research institution, with 28 000 students and 7000 employees. With its broad range of academic disciplines and internationally recognised research communities, UiO is an important contributor to society. The Natural History Museum at the University of Oslo is Norway’s most comprehensive natural history collection. For almost 200 years, preserved plant specimens, animal specimens, rocks, minerals and fossils have been collected, studied and preserved here. A selection of specimens are on display for the general public, in the Geological Museum and the Zoological Museum. Both are found in the beautiful Botanical Garden. Located at Tøyen in the east of Oslo city centre, the garden is not only popular for recreation, but also a scientific collection.

Description of the position The employee will be appointed in as senior executive officer (seniorkonsulent) with responsibility for the practical implementation and management of H2020 MSCA-ITN-ETN project Plant.ID on molecular identification of plants, as well as PET research administrative support. Plant.ID is training network involving 15 PhD students at 9 European institutes with 18 partner organisations. Tasks will include logistics and coordination of network-wide events such as supervisory board meeting, courses, workshops,

project reviews, reporting of deliverables and milestones to the EU project officer in Brussels, facilitate travel and secondments, maintenance of the project webpages, and profiling in social media. The employee will be part of the PET group and report to the project leader.

Required qualifications - Minimum MSc degree in biology. - Someone with relevant organizational experience. This can include research and project administration, organization of meetings, conferences, courses, teaching. - Expertise in biology, preferably biosystematics, phylogenetics and DNA barcoding. - Proven ability in scientific writing and reporting in English. - A true team-player, with good ability both to work independently and in collaborative teams. - Someone who keep deadlines, is organized and manages tasks carefully. - Willingness to travel for meetings, conferences, workshops and courses. - Must be fluent in English.

Relevant applicants will be interviewed.

We offer - Salary of 474.300 - 517.300 NOK per year, depending on qualifications (position code 1363). - An inspiring and friendly working environment - Membership in the Norwegian Public Service Pension Fund - A position in an inclusive work life (IA) institution - Attractive welfare benefits

The application must include - Application letter, including 1) your interest in this position, a review of relevant work experience and interests, and a description of how this position will fit you and enhance your career development goals. - CV (summarizing education, positions and academic work - scientific publications) - Copies of educational certificates, transcript of records and max 2 letters of recommendation. - Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number).

In accordance with the University of Oslo's equal opportunities policy, we invite applications from all interested individuals regardless of gender or ethnicity.

The University of Oslo has an agreement regarding acquisition of rights to work results for all employees, with the aim to secure rights to research results, etc.

According to the Freedom of Information Act (offentlighetsloven) Å§25 section 2, information concerning the applicant may be made public even though the applicant has requested not to be shown on the list of applicants.

Apply by October 15th at: <https://www.jobbnorge.no/en/available-jobs/job/142488/project-manager-research-administrator> Contact information

— / —

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>

## Uppsala 2 PlantEcolEvolution

Department of Ecology and Genetics, Division of Plant Ecology and Evolution, Evolutionary Biology Centre, Uppsala University seeks to appoint two positions in Plant Ecology and Evolution:

Associate Professor/Senior Lecturer in Plant Ecology (with the possibility of being employed as Professor)

The position includes research, teaching at graduate and undergraduate level, outreach activities and some administration. The holder of the position is expected to contribute actively to applications for external research grants and to the development of the research and teaching of the department.

In ranking eligible candidates, equal importance will be given to scientific and teaching skills. When judging scientific proficiency special importance will be given to research qualifications within plant population and community ecology.

More detailed information about the position and information about how to apply can be found

<http://www.uu.se/en/about-uu/join-us/details/?positionId=174434> Closing date for application is 8 December, 2017

Postdoctoral Research Fellow in Plant Ecology and Evolution

This four-year position is intended for a promising researcher at an early career stage.

The position includes research, teaching, and administration. Teaching duties include course responsibility, course administration and supervision of second- and third-cycle students. A position as postdoctoral research fellow is intended to qualify the holder for a teaching position with higher qualification requirements, and can be held for a maximum of four years.

Applicants who have obtained a doctoral degree or achieved the equivalent competence in seven years or less prior to the end of the application period will be given priority. The ranking of eligible applicants will be based primarily on research expertise. In assessing research expertise special weight will be attached to research merits in Plant Ecology and Evolution.

More detailed information about the position and information about how to apply can be found

<http://www.uu.se/en/about-uu/join-us/details/?positionId=171843> Closing date for application is 8 December, 2017

For further information about these positions, please contact Professor Jon Agren telephone +46-(0)18-471 2860 or email [Jon.Agren@ebc.uu.se](mailto:Jon.Agren@ebc.uu.se)

The Evolutionary Biology Centre of Uppsala University offers a vibrant research environment and bridges a broad range of disciplines in the biological sciences. Information about the Evolutionary Biology Centre and the Department of Ecology and Genetics can be found at <http://www.ebc.uu.se/> and <http://www.ieg.uu.se/?languageId=1>

Jon Ågren <[jon.agren@ebc.uu.se](mailto:jon.agren@ebc.uu.se)>

---

## UppsalaU ResearchEngineer HumanEvolutionaryGenetics

Research Engineer in human evolutionary genetics: A position as Research Engineer in the field of human evolutionary genetics is available at the Department of Organismal Biology, Uppsala University (Sweden).

The position will be situated in the group of Dr. Carina Schlebusch within the Human Evolution sub-Program at the Department of Organismal Biology (Evolutionary Biology Center, Uppsala University). The Human Evolution sub-Program, has a broad interest in population genetics and human evolution. The Schlebusch group is specifically interested in studying human history on the African continent and use genetic data from modern day populations and ancient remains as a tool for the inference of African history. The group is funded by the Swedish Research Council, the Leakey Foundation and the European Research Council (ERC). The research environment is multidisciplinary with experts in ancient DNA, population genomics and computational biology. The group is international and English is the working language. See Dr. Schlebusch web-page for more information on the research and recent publications (<http://www.iob.uu.se/research/evolution-and-development/schlebusch/>) and Human Evolution web-page for more information on the sub-Program (<http://www.iob.uu.se/research/evolution-and-development/human-evolution/>).

Duties: Handling and trial preparation for sequencing

and genotyping of modern DNA samples from blood / saliva and routine work in regular labs. Work in a specially-built laboratory under cleanroom conditions with ancient DNA to generate sequence data from human remains. The work includes documentation and sampling from bones / teeth, DNA extraction, library preparation, amplification and quantification as well as careful cleaning of the lab.

Requirements: University degree in molecular biology, biomedicine, genetics or other orientation that the employer considers equivalent. Documented experience in laboratory work. Good knowledge of English in speech and writing. Great emphasis is placed on personal qualities such as planning and organizational skills, accountability and accuracy.

Additional beneficial qualifications: Swedish language skills. Experience of work at molecular biology research lab or cleanroom is an advantage. Experience of work with next generation sequencing methods, DNA extraction, PCR and DNA quantification is an advantage.

Uppsala University strives to be an inclusive workplace that promotes equal opportunities and attracts qualified candidates who can contribute to the University's excellence and diversity. We welcome applications from all sections of the community and from people of all backgrounds.

Uppsala University is an international research university focused on the development of science and education. Our most important assets are all the individuals who with their curiosity and their dedication make Uppsala University one of Sweden's most exciting work places. Uppsala University has 40,000 students, 7,000 employees and a turnover of SEK 6,5 billion.

The Department of Organismal Biology teaches and explores the evolution, development and function of whole organisms. For more information see [www.iob.uu.se](http://www.iob.uu.se). Pay: Individual salary Starting: 2018-02-01 or as otherwise agreed. Type of employment: Temporary position ending 2020-01-31. Working hours: 100 %. For further information about the position please contact Carina Schlebusch, e-mail [Carina.Schlebusch@ebc.uu.se](mailto:Carina.Schlebusch@ebc.uu.se). You are welcome to submit your application no later than 19 November 2017,

Link to application: <http://www.uu.se/en/about-uu/join-us/details/?positionId=173024> — This email has been checked for viruses by Avast antivirus software. <https://www.avast.com/antivirus> Carina Schlebusch <[carina.schlebusch@ebc.uu.se](mailto:carina.schlebusch@ebc.uu.se)>

---

## URochester GeneticsGenomics

Department of Biology, University of Rochester

### FACULTY POSITION IN ECOLOGY AND EVOLUTION

The Department of Biology at the University of Rochester (<https://www.sas.rochester.edu/bio/>) invites applications for an open rank faculty position in ecology and evolution. The position is one of three growth hires in the broad area of genetics and genomics (<https://www.sas.rochester.edu/bio/about/job.html>). Applicants for the ecology and evolution position should have a research program that uses empirical studies, theory development or new technologies in genetics and genomics to answer important questions in ecology and evolution. We seek applicants whose research would expand the breadth of existing research areas and synergize with our strength in evolutionary genetics. Research areas include but are not limited to population and evolutionary genomics, phylogenomics, microbial and ecological genomics, quantitative genetics, and genome biology.

The successful candidate is expected to establish an externally funded research program and contribute to undergraduate and graduate teaching and research mentoring. Applications will be considered for tenured or tenure-track positions at the assistant, associate, or full professor level. Qualifications include a PhD and academic credentials commensurate with a candidate's current position. The University of Rochester offers generous startup funding and strong institutional support. Resources include state of the art computing infrastructure and core facilities in genomics. The integrated campus offers interactions with the newly established Goergen Institute for Data Science and the adjacent University of Rochester Medical Center.

Candidates should upload application materials to our online application system (<https://www.rochester.edu/faculty-recruiting/login>). Review of applications will begin Oct. 23 and continue until the positions are filled. Complete applications include: a cover letter, curriculum vitae, a statement of research interests and plans, a statement of teaching qualifications and interests, three letters of reference and pdfs of three publications. Instructions for supplying the reference letters are provided on the application website. The anticipated start date of the position is July 2019.

The University of Rochester has a strong commitment to diversity and to groups underrepresented in higher education. The University is an Equal Opportunity Employer and all qualified applicants will receive consideration for employment without regard to race, color, sex, religion, age, sexual orientation, gender identity or expression, national origin, disability, or protected veteran status.

EOE / Minorities / Females / Protected Veterans / Disabled

Justin Fay Department of Biology University of Rochester

Justin Fay <[fayjustin@gmail.com](mailto:fayjustin@gmail.com)>

---

## USouthCarolina PopulationEvolBiol

Hi-

We are conducting three faculty searches. The position described below is specifically for an evolutionary/population biologist (Posting # FAC137PO17 on [uscjobs.sc.edu](http://uscjobs.sc.edu)). Candidates may be interested to know that we are searching for an Aquatic community ecologist and a plant molecular biologist; evolutionary biologists with appropriate specialties are encouraged to apply to those positions as well.

Cheers,

Jeff Dudycha

Assistant Professor of Population/Evolutionary Biology  
University of South Carolina 'V Department of Biological Sciences

The Department of Biological Sciences invites applications for a tenure-track faculty position at the rank of Assistant Professor to begin August 16, 2018. We seek to hire a population or evolutionary biologist studying mechanisms governing dynamics in natural or experimental systems. Individuals using empirical and theoretical approaches are encouraged to apply. Faculty positions require a commitment to research, teaching, and service. Duties include developing a creative and vibrant research program in population or evolutionary biology; teaching that advances our graduate program in ecology and evolution; undergraduate teaching and advising; and mentoring graduate students.

Minimum qualifications include a PhD in ecology, evolu-

tionary biology, or related discipline; evidence of established scholarship including a strong record of publishing in peer-reviewed journals; and the potential for excellent teaching. Post-doctoral experience is preferred.

The Department of Biological Sciences ([www.biol.sc.edu](http://www.biol.sc.edu)) is a multidisciplinary unit of approximately 1,600 undergraduate students, 50 graduate students, and 45 faculty representing research areas ranging from Ecology and Evolution to Molecular and Cellular Biology. The University of South Carolina's ([www.sc.edu](http://www.sc.edu)) main campus in Columbia is a Carnegie "very high research activity" institution with over 34,000 students on the main campus, more than 450 academic programs, and the top Honors College in the United States. Columbia is the center of an increasingly sophisticated greater metropolitan area with a population of over 800,000.

All applicants must fill out an online application at USC Jobs: <https://uscjobs.sc.edu/>. Candidates should be prepared to upload a full CV, a statement of research interests, a statement of teaching interests and experience, and three letters of reference. Questions may be directed to Dr. Jeffery L. Dudycha, Population Biology Search Committee Chair at [EvolutionSearchSC@gmail.com](mailto:EvolutionSearchSC@gmail.com).

To ensure full consideration, applications and reference letters should be received by Nov 22, 2017. Files will be reviewed until a candidate is selected. The University of South Carolina is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities on the basis of race, color, religion, national origin, sex, sexual orientation, gender, age, disability, veteran status or genetics.

Jeffrey L. Dudycha Professor Dept. of Biological Sciences  
University of South Carolina Columbia, SC 29208  
[dudycha \[at\] biol.sc.edu](mailto:dudycha@biol.sc.edu) <http://www.biol.sc.edu/~dudycha>  
Jeff Dudycha <[dudycha@mailbox.sc.edu](mailto:dudycha@mailbox.sc.edu)>

---

## USussex ResTech ConvergentEvolution

Subject: Job:UniSussex.ResTech

Contract: fixed term until December 2023 Salary: starting 32,548 and rising to 38,833 per annum Closing date: 20 November 2017

The Fraser lab is looking for a research technician with experience in molecular techniques and fish husbandry to

work on an ERC funded project investigating convergent evolution in the Trinidadian guppy. The Trinidadian guppy is a textbook example of convergent evolution at the phenotypic level but we have little insight into its evolution at the genomic level. The overall goal of this project is to understand how convergence occurred in this important wild system. The position will involve molecular laboratory techniques (e.g. DNA extraction, cloning, and RNA synthesis), organising and monitoring breeding crosses, pilot testing CRISPR-cas9 techniques in fishes, and day-to-day management of the lab. An overview of research within the Fraser lab can be found [www.sussex.ac.uk/lifesci/fraserlab/index](http://www.sussex.ac.uk/lifesci/fraserlab/index). The School is committed to equality and valuing diversity, and currently holds an Athena SWAN Silver Award. Applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in science and engineering at Sussex. The School of Life Sciences welcomes applications to academic posts from candidates who wish to work part-time or as job-sharers. The University offers various schemes to provide real benefits to parents, these can be found at Family Friendly Policies <<http://www.sussex.ac.uk/humanresources/personnel/familyfriendlypolicies>>. Potential candidates are strongly encouraged to make informal contact with Bonnie Fraser ([b.fraser@sussex.ac.uk](mailto:b.fraser@sussex.ac.uk)) before applying.

The University of Sussex is located just outside the city of Brighton and approximately 20 minutes to Gatwick Airport and a one hour commute to London (by train). Brighton is a lively and diverse city known for its famous seafront and is closely located to the South Downs National Park and stunning white chalk cliffs of the south coast.

Please apply through the University's website: <http://www.sussex.ac.uk/about/jobs/research-technician-2652>. Reference 2652.

Bonnie Fraser <[B.Fraser@sussex.ac.uk](mailto:B.Fraser@sussex.ac.uk)>

---

## UToronto Mississauga EvolutionaryMicrobiology

The Department of Biology at the University of Toronto Mississauga (UTM) is hiring a tenure stream Assistant Professor in Microbiology. Members of the microbial evolution, and experimental evolution committee are encouraged to apply.

See the following link for full details of the opportunity and how to apply.

<https://goo.gl/gDyGha>  
<rob.ness@utoronto.ca>

Rob Ness

---

## UWyoming ComputationalBiologist

Department of Botany, University of Wyoming

Faculty position in Computational Biology

The University of Wyoming seeks to hire a tenure-track faculty member with expertise in computational biology. The appointment will be as an Assistant Professor in the Department of Botany (<http://www.uwyo.edu/botany>). The successful candidate is expected to build a strong research program that includes developing novel computational methods and tools for ecology, evolution, genomics, or some combination thereof. We particularly seek candidates with expertise in computational tools related to genomics and sequencing technology. Additional preferred qualifications include expertise in computational statistical modeling, mechanistic process modeling, and microbial biology.

This search is one of four in a cluster in the Program in Ecology (aquatic ecosystem ecologist, biogeochemist, computational biologist, and plant-microbe interactions), and candidates may also participate in the interdisciplinary Ph.D. programs in Molecular and Cellular Life Sciences and Hydrologic Science. The cluster hire is supported in part by a new 5-year, \$20 million NSF EPSCoR RII Track-1 grant to the University. In this project we will study microbial life and its ecological consequences. Faculty hired in these searches will benefit from the project's infrastructure and scientific outcomes and will contribute to the project's institutional capacity building in the candidates' areas of expertise. Additional details are available online (<http://www.uwyo.edu/epscor/microbial-ecology/facsearches.html>).

Minimum Qualifications 1) a Ph.D. in a relevant discipline 2) High potential for an extramurally funded research program; and 3) High potential for effective teaching

Review of applications will begin November 6th, 2017.

Complete on-line application (<https://goo.gl/J3izAh>, Job ID #9136) and upload the following as one document: - Cover letter - Curriculum vitae - Contact in-

formation for three work-related references - Statement of research vision - Statement of teaching philosophy - Statement about the applicant's commitment and ability to work with and include diverse participants in science education and scholarship.

The University of Wyoming invites diverse applicants to consider our employment opportunities. We are also especially interested in candidates who have experience working with diverse populations, initiatives, or both.

Buerkle@uwyo.edu

---

## YorkU MolecularEvolution

Assistant Professor - Molecular Evolution, York University

Position Information Position Rank: Full Time Tenure Stream - Assistant Professor Discipline/Field: Molecular Evolution Home Faculty: Science Home Department/Area/Division: Biology Affiliation/Union: YUFA Position Start Date: July 1, 2018

The Department of Biology invites applications for a tenure-track appointment at the Assistant Professor level in the area of Molecular Evolution. We are seeking biologists who study molecular evolution using theoretical and/or empirical approaches. Preference will be given to candidates whose proposed research program complement and extends existing research activities of the Ecology and Evolution group.

Evolutionary biology at York ranges from phylogenetics to microevolution. Research interests in molecular evolution at York University include quantifying patterns of natural selection across the genome, quantifying patterns of molecular evolution underlying the evolution of complex traits, and studying the molecular mechanisms underlying rapid phenotypic evolution in invasive populations, and the ability of species to adapt to anthropogenic disturbances.

The successful candidate will have a Ph.D. in biology or a related discipline, postdoctoral experience, an outstanding research record, demonstrated excellence or promise of excellence in teaching and scholarly research, and will be expected to develop an innovative independent research program. The successful candidate must be eligible for prompt appointment to the Faculty of Graduate Studies, and will be expected to teach both undergraduate and graduate level courses at the department. Pedagogical innovation in high priority areas

such as experiential education and technology enhanced learning is an asset.

Further information about the Department of Biology in the Faculty of Science can be found at <http://science.yorku.ca/biology/> York University is an Affirmative Action (AA) employer and strongly values diversity, including gender and sexual diversity, within its community. The AA program, which applies to Aboriginal people, visible minorities, people with disabilities, and women, can be found at <http://acadjobs.info.yorku.ca/orku.ca/> or by calling the AA office at 416-736-5713. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

The start date for the position is July 1, 2018. All York University positions are subject to budgetary approval.

Applicants should email their curriculum vitae, an outline of research plans, a statement of teaching philosophy and experience, and copies of three publications to [biojobs@yorku.ca](mailto:biojobs@yorku.ca), and arrange for three signed reference letters to be sent to the same email address by December 1, 2017. Applicants wishing to self-identify can do so by downloading, completing and submitting the form found at: <http://acadjobs.info.yorku.ca/> Posting End Date: December 1, 2017

<http://webapps.yorku.ca/academichiringviewer/-viewposition.jsp?positionnumber=1744> shore@yorku.ca

---

## Other

EvolutionSociety Non-AcademicPhD MentorDatabase 107	Software Evolutionary Placement Algorithm . . . . . 111
JaniceBritton-Davidian1950-2017 . . . . . 108	SouthAfrica VolResAssist EvolutionaryPhysiologyBehaviour . . . . . 111
Leipzig CallForWorkingGroups . . . . . 109	SSB Mini-ARTS Grant . . . . . 112
Panama InternStipend PhylogeneticsBiodiversityEvolution . . . . . 109	STEM survey . . . . . 112
phylogenetic likelihood library version2 . . . . . 110	Teaching evolution abroad . . . . . 113
Phyloseminar LuayNakhleh Oct27 . . . . . 110	USVI PuertoRico EducationalRelief . . . . . 113
Python R workshops . . . . . 110	WilliamsC Trinidad Internship GuppyEvolution . . 113
Royal Society Issue . . . . . 110	

---

### EvolutionSociety Non-AcademicPhD MentorDatabase

The Society for the Study of Evolution is seeking professionals with evolution-related PhDs who currently work outside of academia to join a new mentor database. The

database will be made available to graduate students considering a career outside of academia. Students will have the opportunity to contact professionals in the database with questions about their field or to set up an informational interview. To join the database, please fill out this 1-minute form: <https://goo.gl/forms/-pESFZ8TmtAVePHZD3> \*Please note this form is just for professionals who have doctorate degrees and are NOT working in research at a colleges or university.\*

If you know others (e.g. former trainees who work outside of academia) who may be interested in joining the database, please forward them this link. Thank you!

\*Kati Moore\* \*Communications Specialist\* \*Society for the Study of Evolution\* [communications@evolutionsociety.org](mailto:communications@evolutionsociety.org) [www.evolutionsociety.org](http://www.evolutionsociety.org)  
[communications@evolutionsociety.org](mailto:communications@evolutionsociety.org)

## Janice Britton-Davidian 1950-2017

Janice Britton-Davidian 1950-2017

Janice Britton-Davidian passed away on 02 August 2017, after having fought with an admirable courage against an aggressive cancer. She was 66.

After an early education in Mexico and a bachelor of arts in languages and literature obtained while at the university of Texas Austin, she moved to Montpellier to specialize in animal biology in 1975. She did a PhD in population genetics under the supervision of a paleontologist, Louis Thaler, and participated to the building of the first French Institute for Evolutionary Sciences (Institut des Sciences de l'Évolution de Montpellier, ISEM). She contributed to the development of the genetic pole of the ISEM by first, in her early career, pioneering the use of allozyme markers (with Nicole Pasteur) to the understanding of population genetics and systematics of animal species. Mentored by Louis Thaler, she contributed to the renewal of the taxonomy of mice by reinstating *Mus spretus* as a good species in the mid-1970s, kicking off decades of evolutionary studies on genus *Mus* in Montpellier. Bringing her expertise as a population geneticist to a multi-disciplinary group of evolutionary biologists, she has been instrumental for the success of this Institute, and the development of Montpellier evolutionary community, which rapidly became a leading European center in Evolutionary Biology.

She then gradually specialized on mice and moved to the study of chromosome evolution and its role in speciation becoming a leading scientist in this field of research. Although she did all her career in the ISEM, she engaged in active and enriching reciprocal exchanges with colleagues in France and abroad (from Berkeley (USA), Stellenbosch (South Africa) to Monastir (Tunisia) and Lisbon (Portugal), which led to fruitful collaborations, exciting projects and results, and training programs inspiring several generations of students and researchers. She was passionate and dedicated, and anyone that

worked with her was impressed by the intensity of her commitment to science.

Her work on chromosomal evolution left an indelible imprint in the fields of cytogenetics and evolutionary genetics and has greatly contributed to our current understanding of the role of chromosomal evolution in adaptation, speciation and genome evolution.

It is hard to reduce Janice's career to a few achievements. But her work on Robertsonian fusions in populations of the house mouse made a major contribution to the understanding of the origins and evolutionary consequences of chromosomal rearrangements. Over her vast scientific career, there has been a gradual shift from Patterns to Processes, nourished by her infinite scientific curiosity. Among other findings, she described several Robertsonian systems (populations of wild mice with less than 40 chromosomes due to centric fusions), in particular the one on Madeira Island. She studied the effects of these chromosomal rearrangements on recombination rates, on gene flow, and on speciation processes. More recently, she also investigated the structures and compositions of the centromeres, and their contribution to genome reorganization. In parallel, she discovered the unusual sex determination system of the African pygmy mouse, where most of the females are sex-reversed, i.e., XY, due to a third feminizing sex chromosome.

Despite her recent retirement and the serious health issues, she remained active and involved until the end, keeping coming to the lab and working on scientific drafts between two chemotherapies. The last paper that she wrote was accepted last June in *Biol J Linn Soc* <sup>3</sup>Does chromosomal change restrict gene flow between house mouse populations? Evidence from microsatellite polymorphisms<sup>2</sup>

Janice was a great scientist and a remarkable woman. She was an endearing, genuinely generous, and always enthusiastic person. Janice will be remembered for her sense of humor, the selfless support she gave to her colleagues and students, and her involvement at the collective level. She was discreet by nature, but anywhere she went, she left an incredible souvenir of an absolutely unique, lovely, deeply friendly, and inspiring person. Those who have had the unique privilege of knowing her personally, working with her, and learning from her, feel the void she left behind. But many of us follow in her footsteps and perpetuate her passion for evolution and chromosomes.

She will be sorely missed, more than words can say.

Frédéric Veyrunes, Carole Smadja, Guila Ganem, Jean-Christophe Auffray

Carole SMADJA <[carole.smadja@univ-montp2.fr](mailto:carole.smadja@univ-montp2.fr)>

---

## Leipzig CallForWorkingGroups

sDiv has opened a new call for Working Groups, Post-docs and Sabbaticals. Deadline: Proposal 14 FEBRUARY 2018 & Deadline for Statement of Interest 10 January 2018 Please for more information: [www.idiv.de/-sdiv/calls](http://www.idiv.de/-sdiv/calls) Please spread the word & apply

With my best regards from sunny Leipzig,

sMarten Winter

Dr. Marten Winter Scientific Coordinator Synthesis Centre sDiv / Wissenschaftlicher Koordinator Synthesezentrum sDiv German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig

Phone +49(0)341-97-33129 Fax +49(0)341-97-39358  
Email [marten.winter@idiv.de](mailto:marten.winter@idiv.de) Homepage <https://www.idiv.de/the-centre/employees/details/eshow/-winter-marten.html>

German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig Deutscher Platz 5e 04103 Leipzig Germany

iDiv is a research centre of the DFG - Deutsche Forschungsgemeinschaft

“Winter, Marten” <[marten.winter@idiv.de](mailto:marten.winter@idiv.de)>

---

## Panama InternStipend PhylogeneticsBiodiversityEvolution

THIS IS AN URGENT AD. A SUITABLE CANDIDATE IS NEEDED BY MONDAY 16/10/2017.

Project: What causes the high biodiversity of the Neotropics? A systematic analysis.

Opportunity: an intern is needed to be trained in meta-analysis of literature, databases and analysis of data on Neotropical biodiversity. The intern will live in the rainforest in Panama and study at the Smithsonian Tropical Research Institute, a globally leading centre for the study of tropical environments ([stri.si.edu](http://stri.si.edu)).

Research: Neotropics are the most biodiverse area of the planet. What factors have contributed to the ex-

ceptional richness of life in the region? Hundreds of studies attempt to answer this question for individual taxa, from mammals through trees to butterflies. A meta-analysis of results from separate studies of many groups is needed to capture the general trends. The intern will be trained to compile and analyse information from published studies. The intern will explore several taxonomic groups, and learn critical review of scientific literature, collection of data from public repositories, and complex quantitative analysis. Skills acquired in this project can be widely applied in biodiversity conservation, bioinformatics and comparative biology. The question of diversity in the Neotropics remains a great enigma of biology 'V the intern will have a chance to develop their own answers.

Time and place: 3 months, early 2018; STRI facility in Gamboa, Panama, a pleasant village halfway up the Panama Canal in the Soberania National Park. In their free time the intern can enjoy the spectacular outdoors, Caribbean and Pacific beaches, or the booming Panama City. STRI is also an excellent place to find other opportunities for fieldwork, graduate school, etc. The intern will be welcome to join occasional entomological excursions.

Cost: A stipend to cover living costs is offered. The intern needs to pay for a flight to Panama.

Requirements: Current undergraduates or recent graduates only.

Required: very good English; strong interest in biogeography, ecology and evolution; willingness to learn quantitative methods.

Useful: programming skills (e.g. R, python, SQL); familiarity with statistics, modelling, etc. No Spanish needed.

Application: contact Dr Chris Kozak urgently ([kmkozak87@gmail.com](mailto:kmkozak87@gmail.com); Skype: kmkozak).

Interns are selected in a competition: the candidate will have to submit an application early next week (around Monday 16/10/17). Application includes a letter of intent, transcripts and a recommendation.

-- Chris Kozak

Krzysztof Kozak <[kmkozak87@gmail.com](mailto:kmkozak87@gmail.com)>

---

## phylogenetic likelihood library version2

Dear Community,

Today, we released version 2 of our low level phylogenetic likelihood library. It now includes site repeats (see <https://academic.oup.com/sysbio/article/66/2/205/2420631/Efficient-Detection-of-Repeating-Sites-to>) to boost computations <https://github.com/xflouris/libpll-2> and has been integrated into RAxML-NG and Modeltest-NG.

Alexis

– Alexandros (Alexis) Stamatakis

Research Group Leader, Heidelberg Institute for Theoretical Studies Full Professor, Dept. of Informatics, Karlsruhe Institute of Technology

[www.exelixis-lab.org](http://www.exelixis-lab.org) alexandros.stamatakis@gmail.com

---

## Phyloseminar LuayNakhleh Oct27

Next on phyloseminar.org:

Phylogenetic Networks: From Displayed Trees to a Distribution of Gene Trees Luay Nakhleh Rice University Friday, October 27, 2017, 9:00 AM PDT

Phylogenetic networks are leaf-labeled, rooted, directed acyclic graphs that are used to represent and model reticulate, or non-treelike, evolutionary histories. Phylogenetic networks have received significant attention in the last two or three decades and the computational phylogenetics community has developed a wide array of mathematical results and algorithmic techniques for their inference. A fundamental observation that guided much of these developments was that a network is a summary of a set of trees. This observation gave rise to the parsimonious formulation of inferring a network with the smallest number of non-tree events that displays a given set of trees.

More recently, though, efforts have been dedicated to statistical inference of these networks from data of multiple, unlinked loci. This formulation is based on extending

the multi-species coalescent to species phylogenies whose topologies are networks. With this extension, inferences simultaneously account for reticulation events, such as hybridization, in the presence of incomplete lineage sorting, thus not interpreting all heterogeneity in the data as caused solely by reticulation.

In this seminar, I will introduce the phylogenetic network model, and give a brief survey of the results based on the parsimonious formulation. I will then introduce the multispecies network coalescent and describe recent results on statistical inference of phylogenetic networks from multi-locus data under this model.

> – Frederick “Erick” Matsen, Associate Member Fred Hutchinson Cancer Research Center <http://matsen.fredhutch.org/> ematsen@gmail.com

---

## Python R workshops

EvolDir,

I am looking for a spring 2018 python or R workshop for a graduating senior undergraduate working in my lab. This student has introductory knowledge of both platforms, and is looking for something intermediate in nature. Ideally in North America, but they'd consider other locations. Any information would be most appreciated!

All the best, James

James Beck Department of Biological Sciences Wichita State University [www.becklaboratory.com/James](http://www.becklaboratory.com/James) “James.Beck@wichita.edu” <James.Beck@wichita.edu>

---

## Royal Society Issue

Royal Society Publishing have just published another issue of interest to your readers - please can post some details on your EvolDir website as you have done before. Below is some brief wording and the flyer is attached.

Open Access Week

Also a heads up that we will be participating in Open Access Week from 23-29 October. All our content will be free for the duration - you may want to place details of this on your website just before that date?

Many thanks and I look forward to your confirmation of this.

With kind regards.

Felicity

Royal Society Publishing has recently published a special issue of Philosophical Transactions B entitled Wild clocks: integrating chronobiology and ecology to understand timekeeping in free-living animals compiled and edited by William J Schwartz, Barbara Helm and Menno P Gerkema. This content can be accessed at <http://bit.ly/PTB1734> and the articles can be accessed directly at <http://rstb.royalsocietypublishing.org/content/372/1734> A print version is also available at the special price of 35.00. You can order online via the above web page (enter special code TB 1734 when prompted) or, alternatively, you can contact [debbie.vaughan@royalsociety.org](mailto:debbie.vaughan@royalsociety.org)

Felicity Davie Royal Society Publishing

T +44 20 7451 2647 <http://royalsocietypublishing.org> The Royal Society 6-9 Carlton House Terrace London SW1Y 5AG Registered Charity No 207043

“Davie, Felicity”

## Software Evolutionary Placement Algorithm

Dear community,

We just released the completely re-designed version of our Evolutionary Placement Algorithm. It's at least 6 times faster than pplacer/EPA and has much better parallel scalability.

It's available for download here: <https://github.com/Pbdas/epa-ng> As before, EPA-NG user support will be provided via the raxml google group.

Alexis

– Alexandros (Alexis) Stamatakis

Research Group Leader, Heidelberg Institute for Theoretical Studies Full Professor, Dept. of Informatics, Karlsruhe Institute of Technology

[www.exelixis-lab.org](http://www.exelixis-lab.org) [alexandros.stamatakis@gmail.com](mailto:alexandros.stamatakis@gmail.com)

## SouthAfrica VolResAssist EvolutionaryPhysiologyBehaviour

Volunteer Research Assistant Position

We are looking for two volunteer research assistants to carry out exciting experiments with captive Damaraland mole-rats, *Fukomys damarensis* at the Kuruman River Reserve, in the South African Kalahari Desert.

Broadly, our research investigates the influence of genes, hormones and social factors on individual developmental, growth and behaviours.

Currently, we are particularly interested in characterizing the phenotypical differences between breeding and non-breeding individuals and to develop an integrated understanding of the causes and consequences of such differences.

Applicants should be available for a period of 6 to 12 months starting as soon as possible. They should be hardworking, enthusiastic, physically fit, and prepared for long hours in the laboratory. Successful applicants will be responsible to run experiments and will be involved in data collection and management (behavioural observations, collection of blood and urine samples). Other general tasks related to animal handling (hormone injections and implants) and husbandry and data handling will also be expected. One of the two applicants should feel comfortable with being involved in experiments requiring the sacrifice of experimental subjects.

Working weeks will not exceed 45 hours.

This position is particularly suited, but not exclusively, for people aiming to carry on their academic education or a management position in a research project. Successful applicants can expect to gain invaluable experience in animal handling procedures and in conducting and managing experiments. They will also gain database skills (MySQL) and will be provided with the opportunity to work on a personal project using the data available in our existing database.

Costs of food and accommodation while at the project will be covered.

If you are interested in this position send your CV and cover letter stating your availability to Philippe Vulllioud ([philippe.vulllioud@gmail.com](mailto:philippe.vulllioud@gmail.com)).

Shortlisted applicants will be invited for a Skype interview.

Deadline: 31st October 2017 (the position will remain open until filled)

Philippe Vulliouid <philippe.vulliouid@gmail.com>

---

## SSB Mini-ARTS Grant

The Society of Systematic Biologists is pleased to offer Mini-ARTS awards to enhance taxonomic knowledge. These awards are for revisionary taxonomy and systematics, modeled after the National Science Foundation Dear Colleague Letter: “Advancing Revisionary Taxonomy and Systematics (ARTS)” developed within the Systematics and Biodiversity Science Cluster. We are calling these ‘Mini-ARTS’ grants. These awards are designed to allow SSB members (students, post-docs, and faculty) to spend a summer or semester apprenticed to an expert in a particular taxonomic group or to enhance revisionary taxonomic and systematics research in novel ways. Goals of this award program are to address constraints on our knowledge of undescribed biodiversity, assist in passing on taxonomic expertise before it is lost, increase the number of students with broad training in organismal biology and systematics, and support projects in biodiversity and taxonomy informatics as well as monographic and revisionary taxonomy. Activities can include a trip to the taxonomist’s laboratory, pay for the taxonomist to visit the applicant’s laboratory for a period of time, or pay for costs of computer time or development of interactive keys for electronic dissemination of systematics results. Requests for support may be in any amount up to \$3,000.

**APPLICATION DEADLINE:** All application materials are due on November 30, 2017 by 11:59 Eastern Standard Time.

### \*\* HOW TO APPLY \*\*

Submit all materials via the SSB website: <http://www.systbio.org/mini-arts-awards.html> The application materials required are:

- + curriculum vitae (1 page maximum)
- + brief description of the project, including a separate section justifying the importance of the taxon and the revisionary work with literature cited (2 pages maximum)
- + budget (\$3,000 limit) and budget justification (2 page

maximum)

+ letter of support from a taxonomist collaborator

+ if the applicant is a postdoc or student, we also require a letter of support from their academic advisor

Please see the SSB website for further details about the application materials.

### \*\* ELIGIBILITY \*\*

Applicants may be from any country, but must be members of SSB, and are advised to join the Society as soon as possible to facilitate their applications. Previous Mini-ARTS award recipients may not re-apply, but previous applicants who were not selected for funding are encouraged to re-apply.

### \*\* CONTACT \*\*

If you have any questions, please contact the Chair of the SSB Awards Committee (Dr. Tracy Heath: [ssb.awards.director@gmail.com](mailto:ssb.awards.director@gmail.com)).

---

## STEM survey

Dear all, We are seeking participation - please - from Early Career Scientists, within a maximum of ten years of completing their doctorate, in the evolutionary biology community and affiliated disciplines.

In recent years the academic community has made great progress in addressing the historic under-representation of women in Science Technology Engineering and Mathematics (STEM). What has received less attention are the minorities identifying with other protected characteristics. Protected groups are identified in the UK Equality Act 2010 as sharing a particular characteristic against which it is illegal to discriminate, such as race/ethnicity, disability, or sexual orientation (see here for details < <https://www.gov.uk/discrimination-your-rights> >). There has been very little discussion with regards the effect of coming from a protected group, despite evidence that this can have a strong effect on the probability of retaining an academic career. We wish to explore some of the challenges faced by scientists who do not come from a ‘traditional’ background, and how some of these challenges can be overcome. Our aim is an Open Access publication that we hope will be of benefit to all in our community. The study will take no more than 20 minutes of your time, and can be found here: <https://www.surveymonkey.co.uk/r/SH53LZ5>. Further information can be found on the first page of the survey.

Thank you in advance, and best wishes,

Joanne Griffin, Megan Head, Fiona Ingleby, Klara Wan-  
lik, and Zenobia Lewis

Dr Zenobia Lewis Senior Lecturer, Director of Studies,  
Biological Sciences

@Zen\_of\_Science

Room G53, Ground Floor, Biosciences Building

School of Life Sciences University of Liverpool Liverpool  
L69 7ZB UK

+44(0) 151 795 4384

Z.Lewis@liverpool.ac.uk

---

## Teaching evolution abroad

\*Science-Corps\* \*Providing an opportunity for recent  
PhD graduates, as Science-Corps Fellows, to teach sci-  
ence to underserved students and build science capacity  
in the developing world\*

Interested in taking a six month break from the re-  
search/academic track to work in a different part of  
the world and share your expertise where it is needed?  
Science-Corps has launched a new fellowship, which pro-  
vides STEM PhD graduates the opportunity to teach  
science, design curriculum, and build scientific capacity  
abroad.

Science-Corps is recruiting STEM PhD students near  
degree completion and up to four years post completion  
for placement starting June of 2018. Applications are  
due by January 31, 2018.

If interested, visit <http://www.science-corps.org/>  
Stephen E. Harris, Ph.D. Assistant Professor of Biology  
Purchase College - SUNY harris.stephen.e@gmail.com  
harris917@gmail.com

---

## USVI PuertoRico EducationalRelief

We have a large evolutionary/ecology focus in the depart-  
ment and wish to help members of the evolution/ecology  
community as much as possible.

The University of Central Florida has established an

educational relief program to welcome undergraduate  
and graduate students from Puerto Rico and the U.S.  
Virgin Islands in the aftermath of Hurricane Maria.  
Students will be offered in-state tuition, relaxed pa-  
perwork requirements, and access to other resources.  
Additionally, various members of the Biology depart-  
ment have expressed willingness to host affected faculty  
and graduate students whose facilities may be dam-  
aged or inoperable and in need of functional labora-  
tory space and other facilities to continue their research  
and graduate degrees. Please distribute this widely  
to any affected universities or faculty, we know that  
it is currently difficult to reach all affected communi-  
ties. <http://www.sdes.ucf.edu/puerto-rico-educational-relief/> Thanks very much! Chase

Chase Mason, PhD Assistant Professor Depart-  
ment of Biology University of Central Florida  
<https://plantevoecophys.wordpress.com> Chase Mason  
<Chase.Mason@ucf.edu>

---

## WilliamsC Trinidad Internship GuppyEvolution

Dear Brian,

Would you mind posting this job ad under the “jobs”  
category please.

Research Internships. The Guppy Project

Research interns are needed to assist in a multi-  
disciplinary, multi-investigator, experimental study of  
the interactions between ecology and evolution in  
Trinidad, West Indies. The research is led by Professor  
David Reznick at the University of California, Riverside  
in collaboration with Joseph Travis (Florida State), Tim  
Coulson (Oxford), Paul Bentzen (Dalhousie U.), and  
Ron Bassar (Williams). We seek to integrate multiple  
biological fields for the study of these interactions in  
experimental populations of guppies in Trinidad. Duties  
include assisting in monthly censuses of guppy popula-  
tions in montane streams. The monthly censuses include  
long hours in the field and laboratory. There will also  
be 12 days off between each census when interns can  
pursue an independent project.

Qualifications: We seek interns who are entertaining the  
possibility of pursuing graduate studies in some area  
of ecology and evolution and who wish to gain some  
additional field research experience before doing so. Re-  
search will take place in semi-remote areas of Trinidad

sometimes under bad weather conditions. Applicants must be able to live and work well with others. Research will involve carrying heavy packs over slippery and steep terrain. Applicants must be in good physical condition and be able to meet the demands of field research under these conditions. Ability to drive a standard transmission vehicle is desirable but not required. Applicants with first-aid/first responder training, skills in automobile maintenance, and construction skills are highly desirable. Please address these skills when applying.

Interns will be required to spend a minimum of 3-months in Trinidad, with possibility of extension. Starting dates are as early as January 2018. We will cover all travel and living expenses and provide housing.

Please see our website <

[www.theguppyproject.weebly.com](http://www.theguppyproject.weebly.com) > for more information on the project and access to reprints. Our video menu includes a “guppy censuses” submenu that details the main tasks associated with the internship.

Applicants should send cover letter, CV and the names and e-mail addresses of three or more professional references to David Reznick ([gupy@ucr.edu](mailto:gupy@ucr.edu)). At least two of the references should be academics.

– Ron Bassar Assistant Professor Department of Biology Williams College 59 Lab Campus Drive Williamstown, MA 01267 Phone: 413-597-2119 College Webpage: <https://biology.williams.edu/profile/rdb4/>- Personal Webpage: [www.ron-bassar.squarespace.com](http://www.ron-bassar.squarespace.com) The Guppy Project: [www.theguppyproject.weebly.com](http://www.theguppyproject.weebly.com) Ron Bassar <[rdb4@williams.edu](mailto:rdb4@williams.edu)>

---

## PostDocs

AuburnU LizardEvolutionaryEcol .....	115	OregonStateU PacificOysterEvolution .....	127
BoiseStateU EvolutionaryInnovations .....	115	PasteurInst Candida GWAS eQTL .....	128
ClarkU Massachusetts AnnelidNeuralEvodevo ...	116	PasteurInst ComparativeAnalysisTickBacteria ...	128
ColoradoU Boulder HybridizationGenomics .....	117	PDF-3 PhD-2 OriginsLifeResearch .....	129
CSIRO Canberra EvolutionBtResistance .....	117	PennsylvaniaStateU ReptileDemography .....	129
CzechRepublic EcolNicheModellingGenomics ....	118	PurdueU SeaLampreyGenomics .....	130
EAWAG Switzerland PhytoplanktonEvolution ...	119	SARS Bergen BioinformaticsNeuralDevelopment .	131
Estonia PDF PhDs AncientDNA .....	119	SwedishUAgricultureSciences MosquitoEvolution .	131
ImperialC London ModellingProteinStructureEvolution	120	SyracuseU EvolutionaryEcolMutualisms .....	132
IndianaU EvolutionMigratoryBehavior .....	120	SyracuseU SexualSelection .....	133
INRA France PopGenHybridization .....	121	UAarhus PDF PhD environmentalDNA .....	133
INRA France PopulationGenomics .....	122	UALabama DiseaseEvolution .....	133
INRA Rennes FreshWaterSnailEvolutionaryTox ..	122	UARctic Norway PDF PhD SpeciesPersistence ...	134
JaiellonianU EvolutionaryPhysiology .....	123	UARizona ProteinEvolutionBioinformatics .....	135
LCQB AlternativeSplicingEvolution .....	124	UBath Bioinformatics .....	135
MichiganStateU EvolutionPathogenResistance ...	124	UBern 4PDF PhD EvolutionCooperation .....	135
NMNH Smithsonian Applications .....	125	UBristol ModellingVectorSenescence .....	136
NorthernArizonaU PathogenGenomics .....	126	UCalifornia Davis HumanGenomics .....	137
OmahaZoo NGS .....	126	UCalifornia Davis HybridizationPrimateEvolution	138
		UCalifornia Davis PrimateHybridization .....	138

UCalifornia LosAngeles EvolutionDiseases .....	139	UPennsylvania ExperimentalEvolution .....	145
UCalifornia SantaCruz Museomics .....	140	UppsalaU HumanEvolutionaryGenetics .....	146
UCentralFlorida MarinePopulationGenomics .....	140	UppsalaU PopulationGeneticTheory .....	147
UFlorida EvolutionSenescence .....	141	UPuertoRico EvolutionaryGenomics .....	147
ULaval EvolutionaryCellBiology .....	141	USouthPacific FishGenomics .....	148
ULyon AmphibianConservation .....	142	USussex Genomics .....	149
UMassBoston Phylogenetics in R .....	143	UTexas-Houston InferringDemographicHistory ...	149
UMontana EcologicalGenomics .....	143	WayneStateU FishEvolutionaryGenomics .....	150
UNewSouthWales EvolutionParentalEffects .....	144	Yale NUS Singapore EvolutionaryBiol .....	150
UOslo AncientDNA .....	144		
UPennsylvania 2 EvolutionaryGenomics .....	145		

---

## AuburnU LizardEvolutionaryEcol

### Postdoctoral Research Position in Evolutionary Ecology

A Postdoctoral Research Associate position is available in the Warner Lab at Auburn University. The successful candidate will be involved primarily with research on developmental plasticity and population biology of brown anole lizards (*Anolis sagrei*). The Warner Lab has generated a large dataset from a 7-year mark-recapture study on 3-6 island populations (data on ~20,000 individuals) of brown anoles. The successful candidate will be expected to work with this dataset to explore a variety of questions about (but not limited to) spatial and temporal variation in population demographics, phenotypic selection, and habitat use. The post-doc will also be involved with research on the ecology and evolution of embryonic responses to incubation environments, which is another major research focus in the lab. The post-doc will be expected to assist with training graduate students in the lab, develop synergistic projects, write grants, and produce first authored papers and contribute to co-authored papers. There will also be opportunities to develop independent and collaborative research, with the hope that the post-doc will develop their own research program to carry to a future faculty position.

For more information about the Warner Lab, visit <http://warnerlab.weebly.com/> . For more information about the Department of Biological Sciences, visit <http://www.auburn.edu/cosam/departments/biology/> **REQUIRED:** Applicants must have a Ph.D. in an appropriate field (including but not limited to evolution, ecology, physiology, behavior) at time of hire; demonstrated track record of creative, productive research; ability to work in a dynamic, collaborative environment with graduate and undergraduate students; strong background in ecol-

ogy and evolutionary biology; excellent communication, organizational, and leadership skills.

**PREFERRED:** Expertise and skills with mark-recapture statistics, GIS, reptile egg incubation, field research on lizards.

**AVAILABILITY:** The position start date is targeted for January 2018, but this is somewhat flexible. This is a one-year, full-time position with the possibility of renewal for a total of 2 years, pending satisfactory work.

This announcement is informal in nature and candidates of interest will be asked to submit a formal application for complete consideration after initial screening.

If interested, please send the following materials to Dan Warner ([dan.warner@auburn.edu](mailto:dan.warner@auburn.edu)): 1) a current CV with contact information for three references; (2) a short (1-2 page) statement of interest in this opportunity with a list of relevant skills. Screening of applications will begin 31 October 2017, and continue until the position is filled.

Daniel Warner <[daw0036@auburn.edu](mailto:daw0036@auburn.edu)>

---

## BoiseStateU EvolutionaryInnovations

The Hayden Lab at Boise State University is seeking a postdoctoral researcher interested in molecular mechanisms of RNA functional evolution. The lab uses laboratory selection of RNA and high-throughput sequencing to study the distribution of functions in sequence space, the evolution of novel functions, and how the environmental change alters fitness landscapes. These experiments have implications for the understanding of evolutionary innovations in general, have implications for life's origins, and also have applications in

synthetic biology. The lab aims to use synthetic biology approaches to study evolution, and to use evolution to expand the synthetic biology toolbox. The preferred candidate will have a PhD and experience with molecular biology, RNA sequencing, and next-generation sequence data analysis. Experience with programming is preferred (R, python, matlab, perl, etc.), and candidates with PhD's in computational biology or related disciplines will also be considered. Candidates should have demonstrated research success in the form of first author peer review publications. Funding is available for two years. The applicant will have an opportunity to develop a postdoctoral mentoring plan, and to interact with graduate students and faculty in our multidisciplinary Biomolecular Sciences Graduate Program that spans Molecular Biology, Biochemistry and Biophysics at Boise State.

To apply, please go to: <https://www.higheredjobs.com/-clickthru/redirect.cfm?JobCode=176577150> au-torec@gmail.com

---

### ClarkU Massachusetts AnnelidNeuralEvodevo

Position Title: Postdoctoral fellowship in annelid evo-devo Location: Clark University, Worcester, Massachusetts USA Duration: Full-time position for 3 years (preference for a start date on or before January 15, 2018), with further extension possible subject to additional funding availability The Meyer lab at Clark University (<http://wordpress.clarku.edu/nmeyer/>) seeks a postdoctoral research fellow to investigate the molecular control of neural fate specification in annelids. Successful candidates will have expertise in developmental biology, evo-devo, and molecular biology. Experience working with marine organisms, microinjection, CRISPR/Cas9, transcriptomic data, and/or statistical analyses also is desirable but not required. Additionally, the Meyer lab is interested in candidates who can contribute to diversity of the academic community through development of outreach programs for the local community or that have experience in mentoring students from historically underrepresented communities.

The Meyer lab studies evolution of nervous systems, focusing on annelids. We have a stable lab colony of *Capitella teleta*. Techniques used in the lab include microinjection of embryos, qRT-PCR, immunohistochemistry, imaging of live and fixed tissue, quantification of

phenotypes using ImageJ, and gene knockdown and mi-expression by injection of morpholinos and mRNA. We also are currently developing CRISPR/Cas9 for use in *C. teleta*. This research and the post-doctoral position is funded by a three-year grant from the NSF. The primary goal for the postdoctoral fellow will be to investigate what signals are responsible for neural fate specification in the annelid *C. teleta* and if or how this process is linked to dorsal-ventral axis specification. The fellow will also have the opportunity to add additional lines of inquiry related to the research.

There will be multiple opportunities for career development, including mentoring undergraduate and accelerated M.S. students in the lab, participating as a guest lecturer in courses taught by the PI, and courses offered through the Higher Education Consortium of Central Massachusetts (HECCMA) Certificate in College Teaching Program.

This is a full-time (40 hour/week) position for three years subject to satisfactory performance. Extension beyond the three years is possible, subject to additional funding availability. The position provides benefits including health insurance, tuition benefits, vacation, use of the campus fitness center, and more. The preferred start date is on or before January 15, 2018.

Clark University hires only individuals legally authorized to work at the University. If chosen for the position, non-US citizens must obtain visas necessary to work legally in the US. Clark University is an affirmative action/equal employment opportunity university and we strongly encourage members from historically underrepresented communities, including women, to apply.

Applicants should submit a cover letter explaining your interest in the position and qualifications, a curriculum vitae, a statement of research interests, two key publications, and contact information for three references in one electronic file by email to Dr. Néva Meyer ([nmeyer@clarku.edu](mailto:nmeyer@clarku.edu)). Further information is available by contacting Dr. Meyer by email or phone (508-793-7476). Review of applications will begin immediately and will continue until the position is filled, but candidates able to start on or before January 15, 2018 will be given preference. This is a three-year position with the possibility of extension pending funding.

Neva Meyer <[NMeyer@clarku.edu](mailto:NMeyer@clarku.edu)>

---

## ColoradoU Boulder HybridizationGenomics

\*Postdoctoral position in hybridization genomics and phylogenomics\*

Applications are invited for a postdoctoral researcher position in the Taylor Lab at the University of Colorado at Boulder (<https://tinyurl.com/ybj4p686>). The postdoctoral researcher will generate and analyze population genomic and phylogenomic data from North American chickadees, including whole genome and GBS data from two regions of hybridization and whole genome data for all North American taxa. The initial appointment is for one year with the possibility of renewal. Applicants should have completed a PhD or have postdoctoral experience in the fields of Population Genomics, Evolutionary Genomics, Evolutionary Biology, or Computational Biology and have an established record of research productivity and publications in scientific journals. Experience in studies of avian evolution would be an advantage, but is not required.

We are looking for a highly motivated and collaborative individual with lab and computational expertise related to the generation and analysis of high-throughput data. Those with experience studying hybrid zones and/or phylogenomics will be given preference. Proficiency in R, Perl, Python and/or C++ programming is a benefit.

The successful candidate will join the Taylor Lab in the Department of Ecology and Evolutionary Biology (EBIO) at the University of Colorado at Boulder. Research in the Taylor Lab is broadly focused on using avian hybrid zones to understand the genetic bases of traits relevant to speciation and to the maintenance of species barriers. The EBIO Department at CU Boulder has a strong group in evolutionary biology and genomics. The University of Colorado is located in Boulder Colorado, a vibrant city located next to the Front Range of the southern Rocky Mountains.

For further enquiries please contact: Scott Taylor ([scott.a.taylor@colorado.edu](mailto:scott.a.taylor@colorado.edu))

The position will remain open until filled. The start date for this position is flexible, but no later than May 01 2018.

To apply please email a CV, cover letter, a brief statement of research goals, and contact information for 3 references to Scott Taylor ( [scott.a.taylor@colorado](mailto:scott.a.taylor@colorado)).

Short-listed individuals will be contacted.

This position is eligible for medical, dental and life insurance, retirement benefits programs, and is eligible for monthly vacation and sick leave accruals.

The University of Colorado Boulder is committed to providing a safe and productive learning, living and working community. To achieve this goal, we conduct background investigations for all final applicants being considered for employment. Background investigations include a criminal history record check, and an EPLS (Excluded Parties List System) check.

The Immigration Reform and Control Act requires that verification of employment eligibility be documented for all new employees by the end of the third day of work.

The University of Colorado is an equal opportunity and affirmative action employer committed to assembling a diverse, broadly trained faculty and staff. In compliance with applicable laws and in furtherance of its commitment to fostering an environment that welcomes and embraces diversity, the University of Colorado does not discriminate on the basis of race, color, creed, religion, national origin, sex (including pregnancy), disability, age, veteran status, sexual orientation, gender identity or expression, genetic information, political affiliation or political philosophy in its programs or activities, including employment, admissions, and educational programs.

Scott A. Taylor | Assistant Professor Department of Ecology and Evolutionary Biology University of Colorado Campus Box 334 Boulder, CO 80309 Office: C287 Ramaley <http://www.colorado.edu/lab/taylor/dr.scott.a.taylor@gmail.com>

---

## CSIRO Canberra EvolutionBtResistance

Hi all,

I have a postdoc position available at CSIRO using molecular tools to examine the frequency and distribution of Bt resistance alleles. The group at CSIRO is very active in this area and the postdoc will have an opportunity to work with biologists working in the field, molecular biologists and bioinformaticians. There will also be opportunities to interact with industry. The position will be based in Canberra, Australia and there will be opportunities to travel within Australia and internationally. Please share with anyone who you think might be interested.

<https://jobs.csiro.au/job/Canberra%2C-ACT-Postdoctoral-Fellowship-Molecular-detection-of-Bt-resistance-alleles/430679000/> Cheers,

Tom

Dr. Tom Walsh Research Scientist - Team Leader:  
Chemical Response Genomics CSIRO Land and Water  
Phone: +61 2 6246 4083| Mobile: 0421832771  
tom.walsh@csiro.au | [www.csiro.au](http://www.csiro.au) Address: CSIRO,  
Clunies Ross St. Canberra, ACT 2601, Australia GPO  
Box 1700

Please consider the environment before printing this email

“Tom.Walsh@csiro.au”

---

## Czech Republic EcolNicheModellingGenomics

Postdoctoral position in modelling species' response to environmental change at the Czech Academy of Sciences.

In addition to the previously advertised positions, we are seeking a postdoctoral researcher with expertise in Ecological-Niche Modelling (ENM).

The postdoctoral position is available in the group of Petr Kotlik (<http://www.researcherid.com/rid/B-4633-2009>) at the Institute of Animal Physiology and Genetics of the Czech Academy of Sciences in Libečov ([http://www.iapg.cas.cz/org\\_lab&id=23](http://www.iapg.cas.cz/org_lab&id=23)).

The successful candidate will combine phylogeographic/genomic data and ENM to investigate the ecological and evolutionary conditions leading to species' persistence under climate/environmental changes.

The postdoctoral researcher will be involved in a project identifying postglacial population history and genetic adaptations in response to climate change, using large SNP datasets and a widespread European small mammal - the bank vole (*Clethrionomys glareolus*) - as the model system. This project is currently in an advanced state, with extensive genomic and distributional data already acquired and data analysis in progress.

He/she will closely collaborate with a PhD student who is also assigned to this project and who is conducting genomic data analysis.

The project is in collaboration with the lab of Jeremy Searle (Cornell University).

Representative publications of related projects from the

lab can be found below.

The starting date is flexible and can be as early as November 2017. Applications will be accepted until the position is filled. The position is available initially for 1 year, but can be extended depending on progress.

The ideal candidates will have a strong publication track record in peer-reviewed journals and a proven expertise in ENM. Previous experience with analysis of genetic/genomic data is not necessary.

We seek an individual who is enthusiastic, highly motivated, and willing to work independently as well as in a team.

We expect good written and oral communication skills in English for candidates of any nationality.

The gross salary of the postdocs is 35.000 CZK/month (ca 1300 EUR), and may increase based on their achievements during the project (note that living expenses in the Czech Republic are generally lower than in Western European countries or the United States).

Interested applicants should send a PDF with CV, a brief description of research interests and experience, and contact information for three senior scientists who may provide a reference, to [kotlik@iapg.cas.cz](mailto:kotlik@iapg.cas.cz).

Representative publications: Kotlik et al. (2006) A northern glacial refugium for bank voles (*Clethrionomys glareolus*). *Proc. Natl. Acad. Sci. USA* 103, 14860.

Searle et al. (2009) The Celtic fringe of Britain: insights from small mammal phylogeography. *Proc. R. Soc. B* 276, 4287-4294.

Kotlik et al. (2014) Adaptive phylogeography: functional divergence between haemoglobins derived from different glacial refugia in the bank vole. *Proc. R. Soc. B* 281, 20140021.

Filipi et al. (2015) Mitogenomic phylogenetics of the bank vole *Clethrionomys glareolus*, a model system for studying end-glacial colonization of Europe. *Mol. Phylogenet. Evol.* 82, 245-257.

[Kotlik@iapg.cas.cz](mailto:Kotlik@iapg.cas.cz)

---

## EAWAG Switzerland Phytoplankton Evolution

The Narwani lab at Eawag (the Swiss Federal Institute of Aquatic Sciences and Technology) is recruiting a post-doc to work on the evolution of competitive ability in phytoplankton. The goal of this project is understand how competitive traits evolve. We will investigate to what degree the evolution of competitive traits alters the outcome of competition, both in terms of community structure and in terms of species' relative contributions to ecosystem functioning. To answer these questions we use competition experiments in the lab and in natural lakes. These investigations will have the opportunity to leverage existing resources in my group from prior resource limitation evolution experiments (e.g. descendant populations and whole genome sequences).

The position is a 2-year postdoctoral fellowship is funded by the Swiss National Science Foundation (SNSF). The anticipated start date is January 2018.

Candidates should have obtained their PhD in topics including community, population, microbial or evolutionary ecology, with no more than 2 years of work experience post-PhD. Applicants should have at least two of the following three qualifications: (1) a background in competition and coexistence theory, 2) quantitative data analysis skills including familiarity with statistical and modelling techniques using R, Python or similar platforms, 3) experience with modern molecular methods including DNA/RNA extraction, qPCR and library preparation for next generation sequencing and basic bioinformatics. Knowledge of standard methods in aquatic ecology and algal culturing is an asset. Excellent written and spoken English with a track record of publishing in international journals is required.

Eawag offers a high-tech and progressive research and working environment. Applications from women are especially welcome. For more information about Eawag and our work conditions please consult [www.eawag.ch](http://www.eawag.ch) and [www.eawag.ch/en/aboutus/working/employment](http://www.eawag.ch/en/aboutus/working/employment). The deadline for applications is 12 November 2017, but applications will be accepted until a suitable candidate is found. Applications should include a cover letter, CV, and the names and contact information for 3 references. Please send your application through the following webpage; any other way of applying will not be considered. [https://apply.refline.ch/673277/0556/-](https://apply.refline.ch/673277/0556/)

[pub/1/index.html](http://pub/1/index.html) For additional information contact Dr. Anita Narwani, E-Mail: [anita.narwani@eawag.ch](mailto:anita.narwani@eawag.ch) (will not accept applications directly).

“Narwani, Anita Julianne Tricia”  
<[Anita.Narwani@eawag.ch](mailto:Anita.Narwani@eawag.ch)>

---

## Estonia PDF PhDs AncientDNA

To whom it may concern,

Please find here (EBC Current Research Vacancies) a call for three PhDs and one Postdoctoral position at the Estonian Biocentre in Tartu. Two PhD positions are funded by a research project aimed at analysing 2500 high coverage Estonian human genomes using haplotype-aware methods such as chromopainter, fineStructure, Globetrotter, PCAdmix and the like.

One PhD and one Postdoctoral position are funded as part of the new ancient DNA and ultra-sensitive biomolecule analysis laboratory.

Research projects in the aDNA lab will pertain to human, animal, and pathogen questions that overlap the modern DNA genomics work carried out at the institute as well as individual projects.

The candidates are welcome to expand and improve these lines of research, based on his/her personal interests within the field of ancient and modern human and pathogen population genetics.

Previous practical experience on any of the above mentioned approaches is highly recommended. Deadline for the application is 15th December 2017 to start no sooner than February 2018. For the PhDs a masters (MSc or equivalent) is required to be obtained prior to July 2018. For the Post-doctoral position it is best that PhD thesis is submitted prior to the start date and start dates are flexible (from February 2018).

The Estonian Biocentre Evolutionary Biology unit aims at reconstructing human's evolutionary history through modern and ancient DNA genome sequences. Its research has experienced growing international press coverage and all the sequenced data are freely accessible ([www.ebc.ee/free.data](http://www.ebc.ee/free.data)) to the scientific community. Now with brand new state-of-the-art ancient DNA facilities.

Please circulate to potential candidates and encourage them to get in touch for further info.

Best and thank you, Luca Pagani and Christiana Scheib

Senior Researchers, Estonian Biocentre Riia 23b, 51010, Tartu, Estonia

Freddi Scheib

Freddi Scheib <freddischeib@gmail.com>

---

## ImperialC London ModellingProteinStructureEvolution

Hi all,

a 3-year postdoctoral position is available at Imperial College London and the MRC London Institute of Medical Sciences (LMS) to work in the Molecular Systems group headed by Dr Tobias Warnecke. You will also closely interact with the Computational Protein Biology group led by Joe Marsh at the MRC Human Genetics Unit, University of Edinburgh.

We are looking for an outstanding postdoctoral scientist to work on an exciting project at the intersection of medical population genetics, molecular evolution, and protein structural biology. The project is aimed at modelling and predicting the joint impact of two or more amino acid variants on protein structure and protein complex formation, using globinopathies as a model system. We want to explore how naturally occurring variants, obtained from large population cohorts, interact at the structural level when combined on a single genetic background, to obtain view of population-wide epistatic potential and to allow individualized disease predictions that can be tested experimentally.

The project requires extensive computational modelling of protein structure and interactions so advanced working knowledge of state-of-the-art modelling software is highly desirable. You should be proficient in at least one programming/scripting language (java, python, etc.) as well as R or Matlab and comfortable with carrying out large-scale analysis in a computing cluster environment. You should have a strong publication record, excellent verbal and written communication skills, and a track record of addressing scientific problems in an innovative, thoughtful and systematic manner. Prior knowledge of haemoglobin and/or red blood cell biology is a bonus.

You will hold a UKRI Innovation Fellowship (UK nationals) or a Rutherford Fund Fellowship (non-UK nationals) and be part of a national cohort of fellows funded by the UK Government's Industrial Strategy fund. Locally, the fellow will be part of a diverse computational/experimental research team with expertise

and wide-ranging interest in epigenetics, systems biology, and molecular evolution ([molsys.lms.mrc.ac.uk](http://molsys.lms.mrc.ac.uk)). In addition, the fellow will benefit from close interaction with the Marsh group in Edinburgh ([ed.ac.uk/mrc-human-genetics-unit/research/marsh-group](http://ed.ac.uk/mrc-human-genetics-unit/research/marsh-group)). Dedicated support and career advice will be available through Imperial's Postdoc Development Centre.

Please contact Dr Warnecke for further information about the post ([tobias.warnecke@lms.mrc.ac.uk](mailto:tobias.warnecke@lms.mrc.ac.uk)).

For full details of this post and to complete an online application, visit <https://mrc.tal.net/vx/lang-en-GB/-appcentre-1/candidate/postings/713> and upload your CV, names and contacts of two scientific references along with a covering letter stating why you are applying for this role (providing evidence against the requirements of the job as per the job description and person specification). Please quote reference number LMS 668.

Closing date: 5 November 2017.

Tobias Warnecke Group Leader Molecular Systems Group MRC London Institute of Medical Sciences (LMS) & Imperial College London <http://molsys.lms.mrc.ac.uk>

“Warnecke, Tobias” <[tobias.warnecke@lms.mrc.ac.uk](mailto:tobias.warnecke@lms.mrc.ac.uk)>

---

## IndianaU EvolutionMigratoryBehavior

Dear Evolutionary Biologists,

The posting below will be of particular interest to those studying coevolution, adaptive capacity, and evolution of migratory behavior.

The Environmental Resilience Institute (ERI) at Indiana University (IU) invites applications for a Research Fellow to study patterns of animal movements to begin in Fall 2018; the appointment is renewable for up to four years. Applicants with interests in causes and consequences of animal movements and geographic distributions are especially encouraged to apply, as are individuals whose research goals relate to understanding the role of animal movements in disease ecology and conservation biology. Fellows will enjoy a generous research allowance, a rich collaborative environment, and eligibility to serve as PI on external grants.

The position is part of IU's Prepared for Environmental Change Grand Challenge initiative (<http://-grandchallenges.iu.edu/p4ec>). With a primary appointment in the ERI, the successful candidate will join a

cohort of twelve Fellows of the ERI and a growing community of colleagues across the sciences, social sciences, and humanities who are engaged in this collaborative program of research and communication about environmental change. Formal affiliation with relevant department(s) and school(s) will be arranged on a case-by-case basis. Excellent fellow candidates will have experience with and openness toward multi- and trans-disciplinary collaborative research.

Applicants must have a Ph.D. prior to employment along with demonstrated research experience in movement ecology; applicants with prior post-doctoral training will be favored in the review process. Fellows will be expected to develop independent research programs that interface with ERI's multidisciplinary initiative. Appointment will be for two years initially, with opportunity for renewal for an additional two years. While the position is not permanent, Fellows are encouraged to extend the appointment period through external funding.

Applications should be submitted by 12/1/2017 to ensure full consideration, but will continue to be considered until the position is filled. Interested candidates should review the job description and submit application materials online at <http://indiana.peopleadmin.com/postings/4642>. Questions about the position should be directed to: Dr. Ellen Ketterson, Search Committee Chair (ketterso@indiana.edu).

Indiana University is an equal employment and affirmative action employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation or identity, national origin, disability status, or protected veteran status.

Vanessa Worthy <vworthy@umail.iu.edu>

---

## INRA France PopGenHybridization

Postdoctoral Research Assistant in Population Genetics, INRA, Saint-Pée-sur-Nivelle, France.

A postdoctoral research assistant position in population genetics is available at the Joint Research Unit ECOBIOP Fish Behavioural Ecology and Population Biology (INRA - Univ. Pau & Pays Adour).

Project description: Hybridization is a natural biological process encountered in evolutionary history of numerous taxa but can also have more recent origin in the case of

anthropogenic perturbations leading to the loss of reproductive isolation between species. Estimating the relative importance of these different factors is paramount in the case of hybridization involving declining species to evaluate the potential impact of hybridization in the demographic trajectory of species at risk and to understand factors leading to hybridization to better inform management policies. The research subject of the recruited postdoctoral research assistant will be to study hybridization dynamics between the allis shad (*Alosa alosa*) and the twait shad (*Alosa fallax*) within a research project aiming at understanding the causes of the allis shad demographic collapse observed for fifteen years. The first objective will be to develop a genotyping method of SNP markers optimized for identifying hybrids using already available genomic resources for the two species. These methods will then be applied to genotype the main shad populations already sampled across the French Atlantic coast. Population genetics analytical methods will be used to quantify contemporary hybridization and to reconstruct the hybridization dynamic history between the two species. The identification of the population of origin of the individuals combining both the genetic data and microchemistry profiles obtained from the otolith on the same individuals will improve the understanding of the environmental and spatial context of hybridization at the metapopulation scale.

Research environment: The successful candidate will be based at ECOBIOP ([https://www6.bordeaux-aquitaine.inra.fr/st\\_pee\\_eng/UMR-Ecobiop](https://www6.bordeaux-aquitaine.inra.fr/st_pee_eng/UMR-Ecobiop)), a Joint Research Unit between INRA (the French National Institute of Agronomical Research) and the University of Pau & Pays Adour, that studies migratory fish behaviour, evolution and population dynamics using complementary disciplines (physiology, ecology, population genetics and modelling). The candidate will work in close collaboration with Dr. Olivier Lepais within a multidisciplinary research project focused on allis shad conservation led by Françoise Daverat (IRSTEA Bordeaux) that includes several INRA and IRSTEA research teams. The working place will be located at INRA Aquapole in Saint-Pée-sur-Nivelle (20 km south of Bayonne and Biarritz, France).

Required qualification and skills: We are looking for candidates with a PhD degree in ecology, evolutionary biology or related relevant fields, with strong background in empirical population genetics. Skills in molecular biology (general laboratory work, molecular markers developments) and interest in scientific questions related to hybridization are essentials. Candidates should be independent, creative, have good communication skills in French and/or in English.

Terms and salary: The post is a full-time, fixed term from 1st January 2018. The gross salary including benefits starts from 2300 euro /month, depending on past professional experience.

Application: To apply, please send to Dr Olivier Lepais (olepais@st-pee.inra.fr) a cover letter (exposing you background and motivation), a detailed CV and email addresses of two references before the 30th of October 2017.

Olivier Lepais <olivier.lepais@inra.fr>

---

## INRA France PopulationGenomics

The selected candidate will be hosted at INRA GDEC Clermont-Ferrand, France. Applicants should have completed a PhD in the fields of Population Genomics, Quantitative Genetics or Computational Science.

The hired postdoctoral fellow will engage in method development and application related to inferring haplotypes using large-scale DNA sequence data. He will compare the power of association studies, detection of signatures of selection and demography inference using single marker information or haplotypes in bread wheat.

The group of scientists (quantitative genetics, population genetics, ecophysiology, pathology) and engineers (field trials, wheat breeding, molecular biology, sequencing, database and programming) is specialized in wheat genetics and genomics. GDEC ([https://www6.clermont.inra.fr/umr1095\\_eng/](https://www6.clermont.inra.fr/umr1095_eng/)) is one of the leading groups involved in the International Wheat Genome Sequencing Consortium (<http://www.wheatgenome.org/>) to produce high quality sequence and alignment of the complex polyploid large wheat genome (17Gb). This post-doc project is backed up to an INRA project called Haptitude, including INRA partners working on different species and disciplines (animal and plants, geneticists, statisticians and bioinformaticians). For the detection of signature of selection, the post-doc will collaborate with CNRS colleagues who developed algorithms to deal with panels that cannot be analysed using model (island or hierarchical) based methods, but present a continuous genetic structure. The candidate will benefit from connections with the French expert of wheat diversity responsible for the genetic resource center.

Appointment & Salary: The Postdoctoral Fellow is initially appointed for a 1-year period. The position

starts in spring 2018. He/She will have to apply to the Agreenskills programme. Candidates that are eligible could benefit from a monthly gross salary, ranging from EUR4700 for young scientists and EUR6000 for independent scientists, if their project proposal is successful.

Application Process: Send you CV to sophie.bouchet@inra.fr

Sophie BOUCHET Chargée de recherche, PhD sophie.bouchet@inra.fr

UMR GDEC 1095 INRA/UBP

5, chemin de Beaulieu

63000 Clermont-Ferrand

France

Tél. : +33 (0)4 43 76 15 09

Mobile : +33 (0)6 95 80 93 14

Sophie Bouchet <sophie.bouchet@inra.fr>

---

## INRA Rennes Fresh WaterSnailEvolutionaryTox

Postdoctoral position in evolutionary toxicology

The Ecology and Ecosystem Health Research Unit at INRA/Agrocampus Ouest, Rennes, France (<http://www6.rennes.inra.fr/ese/>) invites applications for a 18-month Postdoctoral Position in evolutionary toxicology. The hired postdoctoral fellow will develop a proteogenomic approach to investigate evolutionary factors affecting the response to chemical stress in a hermaphrodite organism used as model in ecotoxicology (pondsnail, *Lymnaea stagnalis*). Experimental lines exposed to a pro-oxidant or to benign conditions and maintained through selfing or outcrossing will be used to test hypotheses on putative mechanisms involved in molecular adaptation: transcriptional plasticity and signal transduction vs selective processes, influence of selfing on short-term response to selection. The post-doc will be part of a larger project which has also a socio-economic scope, as it will provide data useful to fine-tune methods for ecological risk assessment and chemicals regulation, e.g., through the incorporation of high-resolution molecular biomarkers into OECD-supported advanced tools (see Adverse Outcome Pathway knowledge base, for molecular screening and toxicogenomics).

Required profile: doctor (PhD) in toxicogenomics or in

molecular ecotoxicology/stress ecology, with maximum 3 years of experience after thesis defense. An international experience in research is required (during or after Doctorate). Candidates must not have supported their thesis in the hiring institution (INRA) and not previously worked in the host research unit (UMR ESE). The ideal candidate would have strong skills in bioinformatics, transcriptomic and proteomic data analysis, a keen interest in environmental and eco-evolutionary issues, and should be willing to work as part of an ecology team. The project is led by the team EPIX, whose research is focused on Evolutionary Ecology of Systems Perturbed by Biological Invasions and Xenobiotics ([https://www6.rennes.inra.fr/ese\\_eng/ABOUT-US/-Research-Groups/equipe/\(idstructure\)/32/\(idlang\)/uk](https://www6.rennes.inra.fr/ese_eng/ABOUT-US/-Research-Groups/equipe/(idstructure)/32/(idlang)/uk)). It will be conducted in collaboration with Dr Jean Armengaud, CEA, Laboratoire Innovations technologiques pour la Détection et le Diagnostic <http://ibitecs.cea.fr/-drf/ibitecs/Pages/services/spi/li2d.aspx>) and with the Aquatic Ecology and Ecotoxicology Experimental Unit at INRA, Rennes, France. Fundings : CNRS Ec2Co (Ecosphère Continentale et Côtière), Bretagne-Loire University, Région Bretagne, INRA.

Informal questions can be addressed to marie-agnes.coutellec@inra.fr

Applicants should send the following documents by email to marie-agnes.coutellec@inra.fr and copied to UBL recherche@u-bretagne Loire.fr: (1) short CV and a covering letter showing your interest and especially addressing your professional project, (2) a list of your major works (2 pages max.) : scientific publications, patents and others scientific productions, (3) two letters of recommendation, (4) a copy of your PhD diploma. The general selection process is described here : <https://u-bretagne Loire.fr/dossiers/postdoc/candidatures> !!!! Attention, nouvelle adresse / Warning, new email address: marie-agnes.coutellec@inra.fr

Marie-Agnès Coutellec Ecology and Ecosystem Health, UMR INRA/Agrocampus Ouest 65 rue de Saint-Brieuc 35042 Rennes cedex - FRANCE phone: +33 223 485 248 [http://www6.rennes.inra.fr/ese\\_eng/](http://www6.rennes.inra.fr/ese_eng/) Marie-Agnès Coutellec <marie-agnes.coutellec@inra.fr>

## **JaiellonianU EvolutionaryPhysiology**

The Institute of Environmental Sciences of the Jagiellonian University

is hiring a postdoctoral fellow (a research assistant) in

physiological genomics

Research tasks:

The post-doc will perform the “molecular” part of project entitled

Experimental evolution of physiological and behavioral adaptations in the bank vole: molecular background and alimentary system bacterial symbionts

The project is based on a long-term experimental evolution program, with lines of bank voles selected in three distinct directions. The specific objective is to investigate molecular basis of the evolution of increased aerobic exercise metabolism and propensity towards predatory behavior in the selected lines, through a) identification of genes with modified frequency of Single Nucleotide Polymorphism (SNP) alleles, and b) analyses of the correlation between SPN genotypes and phenotypic values of the selected traits. The specific tasks performed by the post-doc will include laboratory molecular analyzes, bioinformatic and statistical analyzes of high-throughput sequencing data, and participation in physiological measurements on laboratory rodents. This project is a continuation of the research presented in Konczal et al. 2015 (doi:10.1093/molbev/msv038) and 2016 (doi:10.1093/molbev/msw121). Additional information can be obtained from the principal investigator, Dr. Paweł Koteja (pawel.koteja@uj.edu.pl).

Key words: animal physiology, behavior, evolution, genomics, high-throughput sequencing, locomotor performance, metabolism, neurophysiology, predation, selection experiment, SNP

The main requirements:

- PhD degree in biology or related sciences obtained not earlier than 7 years prior to employment in the project (note: this period does not include periods of maternity or parental leave, or other circumstances described in the Polish National Science Centre OPUS project regulations),

- or a statement that the PhD dissertation has been submitted and the candidate is expected to obtain the degree before commencing the employment;

- Experience in analyzing data from high-throughput sequencing and working in a Unix/Linux environment.

Conditions of employment:

- full-time contract for 24 months, about 7000 PLN/month (gross; an equivalent to associate professor salary),

- benefits of a full-time employee according to the Polish law (health insurance, retirement benefits, etc.)

- all social benefits of the University staff ([www.en.uj.edu.pl/en/staff/staff-benefits/office](http://www.en.uj.edu.pl/en/staff/staff-benefits/office)),

- beginning of the employment: between 1.12.2017 and 1.04.2018 (negotiable).

Deadline for applications: 31 October 2017 (automatically prolonged if needed)

If no candidate meets the requirements, the recruitment period will be extended. If you are interested in this position but cannot apply before the deadline, let us know and we will inform you about the extension.

For details of the requirements and the recruitment procedure see:

<http://www.eko.uj.edu.pl/index.php/en/institute/-announcements> Contact person:

Dr. Pawel Koteja ([pawel.koteja@uj.edu.pl](mailto:pawel.koteja@uj.edu.pl))

Institute of Environmental Sciences

Jagiellonian University

7 Gronostajowa Street, 30-387 Krakow, Poland

office phone: +48 12 664 5209

mobile phone: +48 606 240 746

skype: pkoteja

fax: +48 12 664 6912

Pawel Koteja <[pawel.koteja@uj.edu.pl](mailto:pawel.koteja@uj.edu.pl)>

---

## LCQB AlternativeSplicingEvolution

The LCQB is seeking a post-doctoral fellow to join the Analytical Genomics team. Our project aims at assessing the role of alternative splicing through evolution and its impact on protein structure, dynamics and interactions. We have developed the first tool that reconstructs evolutionary scenarios explaining transcripts observed in a set of species and models the 3D structures of the produced isoforms (<http://www.lcqb.upmc.fr/PhyloSof/>). The post-doctoral fellow will improve and extend the method to apply it at large scale, to all protein coding genes of the human genome. We expect results to lead to the identification of new therapeutic targets and new evolutionary links between protein folds.

Candidates should have strong programming skills and some experience with high-throughput or high performance computing. He/She should have strong experience in at least one of the two following domains of

the project: molecular modeling or analysis of sequence data (transcriptomics, genomics). Knowledge in both fields would be a plus. Ideally, he/she should also be comfortable with manipulating, predicting and simulating protein tertiary structures, and be familiar with phylogenetic inference. Some previous experience with transcriptomics data will be much appreciated.

The recruited candidate will benefit from ongoing developments within the Analytical Genomics team, concerning the extraction of biologically pertinent information from protein conformational ensembles, the prediction and characterization of protein-protein interactions, and the analysis of genomics/transcriptomics data. He/She will take advantage of computing facilities on the campus of UPMC (Paris). He/She will have the opportunity to evolve in a pluridisciplinary laboratory, comprising theoretical and experimental teams in Biology, and to have fruitful exchanges with collaborators from abroad (Switzerland, Germany).

Here is a detailed description of the position: [http://www.lcqb.upmc.fr/sites/default/files/-postdoc\\_MASSIV.pdf](http://www.lcqb.upmc.fr/sites/default/files/-postdoc_MASSIV.pdf) Elodie Laine.

“[elodie.laine@upmc.fr](mailto:elodie.laine@upmc.fr)” <[elodie.laine@upmc.fr](mailto:elodie.laine@upmc.fr)>

---

## MichiganStateU EvolutionPathogenResistance

\*Postdoctoral Position: Evolution of Pathogen Resistance/Freezing Tolerance in Switchgrass\*

The Lowry lab in the Department of Plant Biology at Michigan State University (MSU) is seeking a Postdoctoral Research Associate who will conduct research on the evolution of Pathogen Resistance and/or Freezing Tolerance in switchgrass. Switchgrass is an important target species for domestic production of cellulosic bio-fuels. The principal aim of most switchgrass breeding programs is to develop high-yielding cultivars. However, as feedstock plantings expand, so will pathogen pressure. Unless controlled, fungal pathogens with explosive disease potential will likely drive yield declines and economic losses. Pathogen resistance can be developed through breeding programs that exploit natural genetic variation in disease resistance. Much of the functional genetic variation in switchgrass is distributed clinally with latitude as well as between lowland and upland ecotypes. In general, southern lowland cultivars of switchgrass have many advantages over northern upland

cultivars because they are higher yielding, require fewer nitrogen inputs, and are more resistant to pathogens. In addition, southern lowland cultivars are generally more tolerant to heat, drought, and flooding than northern upland cultivars. However, southern lowland cultivars are more susceptible to winter kill than northern upland cultivars.

The proposed research will utilize new and powerful genetic mapping populations (QTL and GWAS) to identify genomic regions responsible for divergence in disease resistance and freezing tolerance between northern upland and southern lowland switchgrass ecotypes. These mapping populations have been planted at an unprecedented geographical scale, spanning ten common garden field sites, distributed over 17 degrees of latitude, in the central United States. Therefore, this experiment is ideal for identification of regionally effective disease resistance loci (at one sites) as well as globally effective loci (across multiple sites). In addition, we plan to survey populations for survival to identify loci involved in overwinter survival. Results from the field will be validated through laboratory experiments on fungal pathogen resistance and freezing tolerance. Overall, these studies will provide an improved understanding of the process local adaptation and identify loci that can be utilized in switchgrass breeding programs.

\*Required Qualifications: \*PhD in a field related to Genetics, Genomics,

Bioinformatics, Evolution, Plant Biology, and/or Plant Pathology at the time of hire.

\*Desired Qualifications: \*Expertise in Plant Pathology and/or Freezing Tolerance. General interest and understanding of evolution, genetics, and plant biology. Experience working in the field and laboratory with plants. Experience with analyzing genomic data. Experience conducting Genome Wide Association Studies (GWAS).

\*To Apply: \*Potential candidates should send a one page statement of past research accomplishments, CV, and list of three references to David Lowry at [dlowry@msu.edu](mailto:dlowry@msu.edu). We will begin reviewing applications on November 1, 2017.

– David B. Lowry Assistant Professor Plant Biology Department Michigan State University Plant Biology Laboratories Room 268 517-432-4882

“[dlowry@msu.edu](mailto:dlowry@msu.edu)” <[dlowry@msu.edu](mailto:dlowry@msu.edu)>

## NMNH Smithsonian Applications

Applications are now being accepted through the Smithsonian Institution Fellowship Program for full-time resident fellowships at the National Museum of Natural History in Washington, D.C. As part of our resident academic community, our fellows conduct independent research and collaborate with over 500 renowned scientists and scholars. Fellows have access to the world’s largest natural and cultural history collections, including 145 million specimens, and state-of-the-art analytical equipment. Research must engage our collections and facilities.

Who is eligible? Graduate students, post-doctoral and professional researchers may apply. Fellowships are available to US and non-US citizens. Applicants must write and converse fluently in English.

How do I apply? Apply through the Smithsonian Online Academic Appointment System, SOLAA, found at: <https://solaa.si.edu/solaa/SOLAAHome.html>

Applicants are encouraged to contact NMNH research staff well in advance of the deadline to determine the feasibility of the proposed research. Research staff and directories can be found at <https://www.smithsonianofi.com/wp-content/uploads/2017/09/20170915-SORS-2018-1.6.pdf> Application Deadline: 1 December 2017

Stipend and Tenure:

Graduate Student (10 weeks): \$7500 stipend

Post-candidacy Ph.D. Student (3 months - 2 years\*): \$36,000 per year, up to \$4000 research allowance per year

Post-doctoral Researcher (3 months - 2 years\*): \$50,400 per year, up to \$4000 research allowance per year

Senior Researcher (3 months - 12 months) \$50,400 per year, up to \$4000 research allowance

\*Multi-year fellowship appointments are made possible through the Peter Buck Fellowship Program. In addition to stipend and research support, a relocation allowance is provided.

Smithsonian Institution Fellowship Program

<http://www.smithsonianofi.com/fellowship-opportunities/smithsonian-institution-fellowship-program/> “Bell, Rayna C.” <[BelIRC@si.edu](mailto:BelIRC@si.edu)>

---

## NorthernArizonaU PathogenGenomics

Postdoctoral Position in Pathogen Genomics Northern Arizona University Flagstaff, Arizona

The Foster Lab (fozlab.weebly.com) in the Pathogen and Microbiome Institute (PMI) at Northern Arizona University (pmi.nau.edu) seeks a postdoctoral scholar to be part of our research team. We work broadly across disease ecology and pathogen genomics. The postdoc's research focus will be bacterial evolution and disease ecology, largely on the genetics and genomics of zoonotic and wildlife pathogens. Ability to conduct phylogenetic and/or population genetic analyses of large genomic datasets, knowledge of bacterial genetics and evolution, and skill with genome assembly and annotation are required. The postdoc will assist with writing and publishing scientific papers, development of grant proposals, and training of graduate and undergraduate students.

Minimum Qualifications - PhD in Biology, or a related field. - Willingness and ability to pass a Department of Justice Select Agent Program Security Risk Assessment.

Preferred Qualifications - Experience coding in Python and R, and using data analysis tools. - Facility working with command line in UNIX/Linux. - Skilled in comparative genomics of bacteria. - Knowledge of bacterial genetics research methods, data collection and analysis. - Record of first author and co-authored publications. - Experience managing trainees (e.g., graduate students, and undergraduates). - Experience preparing and presenting scientific talks in an international setting. - Willingness and ability to participate in occupational health monitoring required by Northern Arizona University.

Application Deadline November 6, 2017 at 11:59 pm.

Availability Start date is expected in late 2017 or early 2018. Position is for one year, with the potential for renewal based on funding and performance.

Application Directions: 1. Select the link below to access the position description. For reference, it is Job title: Postdoctoral Scholar, Job ID: 603455. 2. Review the job description and select the Apply button at the bottom to begin your application. 3. Select the "Register Now" link if you're a new user or fill in the User Name and Password if you are an existing user. 4. Please upload a cover letter and CV as a single pdf. You

do NOT need to fill in all of the Education (i.e. I don't need to know what high school you went to), Experience (i.e. no need to detail your stint as a coffee-shop barista, although interesting), and Other Qualifications components if contained in your CV.

[https://hr.peoplesoft.nau.edu/psp/-ph92prta/EMPLOYEE/HRMS/c/-HRS\\_HRAM.HRS\\_APP\\_SCHJOB.GBL?Page=-HRS\\_APP\\_JBPST&Action=U&FOCUS=-Applicant&SiteId=1&JobOpeningId=-603455&PostingSeq=1](https://hr.peoplesoft.nau.edu/psp/-ph92prta/EMPLOYEE/HRMS/c/-HRS_HRAM.HRS_APP_SCHJOB.GBL?Page=-HRS_APP_JBPST&Action=U&FOCUS=-Applicant&SiteId=1&JobOpeningId=-603455&PostingSeq=1) For questions, contact:

Jeffrey Foster, Ph.D. Associate Professor Pathogen and Microbiome Institute Northern Arizona University Flagstaff, AZ 86011 email: jeff.foster@nau.edu website: fozlab.weebly.com

Jeff.Foster@nau.edu

---

## OmahaZoo NGS

### SUMMARY

Omaha's Henry Doorly Zoo & Aquarium Department of Conservation Genetics based in Omaha, Nebraska, is seeking two post-doctoral researchers with interest/expertise in the generation and analysis of next-generation sequencing data of lemurs, tortoises, and other taxa from Madagascar.

RESPONSIBILITIES AND DUTIES include the following. Other duties may be assigned.

The successful applicant will be proficient in the construction genomic libraries and in solution hybridization methodologies for high throughput sequencing as well as all relevant analysis of large datasets, and manage next-generation sequence workflows.

The researchers will be responsible for development, implementation, and support of software applications related to variant detection and interpretation from high-throughput experiments involving multiple species of lemurs, tortoises, and taxa from Madagascar.

Assembly of whole genomes is in-progress, but will likely require additional analysis pertinent to specific research projects. Interested candidates should be highly motivated, organized, independent, and have extensive experience with molecular genomics and bioinformatics, and be able to efficiently write and revise manuscripts. Data on a variety from a variety of species has already been generated, thus candidates will be able to quickly

start analysis and manuscript preparation.

Travel to Madagascar to support the field programs of Omaha Zoo and the Madagascar Biodiversity Partnership is required for a minimum of five week intervals twice a year.

#### Basic Qualifications:

Applicants should hold a PhD in bioinformatics, computer science, molecular genomics or related field and have more than one year of experience in high-throughput genome sequence analysis. Applicants should be experienced at software related to next generation sequencing data and be able to manipulate genomic data for phylogenetics and phylogeography. Our group's focus is large-scale sequencing for phylogenetics, phylogeography and evolutionary studies of lemurs, tortoises and other taxa from Madagascar. Thus, previous experience in genome assemblies, annotation and analysis of a variety of next generation sequencing (NGS) pipelines is preferable. The ideal candidates will be independent, highly motivated, productive, and able to work effectively in a team with members from a variety of diverse backgrounds, and have outstanding written and verbal communication skills. The successful applicants must be interested in interdisciplinary science and field research and have a solid publication record that illustrates ability to conduct novel, independent research.

#### Preferred Qualifications

Candidates should have 3+ years of experience in molecular biology, genetics, or bioinformatics. The position requires proficiency in programming (perl or python) and bash scripting using Linux operating systems. Applicants are also expected to be familiar with bioinformatics tools, be able to implement complex computational pipelines, incorporate genomics databases and have extensive and creditable laboratory experience with constructing genomic libraries. The applicants will need to work closely with two full time technicians to manage NGS lab work, as well as with a full time bioinformatician. While in Madagascar the researchers will work with a variety of Malagasy graduate students, and is expected to assist with the progression of a variety of projects, and assist with completion of their degrees and peer-reviewed manuscripts. Based on all these above duties requires candidates with excellent interpersonal skills, and the ability to train and teach both national and international audiences is necessary. Candidates must also be able to jump between a variety of projects, based on needs of the research group.

#### Time Frame

These positions will be part of an on-going team of rotating postdoc fellows. One of the positions is expected

to begin in January 2018, while the second is expected to start approximately May 2018. Initial appointment will be for two years, with possibility to extend to three years.

#### Application

Please submit your CV with the contact information for 3 professional references, a letter describing your interests and goals, and copies of a few publications. Please apply at: <http://www.omahazoo.com/careers/> Learn more at: <https://madagascarpartnership.org/> Must be legally entitled to work in the USA. Visa sponsorship is not currently available.

Inquiries regarding these positions may be sent to [genetics@omahazoo.com](mailto:genetics@omahazoo.com)

Genetics Department <[genetics@omahazoo.com](mailto:genetics@omahazoo.com)>

---

## OregonStateU PacificOysterEvolution

Research Associate (Post Doc) holds leadership role in a larger research team made up of researchers from Oregon State University (OSU) and the Agriculture Research Service-United States Department of Agriculture (USDA - ARS) involved in cooperative research to improve commercially important traits of farmed Pacific oysters on the US West Coast through the application of quantitative and molecular selection (MAS) methods. Specific objectives are to participate in the design, execution and data analysis of experiments to: 1) develop resistant stocks to new microvariant strains of oyster herpes virus (OsHV-1  $\mu$ var) that pose a threat to the US West Coast oyster industry, 2) develop stocks that are resilient to hypoxic, acidified seawater (OA), 3) develop high-yielding stocks as part of Oregon State University's shellfish breeding program, the Molluscan Broodstock Program (MBP). Quantitative analysis of data will include application of mixed animal models e.g. AIREMLF90, ASReml.

#### To Apply:

<https://jobs.oregonstate.edu/postings/49941> Posting number: P01621UF Full consideration date: 11/22/2017

Informal Enquiries: Michael Banks  
[michael.banks@oregonstate.edu](mailto:michael.banks@oregonstate.edu) Chris Langdon  
[chris.lagdon@oregonstate.edu](mailto:chris.lagdon@oregonstate.edu) Brett Dumbault  
[brett.dumbault@ars.usda.gov](mailto:brett.dumbault@ars.usda.gov)

Michael A. Banks Director, CIMRS Professor, Ma-

rine Fisheries Genetics & Conservation Coastal Oregon Marine Experiment Station, HMSC Department of Fisheries and Wildlife, OSU 2030 SE Marine Science Drive, Newport, Oregon 97365 Landline: 541-867-0420 Cell 541:272-7057 <http://hmsc.oregonstate.edu/cimrs> michael.banks@oregonstate.edu

---

### PasteurInst Candida GWAS eQTL

Postdoc: GWAS and eQTL mapping in *Candida albicans*.

We seek a post-doctoral researcher to work in a project on statistical population genomics in Pasteur Institute, Paris.

**PROJECT:** In the framework of the international project “Multidisciplinary approaches to identify genetic determinants of *Candida albicans* pathogenicity”, a 3 year post-doctoral position in statistical genetics is open from January 2018 at the Institut Pasteur in Paris. The goal of this project is to identify fungal genetic factors associated with the variability in the outcomes of fungal-host interactions, using multidisciplinary cutting-edge approaches. This project will make use of complementary unbiased genome-wide approaches, whole-genome resequencing and transcriptomics (DNAseq and RNAseq), for understanding the impact of *C. albicans* genetic diversity on its pathogenesis. Identification of genetic loci responsible for relevant phenotypic variations will be performed by several approaches including expression Quantitative Trait Locus analysis (eQTL mapping) and Genome-wide Association Studies (more than 100 phenotypes) to explain gene expression and phenotype variations of *C. albicans* isolates interacting with the host, respectively.

**QUALIFICATIONS:** The applicant should have a PhD in Biostatistics, Bioinformatics or Statistical Genetics. The candidate will be responsible for data analyses in the context of this project and will work in two multidisciplinary teams that integrate *C. albicans* genetics and evolutionary and population genetics. These teams are collaborating on adapting the advanced statistical tools currently used in human genetics to the study of the genome of *C. albicans*. We are seeking a candidate with significant experience in large-scale data analyses, computer programming, and advanced tools in statistical inference (e.g., linear and generalized linear models, Bayesian statistics, machine learning, etc.). This project also needs cutting-edge and innovative methods for the

statistical analyses of the data. We expect the candidate to have a strong interest in the development of new statistical approaches. Knowledge of population genetics is not necessary but will be appreciated. Team spirit and dynamism are essential.

**WORK PLACE:** 2018 to mid 2019: Fungal Biology and Pathogenicity Unit (Head: Christophe d’Enfert; website: [www.pasteur.fr/research/bpf](http://www.pasteur.fr/research/bpf)), Institut Pasteur, INRA USC2019, Paris, France. mid 2019 to 2020: Human Evolutionary Genetics Unit (Head: Lluís Quintana-Murci; website: [www.pasteur.fr/research/heg](http://www.pasteur.fr/research/heg)), Institut Pasteur, CNRS URA3012, Paris, France.

**SALARY:** Salary will depend on previous experience.

**CONTACT:** To apply, please send your CV and a letter describing your research interests and skills (in a single pdf file) to Dr Christophe d’Enfert and Dr Guillaume Laval, by e-mail: [christophe.denfert@pasteur.fr](mailto:christophe.denfert@pasteur.fr) [glaval@pasteur.fr](mailto:glaval@pasteur.fr)

Guillaume Laval, Human Evolutionary Genetics, CNRS URA3012 Institut Pasteur, 28 rue du Dr. Roux 75724 Paris Cedex 15, FRANCE

Tel: +33 1 44 38 94 41 Fax: +33 1 45 68 86 39

Guillaume LAVAL <[guillaume.laval@pasteur.fr](mailto:guillaume.laval@pasteur.fr)>

---

### PasteurInst ComparativeAnalysisTickBacteria

Molecular basis for the intramitochondrial tropism of *Midichloria mitochondrii*

We are looking for a highly motivated postdoctoral fellow to work on a recently funded Human Frontier Science Program (HFSP) project, where we seek to characterize the life cycle of an intriguing and understudied intracellular bacterium found in ticks, *Midichloria mitochondrii*, whose genome has been recently compiled by the leader of our consortium (Sassera et al 2011). This bacterium is particularly interesting because to date, it is the only one known to invade host cell mitochondria. Our aim is to understand the evolutionary and molecular basis underlying its ability to colonize mitochondria and its functional consequences. For this we will employ comparative analyses using biochemical techniques. Cell biological approaches using established models will be used to characterize bacterial factors that may play a role in the invasion of host cells and mitochondria. In parallel, we will establish an in vitro infection model

using insect and mammalian cells.

We seek for an undertaking candidate who has the ability to work independently, but will enjoy the collaborative interaction with our international and multidisciplinary HFSP team (France, Italy, Germany and Australia), and the stimulating environment of the Institut Pasteur in Paris.

The candidate should master current molecular biology and biochemical techniques, such as subcellular fractionation of eukaryotic and/or bacterial cells, have solid knowledge in confocal microscopy and be fluent in English. Previous experience with cellular microbiology and in particular with obligate intracellular pathogens (BSL2/3) will be highly appreciated. The position is funded for up to three years, starting on 1st January 2018.

Applicants should send a CV, a cover letter summarising past experience and interest in the project, and two reference letters to [fabrizia.stavru@pasteur.fr](mailto:fabrizia.stavru@pasteur.fr).

Fabrizia STAVRU <[fabrizia.stavru@pasteur.fr](mailto:fabrizia.stavru@pasteur.fr)>

---

### PDF-3 PhD-2 OriginsLifeResearch

Open positions: Biochemical, Genetic, Metabolic, and Isotopic Constraints on an Ancient Thiobiosphere

We are looking for postdoctoral and doctoral colleagues to work on a collaborative project aimed at investigating thioester (bio)chemistry at the origins of life and its biological remnants thereafter. This project results from a recent NSF/NASA Ideas lab, and will operate under a collaborative atmosphere that spans a number of disciplines and institutions.

We will attempt to recover signals of the historical role of thioester (bio)chemistry through a combination of metabolic, phylogenetic, biochemical, and isotopic analyses. In particular, we will work backwards to reconstruct ancient thiochemistries from the systems biology of contemporary metabolisms, with a focus on the ancestral state reconstruction of critical enzymes.

We will simultaneously examine pre-biological chemistries that can couple thioester formation and degradation to energy conservation. Finally, we will look for the presence of a thiobiosphere in deep time by integrating our metabolic, genetic, and biochemical results into bio-isotopic models for comparison with new measurements of C- and S-isotope patterns found

in ancient rocks.

Opportunities to participate in this project are available at the University of Arizona (1 PDF), Boston University (1 PDF), University of Colorado Boulder (1 PhD), Penn State (1 PhD), and the Blue Marble Space Institute of Science (1 PDF).

Successful candidates will have the opportunity to travel among these institutions as well as the Earth-Life Science Institute (ELSI) at Tokyo Tech.

We are interested in hearing from potential candidates with experience in: phylogenetics, molecular evolution, computational systems biology, anaerobic microbiology, biochemistry, and/or isotope geochemistry. We encourage collaborative applications if existing synergies can be demonstrated among interested candidates. For full consideration please send applications or inquiries to [thiobio-research@googlegroups.com](mailto:thiobio-research@googlegroups.com)

Include: 1. a cover letter outlining your interest in the project 2. a CV including the names and addresses of three references 3. (if applicable) a short note describing collaborative synergies with other co-applicants

For more information, please also feel free to contact:

Betül Kaçar - University of Arizona - [betul@email.arizona.edu](mailto:betul@email.arizona.edu) Boswell Wing - CU Boulder - [boswell.wing@colorado.edu](mailto:boswell.wing@colorado.edu) Chris Butch - BMSIS/ELSI Tokyo Tech - [chrisbutch@gmail.com](mailto:chrisbutch@gmail.com) Chris House - Penn State - [chrishouse@psu.edu](mailto:chrishouse@psu.edu) Daniel Segrè - BU - [dsegre@bu.edu](mailto:dsegre@bu.edu) Shawn McGlynn - BMSIS/ELSI Tokyo Tech - [mcglynn@elsi.jp](mailto:mcglynn@elsi.jp)

Betül Kacar <[betulkcr@gmail.com](mailto:betulkcr@gmail.com)>

---

### PennsylvaniaStateU ReptileDemography

\*Post-doc: Applied Demography of Reptiles 'V Penn State University 'V Department of Ecosystem Science and Management\*

I am recruiting a post-doc to work in my research group (\*<http://appliedpopecol.org/> < <http://appliedpopecol.org/> >\*) on two projects that both employ long-term mark-recapture data sets to examine demographic patterns in reptiles. The first project is funded by NIH to look at aging in turtles. The focal population is a 30 year study of painted turtles in the Midwest ( <http://www.pnas.org/content/113/23/6502.abstract>), with the potential to also use other

long-term turtle data sets. The second project is again a long-term study (40+ years) of garter snake populations in California (doi/10.1890/10-1438.1) funded by NSF. The goal of this project is to understand the inter-relationship between climate, individual physiology (condition, immune-function, and stress), and demographic responses in multiple populations of two species in the Eagle Lake area of California.

The post-doc will be tasked with analyzing the long-term data and contributing to the overall goals of the two projects. The focus of both is on demography and estimating demographic parameters and the person filling the position should have experience and interest in this area. The position would be a good fit for a person with interests in any of the following: quantitative ecology, applied population ecology, and/or evolutionary ecology. The post-doc will be given flexibility, within the basic parameters of each of the projects, to contribute to the collaborative efforts. Areas where significant contributions may be made include: 1) the joint modeling of growth and survival to improve estimates of age-specific fitness; 2) comparative demography of aging, 3) influence of early-life conditions on demography, 4) linking physiology measures to fitness and population growth rate; 5) measuring effects of climate change on structured metapopulations; and 6) using structural equation models to understand population responses in complex systems.

To apply, submit a CV, cover letter, and contact information for 3 references at: <https://psu.jobs/job/74192>. I will begin to review applications in early November with the goal of having someone start sometime after the new year (start date may be flexible). Any questions can be directed to David Miller (dxm84@psu.edu). Other collaborators on the project include Dr. Anne Bronikowski and Fred Janzen at Iowa State University and Dr. Amanda Sparkman at Westmont University.

My goal is to build a diverse and vibrant lab group and strongly encourage all who are qualified and interested to apply. Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

—

David Miller 411 Forest Resources Building Department of Ecosystem Science and Management Pennsylvania State University University Park, PA 16802 814.863.1598 (office) dxm84@psu.edu <http://appliedpopocol.weebly.com> <http://ecosystems.psu.edu/directory/dxm84> David Miller <dxm84@psu.edu>

---

## PurdueU SeaLampreyGenomics

A postdoctoral position is available in the laboratory of Mark Christie at Purdue University (<https://www.bio.purdue.edu/lab/christie/>) to address a variety of evolutionary and genetic questions in sea lamprey (*Petromyzon marinus*). Part of the research will focus on addressing whether invasive sea lampreys are evolving resistance to a commonly used lampricide; a recent review of which is available here: [https://www.bio.purdue.edu/lab/christie/docs/024\\_cjfas-2017-0015.pdf](https://www.bio.purdue.edu/lab/christie/docs/024_cjfas-2017-0015.pdf). Whole transcriptome sequencing (i.e., RNA-seq) will play a central role in this project, thus the ideal candidate will have a strong background in bioinformatics. Proficiency with Unix/Linux (bash shell) command line and one or more scripting languages (Perl/Python etc.) is preferred. Competitive applicants will also have familiarity with R and analytical methods in population genetics. The candidate is expected to be highly motivated and able to work both collaboratively and independently. The position is to be filled as soon as possible.

Applicants must have a PhD; exceptional candidates who will complete their PhD within the next few months will also be considered. Applicants should submit 1. a cover letter that describes your research interests and goals, 2. a full CV, and 3. the names and contact information for three individuals who are willing to serve as references. Please submit all application materials as a single PDF file to markchristie@purdue.edu. Funding is available for two years contingent upon a successful one-year review. Review of applications will begin November 1<sup>st</sup> and continue until the position is filled.

Purdue has substantial bioinformatics resources and state-of-the-art computational facilities ideal for working with high-throughput sequencing data. West Lafayette is located about 1 hour away from Indianapolis and two hours from Chicago. Purdue University's Department of Biological Sciences is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction and engagement.

“Christie, Mark R” <christ99@purdue.edu>

---

## SARS Bergen BioinformaticsNeuralDevelopment

A postdoctoral opportunity from our friends at the Sars International Centre for Marine Molecular Biology in Bergen, Norway. Please respond directly to Fabian Rensch with any questions.

Andy

UNIVERSITETET I BERGEN

Sars International Centre for Marine Molecular Biology  
Postdoctoral Position Bioinformatic Analysis of Neural Development in Nematostella

There is a vacancy for a two-year Postdoc position at the Sars International Centre for Marine Molecular Biology ([www.sars.no/](http://www.sars.no/)) in the research group headed by Dr. Fabian Rentsch. The position is available from January 2018. Closing date for application: October 29, 2017

About the project/work tasks:

The research group studies neurogenesis in the cnidarian *Nematostella vectensis* with the aim to understand cellular, molecular and evolutionary aspects of nervous system development (see Richards and Rentsch, Development, 2014 and 2015). The main task for this position is the computational analysis of single cell RNA sequencing data with the aim to understand the transcriptional changes that control the development of neural progenitor cells into differentiated neurons. If desired, contribution to the experimental validation of the computational analyses is possible in collaboration with a postdoc. The successful candidate is also expected to provide support for other projects (ATAC-seq, differential gene expression) and to contribute to the further development of the main project in line with his/her interests.

Qualifications and personal qualities:

- The applicant must hold a Norwegian PhD or an equivalent degree within informatics or molecular biology or must have submitted his/her doctoral thesis for assessment prior to the application deadline. It is a condition of employment that the PhD has been awarded.
- Experience in the analysis of high-throughput sequencing data and a strong interest in gene regulatory networks, developmental biology or stem cell biology is required.
- Ability to work both independently and in close collaboration with others in a structured manner.
- Personal

communication skills to interact with the scientific environment are required. - Proficiency in both written and oral English - Applications in English must include:

- A cover letter that includes brief account of the applicant's research interests and motivation for applying for the position
- CV
- List of publications
- The names and contact information for two reference persons. One of these must be the main advisor for the PhD programme.
- Transcripts and diplomas and official confirmation that the doctoral thesis has been submitted
- Relevant certificates/references

Please send your application with attachments electronically via JobbNorge by clicking on the button "Apply for this job" (choose English page) - <https://www.jobbnorge.no/en/available-jobs/job/143047/postdoc-position-in-bioinformatic-analysis-of-neural-development-in-nematostella> . If your diploma, grade transcripts and other documentation are in a language other than English, you must upload certified translations of these (diploma and grade transcripts in a Scandinavian language are acceptable). Please note that applications will be assessed only with the information available in JobbNorge when the deadline expires. It is the applicant's responsibility to ensure that all relevant attachments are submitted by the deadline. Further information about the position can be obtained from Group Leader Dr. Fabian Rentsch, tlf +47 55 58 43 04, email [fabian.rentsch@uib.no](mailto:fabian.rentsch@uib.no). Applications by e-mail only will not be considered.

"Baxevanis, Andy (NIH/NHGRI) [E]"  
<[andy@mail.nih.gov](mailto:andy@mail.nih.gov)>

---

## SwedishU AgricultureSciences MosquitoEvolution

The Department of Plant Protection is an interdisciplinary constellation with good opportunities for strong research collaboration within and outside the departmental area ([www.slu.se/en/departments/plant-protection-biology/](http://www.slu.se/en/departments/plant-protection-biology/)). World-leading research is conducted in chemical ecology/sensory biology, and successful research is also conducted in resistance biology and integrated plant protection. The research efforts are directed towards both fundamental and applied research. At the Department, one group focusses on the chemical ecology of disease vectors. Female mosquitoes are major vectors of human disease and the most dangerous are those that preferentially bite humans. Host selection and dis-

crimination by mosquitoes are mainly odour mediated. Understanding the genetic causes and effects of host choice in sympatric, closely related species is challenging, controversial and of significant practical importance for controlling these rapidly evolving vectors ([www.slu.se/en/cv/sharon-hill/](http://www.slu.se/en/cv/sharon-hill/); [www.slu.se/en/cv/rickard-ignell/](http://www.slu.se/en/cv/rickard-ignell/)). Duties: The research describes the genetic mechanism linking the basic molecular building blocks of the peripheral olfactory system with the 'inherent' host preference displayed by sibling malaria mosquito species using suitable techniques. The postdoc will be involved in a project that identifies the genetic changes resulting in minor structural differences that change odorant receptor and receptor neuron response to host odours among three sibling species of malaria mosquitoes that display different preferences for humans as a host. To investigate the mechanism underlying such functional changes in the receptors due to polymorphisms, the receptors will be functionally assessed in response to host odours. These findings will subsequently be investigated at the receptor neuron and behavioural levels. Qualifications: The successful candidate will hold a PhD, issued no earlier than 3 years ago. Experience with common molecular biological techniques is a requirement. In addition, experience with cell-based membrane protein expression and assay systems is a significant asset. S/he should be fluent in spoken and written English, and have excellent communication skills. The candidate must demonstrate a solid ability to work independently to advance our research. The candidate should furthermore enjoy working in a group environment and have interest in mentorship. Place of work: Alnarp, Sweden. Form of employment: Stipend 1 year. Extent: 100%, Full time. Starting date: 1 January 2018. Application: We welcome your application marked Mosquito Postdoc.

Please submit your application to associate professor Sharon Hill ([sharon.hill@slu.se](mailto:sharon.hill@slu.se)) no later than 1 November 2017. Specific documents attached: Applications must contain (1) CV with full publications list, (2) copies of the two most important publications, (3) a description of research experiences, (4) a statement of scientific interests, as well as (5) contact information of two references. SLU is an equal opportunity employer. Further information: Sharon Hill, Associate professor, +46(0)40 41 53 79 (office), +46(0)70 72 63 94 (mobile), [sharon.hill@slu.se](mailto:sharon.hill@slu.se), [www.slu.se/en/cv/sharon-hill/](http://www.slu.se/en/cv/sharon-hill/) <https://www.postdocjobs.com/posting/7048083> Sharon Hill <[Sharon.Hill@slu.se](mailto:Sharon.Hill@slu.se)>

---

## SyracuseU EvolutionaryEcolMutalisms

The Segraves and Althoff labs at Syracuse University invite applications for a joint postdoctoral position on the community and evolutionary ecology of multi-species mutualisms using a synthetic mutualism lab system based on strains of brewer's yeast. The goal of the project is to develop and test qualitative and quantitative theoretical predictions of community dynamics by using an easily replicable and fast-growing community of organisms. The project will combine theory with experimental manipulations of community structure to examine the properties of mutualistic communities that contribute to their persistence.

This project will involve joint collaborations with the Segraves and Althoff labs (<http://segraveslab.syr.edu> and <http://althofflab.syr.edu>) as well as with Dr. Chris Moore at Colby College ([mutualismecology.com](http://mutualismecology.com)) and Dr. Mark Ritchie at Syracuse University. S.U.'s Department of Biology is a collaborative group of vibrant researchers spanning a wide array of disciplines and also has close affiliations with faculty at SUNY-Environmental Science and Forestry. Preferred start date is Jan 10, 2018 or later. We are willing to delay the start until the summer of 2018 for ideal candidates.

Qualifications: A Ph.D. in evolutionary ecology, community ecology, experimental evolution, or theoretical ecology is required. Applicants should have a demonstrated ability to combine theoretical and empirical approaches in species interactions or community ecology and strong interests in linking experimental data with results from mathematical models. Proficiency in basic molecular biology skills such as pipetting, making solutions, culturing microorganisms, and sterile technique is preferred, but not necessarily required.

Please direct any questions to Dr. Kari Segraves ([ksegrave@syr.edu](mailto:ksegrave@syr.edu)) and view full job description and apply at <https://www.sujobopps.com/postings/72160>. David M. Althoff Associate Professor Dept. of Biology T 315.443.1096 107 College Place, Syracuse, NY 13244

[althofflab.syr.edu](http://althofflab.syr.edu)

Syracuse University

David M Althoff <[dmalthof@syr.edu](mailto:dmalthof@syr.edu)>

---

## SyracuseU SexualSelection

Description: A postdoctoral position is available in the laboratories of Drs. Scott Pitnick and Steve Dorus in the Center for Reproductive Evolution at Syracuse University. The broad goal of this NSF-funded, collaborative research project (with Dr. Mariana Wolfner, Cornell University) is to determine how molecular interactions between sperm and the female reproductive tract evolve across closely related species and their contribution to reproductive isolation. Sperm undergo numerous modifications as they move through the male and female reproductive tracts, although the nature of these interactions and their importance for fertilization success is not well understood. This project will characterize these changes at the molecular level, within closely-related species of fruit fly, as well as following hybrid inseminations, to understand their evolutionary history and influence on sperm survival and fertilization success.

Qualifications: PhD in Genetics, Genomics, Evolution or a related field is required, and the candidate should have a demonstrated history of research excellence. Preference will be given to candidates with a strong background in molecular evolution, genomics and/or proteomics of reproductive systems. Experience conducting research with *Drosophila* or other insects would be beneficial, but is not required.

Details: The start date for this position is flexible but could be as early as 12/1/17. Funding is available for up to three years (conditional on satisfactory performance). All enquiries should be sent to Scott Pitnick ([sspitnic@syr.edu](mailto:sspitnic@syr.edu)) and Steve Dorus ([sdorus@syr.edu](mailto:sdorus@syr.edu)).

Applications: Interested individuals should submit a cover letter, CV, a short statement of research interests, and the contact information of 3 or 4 references to <https://www.sujobopps.com/postings/70054>. Center for Reproductive Evolution (<http://cre.syr.edu>): The CRE is a highly collaborative, multi-laboratory collective dedicated to advancing our understanding of reproductive trait evolution. Occupying a shared suite of laboratories within SU's Life Sciences Complex, CRE researchers work together on diverse taxa using highly integrative approaches to explore molecular, physiological, morphological and behavioral mechanisms of male-female interactions to understand adaptive processes underlying the origin and maintenance of biodiversity. [sdorus@syr.edu](mailto:sdorus@syr.edu)

---

## UAarhus PDF PhD environmentalDNA

I am announcing two positions in environmental DNA for my new research group in University of Aarhus, Denmark.

PhD (application deadline November 1st): <http://talent.au.dk/phd/scienceandtechnology/opencalls/calls-on-specific-projects/november-2017/environmental-dna-analyses-of-aquatic-ecosystems/> Postdoc (application deadline December 1st): <http://www.au.dk/en/about/vacant-positions/scientific-positions/stillinger/-Vacancy/show/935891/5283/> Thank you very much. Best regards, Philip

Philip Francis Thomsen, ph.d. Assistant Professor Centre for GeoGenetics Natural History Museum of Denmark University of Copenhagen Åster Voldgade 5-7 1350 Copenhagen K, Denmark

email: [pftthomsen@snm.ku.dk](mailto:pftthomsen@snm.ku.dk)

phone: +45 27142046

skype: philip.francis.thomsen

Philip Francis Thomsen <[pftthomsen@snm.ku.dk](mailto:pftthomsen@snm.ku.dk)>

---

## UAlabama DiseaseEvolution

\*Postdoc: Disease Ecology \*

A postdoctoral research position in the fields of infectious wildlife diseases, microbiome ecology and conservation biology is available in the laboratory of Dr. Gui Becker in the Department of Biological Sciences at the University of Alabama (<https://bsc.ua.edu/profiles/-gui-becker/>). This position will explore the integrative mechanisms that underlie host-pathogen-microbiome interactions in amphibians.

The ideal candidate is a talented researcher that is hardworking, creative, and, above all, competent with manuscript writing. Responsibilities will include laboratory work involving fungal culturing, molecular analyses, planning and supervising experiments, student mentoring, data management and analysis, manuscript preparation and submission, and animal care. The candidate

could be interested in conducting fieldwork in the tropics and/or working with existing datasets on amphibian chytridiomycosis.

Candidates must have received a Ph.D. in a relevant field by the start date.

Funding is available for two years, with annual renewal dependent on performance evaluation, and will include a competitive salary and full benefits. The University of Alabama offers a range of professional development opportunities. Application review will begin November 1, 2017 and will continue until the position is filled. Start date is negotiable, but the successful applicant should be able to start in the January 2018 semester.

Applicants interested in the position should contact Dr. Gui Becker <cgbecker1@ua.edu>.

Applicants must apply by submitting an application to the Fall 2017 Biological Sciences Departmental post-doctoral pool at [facultyjobs.ua.edu](https://facultyjobs.ua.edu) (requisition number 0810628): <https://facultyjobs.ua.edu/postings/40563> Materials should include:

1. Cover letter stating your application for the disease ecology position, a brief description of research accomplishments and interests, and career goals.
2. The names and contact information for 3 references.
3. Curriculum vitae.
4. Two representative publications.

About the University of Alabama:

The University of Alabama is the flagship campus of the University System of Alabama, with an enrollment of over 35,000 students. The University is committed to achieving excellence as one of the country's primary centers of research and education. It is located in the vibrant college town of Tuscaloosa, AL, which boasts many cultural and athletic activities. The campus also benefits from the close proximity to the Birmingham metropolitan community.

The University of Alabama is an Equal Employment/Equal Educational Opportunity Institution. All qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age, genetic information, disability, or protected veteran status, and will not be discriminated against because of their protected status.

Gui Becker <guibecker22@gmail.com>

---

## UArctic Norway PDF PhD Species Persistence

PhD and Post Doc positions on the project ECOGEN - Ecosystem change and species persistence over time: a genome-based approach. Deadline 1<sup>st</sup> of December.

The successful candidate will core lakes in the Alps and do metabarcoding and lithological analyses of lake-sediments to obtain information on past vascular plant species and key herbivores, These data, together with similar data from Fennoscandia, will be used together with the ECOGEN team to 1) Distinguish the effects of biotic drivers, human land use and climate change on ecosystem resilience and ecosystem services, 2) Estimate species persistence across periods of change and identify factors causing extinction, 3) Provide methods and knowledge to inform species conservation and ecosystem management.

Post.doc: <https://www.jobbnorge.no/ledige-stillinger/-stilling/143190/postdoctoral-fellow-ecogen-ecosystem-change-and-speices-persistence-over-time>

PhD: [https://www.jobbnorge.no/ledige-stillinger/-stilling/143266/phd-candidat e-in-metabarcoding-at-tromsoe-university-museum](https://www.jobbnorge.no/ledige-stillinger/-stilling/143266/phd-candidat-e-in-metabarcoding-at-tromsoe-university-museum)

Sincerely yours,

Inger Greve Alsos

Prof. Inger Greve Alsos

Tromso University Museum

NO-9037 Tromso

Norway

Telephone: +47 77 62 07 96

Telefax: +47 77 64 51 05

Email: [inger.g.alsos@uit.no](mailto:inger.g.alsos@uit.no)

<http://en.uit.no/ansatte/inger.g.alsos> Inger Greve Alsos <[inger.g.alsos@uit.no](mailto:inger.g.alsos@uit.no)>

---

## UArizona ProteinEvolutionBioinformatics

Postdoc position: long-term trends in protein evolution  
A postdoc position is available with PI Joanna Masel (<http://eebweb.arizona.edu/faculty/masel>) at the University of Arizona in Tucson. A popular tourist destination surrounded on all four sides by mountainous national and state parks, Tucson is a vibrant city of nearly a million people with an attractive climate. The EEB department was ranked in the top 10 by US News & World Report.

We recently found that genes of different ages encode proteins with different computationally predictable structural properties, forming an extraordinarily long-term trend (see <https://doi.org/10.1101/176867>). This project will use bioinformatics techniques to discover whether these long-term trends are really a consequence of evolution by descent with modification that continues for long periods of time in a consistent direction.

Techniques used may include phylostratigraphy (assigning ages to gene families), ancestral sequence reconstruction, and porting macroevolutionary techniques for studying speciation and extinction to the study of gene duplication and loss. A high level of statistical sophistication is required throughout.

Excellent computer programming skills are strongly preferred, ideally with bioinformatics / genomics and statistics experience. Exceptionally strong candidates who come from a more experimental background within evolutionary biology, and who now wish to retrain as bioinformaticians, will also be considered. A background in evolutionary biology is also strongly preferred, although again, exceptionally strong computational scientists from highly quantitative backgrounds outside evolutionary biology will also be considered. Statistical knowledge, and knowledge about protein structure and folding, are advantages. Start date is negotiable, and the position is renewable, with funding secured through July 2020.

Contact Joanna Masel at [masel@u.arizona.edu](mailto:masel@u.arizona.edu) for more information and to apply.

[masel@email.arizona.edu](mailto:masel@email.arizona.edu)

---

## UBath Bioinformatics

A 3 year ERC funded post-doctoral position in bioinformatics is available at The Milner Centre for Evolution at the University of Bath, UK

Which synonymous sites are under selection and why? Can we use this information to improve diagnostics? This 3 year ERC funded position is for a bioinformatician to develop methods and web resources. The successful candidate is also expected to help maintain a complimentary web resource for the generation of transgenes via optimization of synonymous sites and work in collaboration with experimentalists.

An interest in computational comparative genomics or in translational bioinformatics would be an advantage. The position will be a fixed term contract for up to three years. The candidate should have a successful track record in bioinformatics. Experience in R and a scripting language are essential. Experience with Ruby and Ruby on rails would be desirable. The successful applicant will work in close collaboration with the PI, Professor Laurence Hurst (<http://people.bath.ac.uk/bssldh/LaurenceDHurst/Home.html>), and experimental collaborators in Edinburgh and Berlin.

The successful applicant will join a vibrant group of working on comparative genomics and bioinformatics in The Milner Centre for Evolution (<http://www.bath.ac.uk/projects/the-milner-centre-for-evolution/>), at the University of Bath. Starting date: as soon as convenient (preferably by Jan 1st 2018) Any questions to Laurence Hurst ([l.d.hurst@bath.ac.uk](mailto:l.d.hurst@bath.ac.uk)) For further details and to apply see: <https://www.bath.ac.uk/jobs/Vacancy.aspx?ref=SF5339>  
Laurence Hurst <[L.D.Hurst@bath.ac.uk](mailto:L.D.Hurst@bath.ac.uk)>

---

## UBern 4PDF PhD EvolutionCooperation

4 PhD- and postdoc positions are available at the University of Bern, to study the

Evolution of cooperation based on relatedness, negotiation and trading

All major transitions in the evolution of life are characterized by the necessity of cooperation and sacrifice of constituent parts transforming into higher complexity. Conceptually, the evolution of cooperation seems to be well understood. However, critical tests of the predictions from alternative mechanisms responsible for the establishment of evolutionarily stable levels of cooperation hardly exist. For instance, the seemingly overwhelming evidence for the importance of kin selection to the evolution of altruism is almost entirely correlational. Few studies have manipulated relatedness and measured behavioural responses and corresponding fitness effects, and several have found that relatedness in fact hampers cooperative behaviour instead of promoting it, opposite to predictions from kin selection theory. The relative significance of alternative mechanisms in addition to kin selection, such as negotiation and reciprocal trading, to explain cooperation in nature is as yet unclear. In this project we aim to develop and experimentally test predictions regarding the relative and interactive influence of relatedness and negotiation/trading on cooperation between social partners.

Our previous work has suggested that mutual help and trading of service and commodities are important and widespread variants of cooperative interactions among animals, which can elicit high levels of evolutionary stable cooperation. A crucial parameter in reciprocal trading is the potential time delay between subsequent interactions among social partners, because this affects the perceived or true probability to receive returns for provided help. One aim of this project will be to vary the time axis of social decisions between concurrency and delays of different magnitude to span the entire range from coaction to long-term reciprocity. Another important issue is that in nature most social interactions involve some sort of asymmetry between concerned individuals, regardless whether this is sex, age, dominance status, body condition, individual quality, need, resource holding potential, reproductive status, residual reproductive value, etc. Consequently, in virtually any social interaction the involved individuals have different abilities and expectations about potential pay-offs from the interaction. The current project aims to experimentally scrutinize the significance of asymmetries for the negotiation process between social partners about their respective cooperative effort.

Hitherto, effects of experimental manipulation of cooperation on direct and indirect components of fitness have hardly been scrutinized. We aim at estimating fitness effects of experimentally controlled cooperative behaviour in natural and semi-natural settings by manipulating at the same time relatedness and the negotiation rules applied by all involved parties. Our model organisms will

be wild-type Norway rats and cooperatively breeding Lake Tanganyika cichlids.

Within the framework of this SNF-funded project, we offer one post-doc and three PhD-positions. We seek highly-motivated and well organised candidates who can work independently as well as drive collaborative projects. Scientific curiosity is a must and good English language skills are important. Previous experience with studying animal behaviour is mandatory. The PhD-applicants will need an MSc-degree (or equivalent) in biology. Applications must include a letter of motivation, CV, list of publications, copy of degree certificates, and two names of referees who should have sent their recommendation letter separately before the mentioned deadline. Applications should be submitted before

Wednesday 25 October 2017

by e-mail (all documents merged into one PDF file) to [Claudia.Leiser@iee.unibe.ch](mailto:Claudia.Leiser@iee.unibe.ch).

Late applications will be considered until all positions are filled. Starting date of all positions is as soon as possible. Duration of contracts is up to 3 years.

Principal investigator: Prof. Dr. Michael Taborsky

Behavioural Ecology Division, Institute of Ecology and Evolution

[michael.taborsky@iee.unibe.ch](mailto:michael.taborsky@iee.unibe.ch)

<http://behav.zoology.unibe.ch/index.php?p=109> “[michael.taborsky@iee.unibe.ch](mailto:michael.taborsky@iee.unibe.ch)”  
<[michael.taborsky@iee.unibe.ch](mailto:michael.taborsky@iee.unibe.ch)>

---

## UBristol Modelling Vector Senescence

A 2-year BBSRC-funded postdoctoral position is available to develop evolutionary and epidemiological models of reproductive senescence in tsetse flies under the guidance of Dr Sinead English in the School of Biological Sciences, University of Bristol, along with Prof Matt Keeling and Dr Kat Rock (Zeeman Institute, University of Warwick) and Prof Mike Bonsall (Department of Zoology, University of Oxford). The post is part of a larger project investigating epidemiological consequences of reproductive senescence in a disease vector *A?*- the tsetse fly - which gives birth to live young and has extraordinary maternal investment.

The role of the PDRA will be to develop state-dependent models to predict optimal allocation of resources from

mothers to young in tsetse across the lifespan. The PDRA will integrate predictions from these life history models into epidemiological models to understand how maternal investment affects disease transmission. This work - incorporating insights from evolutionary theory into epidemiological models - presents an exciting and novel area in vector-borne disease research.

The PDRA will work closely during model development with experts on vector biology (Prof Steve Torr, Dr Lee Haines and Dr Jennifer Lord at Liverpool School of Tropical Medicine; Prof John Hargrove and Prof Glyn Vale, South African Centre for Epidemiological Modelling and Analysis, Stellenbosch), who will be generating empirical data on maternal investment in laboratory and field flies, to ensure both that models are based on real parameters and that the models produce testable predictions.

The successful candidate will have a PhD in a relevant biological or quantitative subject, a strong interest in life history theory, evolutionary ecology and epidemiology, and extensive experience of mathematical or computational modelling. They will be highly motivated, collaborative and an excellent communicator, and have a demonstrable desire to learn new skills. Training will be provided in the development of state-dependent models, using ordinary and partial differential equations in epidemiological models, and running individual simulations - although prior experience in any of these approaches will be an advantage. In addition, there is some flexibility to adjust the focus and direction of the work depending on the interests and expertise of the successful candidate.

Applications are invited from applicants from any citizenship or country of origin. The position is offered from January 2018. Funding is available for 2 years in the first instance but with possibility of extension.

The closing date for applications is midnight on 12 November 2017. For further particulars and link to the application, see: <http://www.bristol.ac.uk/jobs/find/-details.html?nPostingId=6708&nPostingTargetId=33734&id=Q50FK026203F3VBQBV7V77V83&LG=UK&mask=uobext> Informal enquiries can be emailed to [sinead.english@bristol.ac.uk](mailto:sinead.english@bristol.ac.uk)

- Sinead English Royal Society Dorothy Hodgkin Research Fellow Room 2A04, School of Biological Sciences Life Sciences Building, University of Bristol

e: [sinead.english@bristol.ac.uk](mailto:sinead.english@bristol.ac.uk) w: <http://www.bristol.ac.uk/biology/people/sinead-english/-index.html> p: +44 177 39 41195 t: @englishse

Sinead English <[sinead.english@bristol.ac.uk](mailto:sinead.english@bristol.ac.uk)>

---

## UCalifornia Davis HumanGenomics

A new postdoctoral position is available in the Henn Lab at UC Davis < <https://www.ucdavis.edu/> > in the Dept. of Anthropology and the Genome Center. The Henn Lab specializes in human population genetics/genomics and human evolution. Much of our research involves field collection of samples from southern Africa, next-generation sequencing of human genomes and modeling evolution (both phenotype and prehistory) in African populations. Please see \*<https://ecoevo.stonybrook.edu/hennlab/> - [my former SUNY website] for additional information on research projects and publications. We seek a post-doctoral scientist to lead research projects related to African demographic history using next-generation sequence data. A strong computational background is required. Opportunities to participate in workshops, develop independent projects and travel will be available; we have many collaborators both in the US and internationally. UC Davis is an outstanding environment for both anthropology and genomics, and the postdoctoral candidate will spend time at the Genome Center to facilitate interaction. Compensation is based on NIH pay-scales and 3 years of funding are available.

Skills: Experience with scripting languages such as Python or PERL, experience with statistical analysis in R, and a strong background in population genetics are necessary. Knowledge of human evolution is a plus. A PhD in Genetics, Statistics, Anthropology, Biology or related field is required by the start date. Start date February 1, 2018 or thereafter. E-mail a CV and cover letter to Brenna Henn <[quercus29@gmail.com](mailto:quercus29@gmail.com)>.

Brenna M. Henn

Assistant Professor Dept. of Ecology and Evolution Program in Human Evolutionary Biology 640 Life Sciences Building Stony Brook University, SUNY

[brenna.henn@stonybrook.edu](mailto:brenna.henn@stonybrook.edu)

---

## UCalifornia Davis Hybridization Primate Evolution

Postdoctoral Scholar, Morphological Consequences of Hybridization in Primate and Human Evolution: A Macaque Model

We invite applications for a one-year postdoctoral position (with the possibility of extension for another six months) funded by a National Science Foundation grant (1720128), "Morphological consequences of hybridization in primate and human evolution: a macaque model". More information about the grant can be found here: [https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1720128&HistoricalAwardsOnly](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1720128&HistoricalAwardsOnly). The goal of the project is to use data collected on a large, multigenerational sample of Indian-Chinese macaque crosses from the California National Primate Research Center to better understand the relationship between morphology and admixture proportion and to develop criteria for detecting morphological evidence of admixture in the human fossil record.

We seek a creative and self-motivated researcher to join the Evolutionary Wing of the Department of Anthropology at the University of California, Davis, and an international team of scholars working to use methods and theory from evolutionary quantitative genetics to investigate primate morphological variation and the human fossil record. The responsibilities of the position will include assisting with analyses, contributing to scientific publications and presentations disseminating the results of the project, coordinating data collection with the California National Primate Research Center and maceration with the UC Davis Museum of Wildlife and Fish Biology, training undergraduate students to process CT scans and collect morphometric data, and data management. Beyond a background in biological anthropology and evolutionary biology, we are particularly interested in applicants with experience in processing CT scans, geometric morphometrics, evolutionary quantitative genetics, programming (Matlab, R), and/or the human fossil record.

The start date for the position is flexible, but it could be as early as January 2018.

UC Davis and the Department of Anthropology are interested in applicants who are committed to the high-

est standards of scholarship and professional activities, and to the development of a campus environment that supports equality and diversity.

Qualifications:

Applicants should have a doctoral degree (PhD, DPhil) in biological anthropology, evolutionary biology, or a related discipline and a record of original research and scientific publication.

How to Apply:

Applicants should submit (1) a curriculum vitae, (2) a letter of interest, and (3) the names and email addresses of three references by email to Tim Weaver (tdweaver@ucdavis.edu). The position will remain open until filled, but to ensure consideration, applications should be received by 1 December 2017.

Timothy D. Weaver Department of Anthropology University of California One Shields Avenue Davis, CA 95616 USA Associated Researcher Department of Human Evolution Max Planck Institute for Evolutionary Anthropology Deutscher Platz 6 04103 Leipzig GERMANY +1 530-554-2300 tdweaver@ucdavis.edu

Timothy D Weaver <tdweaver@ucdavis.edu>

---

## UCalifornia Davis Primate Hybridization

Postdoctoral Scholar, Morphological Consequences of Hybridization in Primate and Human Evolution: A Macaque Model

We invite applications for a one-year postdoctoral position (with the possibility of extension for another six months) funded by a National Science Foundation grant (1720128), "Morphological consequences of hybridization in primate and human evolution: a macaque model". More information about the grant can be found here: [https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1720128&HistoricalAwardsOnly](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1720128&HistoricalAwardsOnly). The goal of the project is to use data collected on a large, multigenerational sample of Indian-Chinese macaque crosses from the California National Primate Research Center to better understand the relationship between morphology and admixture proportion and to develop criteria for detecting morphological evidence of admixture in the human fossil record.

We seek a creative and self-motivated researcher to join

the Evolutionary Wing of the Department of Anthropology at the University of California, Davis, and an international team of scholars working to use methods and theory from evolutionary quantitative genetics to investigate primate morphological variation and the human fossil record. The responsibilities of the position will include assisting with analyses, contributing to scientific publications and presentations disseminating the results of the project, coordinating data collection with the California National Primate Research Center and maceration with the UC Davis Museum of Wildlife and Fish Biology, training undergraduate students to process CT scans and collect morphometric data, and data management. Beyond a background in biological anthropology and evolutionary biology, we are particularly interested in applicants with experience in processing CT scans, geometric morphometrics, evolutionary quantitative genetics, programming (Matlab, R), and/or the human fossil record.

The start date for the position is flexible, but it could be as early as January 2018.

UC Davis and the Department of Anthropology are interested in applicants who are committed to the highest standards of scholarship and professional activities, and to the development of a campus environment that supports equality and diversity.

#### Qualifications:

Applicants should have a doctoral degree (PhD, DPhil) in biological anthropology, evolutionary biology, or a related discipline and a record of original research and scientific publication.

#### How to Apply:

Applicants should submit (1) a curriculum vitae, (2) a letter of interest, and (3) the names and email addresses of three references by email to Tim Weaver (tdweaver@ucdavis.edu). The position will remain open until filled, but to ensure consideration, applications should be received by 1 December 2017.

– Timothy D. Weaver Department of Anthropology University of California One Shields Avenue Davis, CA 95616 USA Associated Researcher Department of Human Evolution Max Planck Institute for Evolutionary Anthropology Deutscher Platz 6 04103 Leipzig GER-MANY +1 530-554-2300 tdweaver@ucdavis.edu

Tim Weaver <tdweaver@ucdavis.edu>

---

## UCalifornia LosAngeles EvolutionDiseases

A two-year post-doctoral position is available (start date flexible, can start as early as January, 2017) in the group of Dr. Van Savage (<http://faculty.biomath.ucla.edu/~vsavage/>) in the Department of Ecology and Evolutionary Biology at UCLA. This position will be supported by an NSF EEID grant ([http://www.nsf.gov/awardsearch/showAward?AWD\\_ID=-1518681&HistoricalAward=olse](http://www.nsf.gov/awardsearch/showAward?AWD_ID=-1518681&HistoricalAward=olse)). Savage combines mathematical models with analysis of large datasets to uncover insights into biological systems. The overall goal is to better understand, both empirically and theoretically, how mean temperature and fluctuations in temperature affect mosquito-borne disease such as Zika, malaria, dengue, and chikungunya. These effects arise due to changes in lifespan, development time, biting rate, and other mosquito traits. Part of this project is to determine if these mosquito traits change with temperature approximately as predicted by metabolic scaling theory. Answering this and other questions by using transparent, predictive models is greatly needed in light of climate change and emerging epidemics such as Zika. The project has the potential to involve theory development, numerical simulations, and data analysis. Savage will mentor the postdoc in designing and conducting research projects, writing papers, giving talks, and applying for jobs. Moreover, there will be the opportunity to work with and travel to the lab of Dr. Erin Mordecai (<https://www.mordecailab.com>) at Stanford University as part of this research project.

UCLA is a major research university with the Faculty of Arts and Sciences, Medical School, and Engineering School all on the same campus, allowing access to myriad researchers and resources that could be useful to this project. UCLA is the top ranked public university in the world and consistently in the top 5 in terms of federal research funding awarded to universities. Los Angeles is a vibrant, diverse city with outdoor activities available nearby, including beaches and mountains. L.A. also has a wide array of arts and culture, including world-class museums, theater, music, and of course, movies.

Candidates are expected to be independent, highly motivated problem solvers who communicate well and enjoy working in a collaborative environment. The ideal candidate would have a background in mathematical model-

ing, knowledge of models for either disease transmission or consumer-resource interactions, and some experience with programming. Applicants with only a subset of these skills are encouraged to apply. Applications and any questions should be sent to vsavage@ucla.edu. The application should include a Curriculum Vitae that details education, past research, and publications. Applicants should also submit a cover letter that describes their interest in the project and the names of three references. Review of applications will begin immediately and continue until the position is filled.

UCLA is an AA/EOE that is strongly committed to diversity and excellence among its researchers.

Van Savage <vsavage23@gmail.com>

---

### UCalifornia SantaCruz Museomics

The Paleogenomics Lab at UC Santa Cruz is recruiting a postdoctoral fellow to improve methods to recover ancient DNA from museum specimens. The project will include developing and refining experimental methods and coordinating a workshop for museum professionals, in addition to developing a focal project. The ideal candidate will have experience with molecular biology methods development and computational analysis of genomic data, as well as excellent organizational skills. Experience working with ancient DNA is not a prerequisite; we are looking for individuals whose expertise complements that of the lab. Individuals with biochemical expertise are particularly encouraged to apply. The position will be supervised jointly by Beth Shapiro and Ed Green, and will be part of the vibrant ancient DNA and genomics community at UCSC. The up-to-three year position is open as of November 2017. Please submit a cover letter and CV with the names and contact information for three references to bashapir@ucsc.edu.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or protected veteran status. The PGL and UC Santa Cruz are committed to excellence through diversity, and strives to establish a climate that welcomes, celebrates, and promotes respect for the contributions of all students and employees. Inquiries regarding the University's equal employment opportunity policies may be directed to: Office for Diversity, Equity, and Inclusion at the

University of California, Santa Cruz, CA 95064; (831) 459-2686.

Beth Shapiro <beth.shapiro@gmail.com>

---

### UCentralFlorida MarinePopulationGenomics

Postdoctoral Position in marine population genomics and eDNA. Applications are invited for a two-year postdoctoral researcher position in population genomics in the lab of Assistant Prof. Michelle R. Gaither at the University of Central Florida Genomics and Bioinformatics Cluster (Department of Biology).

I'm looking for a postdoc who will help me set up and run a new marine population genomics lab. Duties will include establishing RADSeq and eDNA protocols, generating and analyzing data, mentoring students, conducting independent research projects and writing grants. The Postdoc will also be responsible for the daily running of the lab such as ordering equipment and supplies and training students.

I'm seeking a highly motivated, independent, productive and collaborative researcher who works well with students and who is interested in taking advantage of a fully equipped genomics lab and collaborating with computer scientists within the cluster. The ideal candidate will have documented experience with NGS methods and data, and strong bioinformatics skills.

Applicants should have completed a PhD in the fields of Population Genomics, Evolutionary Genomics or Computational Science and have an established record of productivity and publications. New graduates and applicants from groups that are traditionally underrepresented in the sciences are strongly encouraged to apply.

Further information on the Genomics and Bioinformatics Cluster at UCF can be found at <https://www.ucf.edu/faculty/cluster/genomics-bioinformatics/>. Inquiries about the position can be made to Michelle R. Gaither at michellergaither@gmail.com with the subject line UCF\_Postdoc\_Position.

To apply, please send your CV, a list of four references, and a letter of interest briefly describing your experience in genomics/bioinformatics (not more than 2 pages) michellergaither@gmail.com with the subject line UCF\_Postdoc\_Position. I will begin reviewing applications in early December with an expected start date in early 2018 (Feb/March). However, the latter is flexible.

Michelle R. Gaither Assistant Professor (Start date Dec. 1st 2017) University of Central Florida Genomics and Bioinformatics Cluster Department of Biology <https://scholar.google.com/citations?user=jPbEa9cAAAAJ&hl=en&oi=ao> Michelle Gaither <michellergaither@gmail.com>

## UFlorida EvolutionSenescence

Postdoctoral Associate in Stem Cell and Regenerative Biology, Whitney Laboratory for Marine Bioscience, University of Florida <http://explore.jobs.ufl.edu/cw/en-us/job/504986/postdoctoral-associate> The Schnitzler Lab seeks a highly motivated postdoctoral associate to join a team focused broadly on stem-cell mediated tissue regeneration, and the evolution and development of cellular senescence in the colonial cnidarian *Hydractinia* using modern experimental and computational biology techniques.

The postdoctoral associate will be expected to design and lead research activities related to these topics, including designing and performing experiments, developing and executing protocols, performing data analysis, and writing manuscripts and grants. The postdoc will perform research as part of a team, as well as train and mentor other lab members. The ideal candidate will have extensive experience in molecular and cellular biology techniques such as: DNA and RNA extraction, molecular cloning, in situ hybridization, gene manipulation and editing techniques (RNAi, morpholinos, CRISPR/Cas9), microinjection and/or electroporation of embryos, quantitative PCR, Western blotting, epifluorescence and confocal microscopy. Experience with cellular proliferation and viability assays is preferred. Experience with generating and processing RNA-seq or similar datasets is also preferred. Unix and programming skills are preferred. Experience with cnidarian or other marine invertebrate organisms is preferred.

Information about the Whitney Laboratory can be found at <http://www.whitney.ufl.edu/>. Applicants from groups that are traditionally underrepresented in the sciences are strongly encouraged to apply. Application deadline is November 30, 2017.

For further information, please contact Dr. Christine Schnitzler ([christine.schnitzler@whitney.ufl.edu](mailto:christine.schnitzler@whitney.ufl.edu))

Christine Schnitzler <[christine.schnitzler@whitney.ufl.edu](mailto:christine.schnitzler@whitney.ufl.edu)>

## ULaval EvolutionaryCellBiology

Postdoctoral position in Evolutionary Cell Biology at Université Laval (Quebec City, Canada) A postdoctoral position (2 years) is available in the Landry Laboratory. The ideal applicant would have a strong expertise in molecular biology, biochemistry, or proteomics with interest for and/or basic skills in bioinformatics (Python, R). The projects are mainly experimental but candidates with a strong computational background who are willing to learn and perform experimental research are encouraged to apply. Previous work in yeast genetics and genomics would be an asset. Potential projects are related to recently published work (see below) and include, but are not limited to, the evolution and function of new genes and the organization and evolution of protein-interaction networks.

Université Laval is one of the most important research universities in Canada and is located in Quebec City ([https://en.wikipedia.org/wiki/Quebec\\_City](https://en.wikipedia.org/wiki/Quebec_City)), a lively city with a vibrant culture that offers an exceptional quality of life.

Interested applicants should send a CV, a list of publications, a statement of interest (1 page) and the name of three referees in a single PDF file to [landrylaboratory@gmail.com](mailto:landrylaboratory@gmail.com). The positions will remain available until filled. Starting dates could be between January 2018 and July 2018.

Recent representative publications: Marsit S, Leducq JB, Durand A, Marchant A, Filteau M, Landry CR. Evolutionary biology through the lens of budding yeast comparative genomics. *Nat Rev Genet.* 2017 Oct;18(10):581-598.

Diss G, Gagnon-Arsenault I, Dion-Coté AM, Vignaud H, Ascencio DI, Berger CM, Landry CR. Gene duplication can impart fragility, not robustness, in the yeast protein interaction network. *Science.* 2017 Feb 10;355(6325):630-634.

Caron D, Byrne DP, Thebault P, Soulet D, Landry CR, Eysers PA, Elowe S. Mitotic phosphotyrosine network analysis reveals that tyrosine phosphorylation regulates Polo-like kinase 1 (PLK1). *Sci Signal.* 2016 Dec 13;9(458):rs14.

Leducq JB, Nielly-Thibault L, Charron G, Eberlein C, Verta JP, Samani P, Sylvester K, Hittinger CT, Bell G, Landry CR. Speciation driven by hybridization and

chromosomal plasticity in a wild yeast. *Nat Microbiol.* 2016 Jan 11;1:15003.

Filteau M, Hamel V, Pouliot MC, Gagnon-Arsenault I, Dubé AK, Landry CR. Evolutionary rescue by compensatory mutations is constrained by genomic and environmental backgrounds. *Mol Syst Biol.* 2015 Oct 12;11(10):832 Filteau M, Diss G, Torres-Quiroz F, Dubé AK, Schrafl A, Bachmann VA, Gagnon-Arsenault I, Chrétien AA, Steunou AL, Dionne U, Côté J, Bisson N, Stefan E, Landry CR. Systematic identification of signal integration by protein kinase A. *Proc Natl Acad Sci U S A.* 2015 Apr 7;112(14):4501-6.

Nguyen Ba AN, Strome B, Hua JJ, Desmond J, Gagnon-Arsenault I, Weiss EL, Landry CR, Moses AM. Detecting functional divergence after gene duplication through evolutionary changes in posttranslational regulatory sequences. *PLoS Comput Biol.* 2014 Dec 4;10(12):e1003977.

Goldman A, Roy J, Bodenmiller B, Wanka S, Landry CR, Aebersold R, Cyert MS. The calcineurin signaling network evolves via conserved kinase-phosphatase modules that transcend substrate identity. *Mol Cell.* 2014 Aug 7;55(3):422-435.

Christian Landry, PhD Professor Canada Research Chair in Evolutionary Cell and Systems Biology Département de biologie Département de biochimie, de microbiologie et de bio-informatique Institut de Biologie Intégrative et des Systèmes Université Laval Québec (Québec) G1V 0A6 Canada

<http://landrylab.ibis.ulaval.ca/> Christian Landry  
<Christian.Landry@bio.ulaval.ca>

## ULyon Amphibian Conservation

The University of Lyon (UdL), a community of universities and institutions, bringing together 12 institutions of higher education in Lyon Saint Etienne, is looking for a post-doctoral fellow.

**JOB DESCRIPTION** Research unit and location: UMR CNRS 5023 LEHNA, The research will be conducted in the team Ecophysiology Behaviour and Conservation in the LEHNA (<http://umr5023.univ-lyon1.fr/equipede-recherche/e2c#>). The LEHNA laboratory works on different thematic from evolutionary to environmental sciences at different organization levels (ecosystem to individual). It is one of the 65 research units of Lyon 1 University counting 45000 students including 1800 PhD

students.

Working time per week: 37h - 100% Address: Darwin C & Forel, 3-6 Rue Raphaël Dubois, 69622 Villeurbanne Gross Salary: approx. 2600,00 euro

Description research project and main tasks: Artificial light at night (ALAN) is an increasing phenomenon worldwide generated mostly by urban areas and transport networks. Recent reviews have highlighted the biological and ecological effects of ALAN on biodiversity, but also the knowledge gaps. Physiological and behavioral disruption can affect individual, population and potentially scale up at the ecosystem level. Some animal groups may be particularly exposed because of their activity pattern. Amphibians are nocturnal nature and their night vision is very sensitive. Individuals exposed to ALAN may experience disruption of their behaviour, especially the performance of prey capture. The global unfavorable conservation status of this vertebrate group makes it a primary targets of ALAN studies for Conservation biology.

The candidate will investigate the effects of increasing exposure to ALAN on the foraging behavior and the physiology of the Common toad, a ubiquitous anuran that can stand some level of urbanization. The work is lab-based. The hired person will carry out indoor experiments on the foraging behaviour of adult toads exposed to increasing levels of ALAN. He/She will also carry out physiological assays to quantify the stress level of animals in regards to ALAN exposition.

**REQUIRED PROFILE Skills:** The candidate must show publication record in the field of behavioral ecology and/or ecophysiology. Skills in the design of experiments and experience in the field of stress physiology are required.

Its work will be part of a multidisciplinary project (ecology, geography) on ALAN aiming quantifying biological effects in that species and mapping these effects on a large wetland (>1000 km<sup>2</sup>) area located on the border of Lyon, the second largest French city.

### APPLICATION PROCEDURE

Interested candidates should submit the following electronic documents:

- A cover letter including succinct research statements.
- Curriculum vitae including a complete list of publications (all peer-reviewed/non-peer reviewed journal articles, conference contributions, books, etc.).
- Contact information of two professional references (referees will be contacted after the final candidates have been shortlisted).

Contacts: Proposition should be send to Thierry Lengagne (thierry.lengagne@univ-lyon1.fr) and Isabelle Di Raimondo (isabelle.diraimondo@universite-lyon.fr) before the 15th November.

Jean SECONDI <jean.secondi@univ-angers.fr>

---

## UMassBoston Phylogenetics in R

\*Postdoctoral fellowship in computational phylogenetics in R\*

Applications are invited for a postdoctoral fellowship in the Revell Lab at the University of Massachusetts Boston to work on computational methods for phylogenetics in R (broadly defined to include phylogenetic inference, comparative methods, plotting, etc.).

More information, including a direct link to apply for the position, are linked on my blog: <https://goo.gl/mJdhFm>. The closing date for application is October 19.

Please take note that the postdoc is for \*one year\* with only a modest possibility of extension to multiple years contingent on external funding.

Please circulate the advertisement to interested parties. Any questions about the position should be directed to me at the following email address: liam.revell@umb.edu.

– Liam J. Revell, Associate Professor of Biology University of Massachusetts Boston web: <http://faculty.umb.edu/liam.revell/> email: liam.revell@umb.edu blog: <http://blog.phytools.org> “Liam.Revell@umb.edu” <Liam.Revell@umb.edu>

---

## UMontana EcologicalGenomics

\*Postdoctoral Research Fellow 'V Ecological Genomics, University of Montana\*

The Good and Mills Labs at the University of Montana seek to hire a postdoctoral research fellow to investigate genome-to-phenome connections underling the evolution of seasonal coat color camouflage in snowshoe hares. Current research efforts by Mills and Good on snowshoe hares and other coat color changing species include dissecting the genetic basis of seasonal coat color

phenology, continuing to connect it to field-based fitness and population dynamics, and developing an integrative systems genetics framework for understanding the mechanistic underpinnings of seasonal color molts.

This position is part of a new collaborative research and training network between the University of Montana and the University of Nebraska to advance evolutionary and ecological genomics in natural populations. The UNVEIL network (Using Natural Variation to Educate, Innovate, and Lead) brings together researchers from the University of Montana (UM) and the University of Nebraska Lincoln (UNL) to advance understanding of the genetic basis of fitness-related traits in wild populations. Our goal is to train the next generation of integrative biologists to solve pressing societal challenges in ecological and conservation genomics. A more detailed description of the research and training network is available through the UNVEIL website ([www.unveilnetwork.org](http://www.unveilnetwork.org)). For other postdoctoral opportunities within the network please see: <http://evol.mcmaster.ca/~brian/evoldir/PostDocs/UMontana.UNebraska.EvolGenomics> In addition to a competitive salary (~\$47,500) and benefits package, the successful applicant will be provided generous research funds (up to \$30,000/year for two years) to allow them the freedom to creatively extend the core projects in novel directions.

HOW TO APPLY: Interested applicants are strongly encouraged to \*contact PI Good in advance\*. \*Candidates must apply online (<http://bit.ly/um1826>) and will be asked to upload the following application materials: a CV, a 1-page description of previous or current research, a 2 page description proposed research directions and interests, and contact information for 3 references.

Review of applications to the UNVEIL network will begin on November 1, 2017. Late applications can be considered and the position will remain open until filled. The appointment is a 12-month Letter of Appointment with a flexible start date on or after January 15, 2018. The position renewable for up to two years.

Please direct inquires to Jeffrey Good (jeffrey.good@umontana.edu; [www.thegoodlab.org](http://www.thegoodlab.org)).

– Jeffrey M. Good, Ph.D.

Associate Professor Division of Biological Sciences The University of Montana 32 Campus Drive, HS104 Missoula MT 59812 Phone: 406-243-5771 Fax: 406-243-4184 Website: <http://www.thegoodlab.org/> Jeffrey Good <jeffrey.good@mso.umt.edu>

---

## UNewSouthWales EvolutionParentalEffects

A postdoctoral position is available in the Bonduriansky lab at UNSW in Sydney, Australia, to work on the evolutionary ecology of parental effects, particularly in relation to diet and genetic quality.

Funding is currently available for two years, starting at the beginning of 2018.

The fellow will be encouraged to apply for an ARC Discovery Early Career Researcher Award (DECRA) that, if successful, would provide an additional three years of funding plus research funds.

Applications will be assessed until the position is filled.

For more information, please contact Russell Bonduriansky (r.bonduriansky@unsw.edu.au).

Russell Bonduriansky <bonduriansky@gmail.com>

---

## UOslo AncientDNA

Postdoctoral Research Fellow in Ancient DNA and Evolutionary Genomics A two-year position as a postdoctoral research fellow in the field of ancient DNA (aDNA) and evolutionary genomics is available at the Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biosciences.

The Postdoctoral fellow will be part of a multi-disciplinary, international team led by Dr Bastiaan Star, working on the project Catching the Past: Discovering the legacy of historic Atlantic cod exploitation using ancient DNA funded by the Research Council of Norway. The position is affiliated with CEES, a former national centre of excellence (CoE). Expected start date is April 2018. No one can be appointed for more than one Postdoctoral Research Fellowship at the University of Oslo.

The University of Oslo is Norway's oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor

to society. The Centre for Ecological and Evolutionary Synthesis (CEES) is a Centre of Excellence (CoE) based at the Department of Biosciences, University of Oslo. CEES combines a broad spectrum of disciplines (population biology, genomics, statistics, mathematical modelling) to foster the concept of ecology as a driving force of evolution via selective processes, with a corresponding influence of evolutionary changes on ecology. CEES has over 160 members (Professors (20), postdocs/researchers (45), PhDs (25), Master's students (25) and technical and administrative staff) and many guest researchers. The members represent 30 nationalities and constitute a vibrant and creative research environment. CEES coordinate several international networks. The budget = 150 million NOK (about 50 externally funded research projects). CEES is chaired by Professor Nils Chr. Stenseth.

Project description Humans have used the natural resources of the oceans for thousands of years. The main aim of this project is to investigate if the intensive, long-term exploitation of Atlantic cod has affected its pan-European population demography or has led to evolutionary change. By extracting DNA from ancient fish remains (up to 10,000 years old), we compare the genome-wide data of specimens that predate extensive human influence to extensive modern reference databases comprising hundreds of individuals. In addition, we aim to reconstruct the early origin of long-distance fishing trade by analysing material from different types of archaeological sites (representing centres of export and import). By identifying the biological source population of bones from a large number of import sites, we will investigate the extent and range of early Viking Age and medieval fish trade (see for instance <http://www.pnas.org/content/114/34/9152.full>). Knowledge of the chronology of such long-distance trade yields fundamental insights into historic exploitation patterns.

In this project, we have access to unique biological material from different countries that will be analysed using high-throughput, whole-genome sequencing approaches. The successful applicant will join a multi-disciplinary, international team that brings together experts from the fields of biology, archaeology and zooarchaeology. The research fellow's main task will be the comparative genomic analyses of hundreds of individually sequenced ancient genomes. These data will be interpreted in close dialog with project partners and archaeological sample providers. The ideal candidate will make a major contribution to the planned research, but may also develop her/his own complementary lines of research that reflect the candidate's own expertise and interests, and that fit within the project's main goals. This project forms a collaboration between the CEES at the University of Oslo,

the Institute for Marine Research (IMR), University Museum of Bergen, University of Gothenburg, University of Cambridge and the University of Copenhagen.

**Requirements** Applicants must hold a PhD-degree (or other corresponding education equivalent to a Norwegian doctoral degree) with a background within population genomics and/or evolutionary genomics. The candidate should be able to document strong skills in the analyses of genome-wide data using phylogenetic or population genetic approaches. Experience with ancient DNA, analytical or experimental, is a distinct advantage. Applicants should have a strong publication record for their career stage.

We seek a highly motivated, enthusiastic person with the ambition to gain insight and publish papers in leading, international journals, with interpersonal skills and the capability to work in close collaboration with others. The candidate will work in close collaboration with the rest of the team as well as our national and international partners (Denmark,

— / —

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>

---

## UPennsylvania 2 EvolutionaryGenomics

Title: UPenn.Intragenomic.Conflict

Postdoc opportunity: Cell Biological Basis of Intragenomic Conflict

The Levine Lab (<https://web.sas.upenn.edu/levine-lab/>) at the University of Pennsylvania is recruiting two postdoctoral research fellows to start spring or summer 2018. Our lab integrates evolutionary genetics and cell biology to investigate intra-genomic conflict between host genomes and their selfish genetic elements. We study how these escalating molecular 'arms races' shape the fundamental, chromatin-dependent processes of telomere protection and inter-generational sex chromosome transmission. To experimentally elucidate the molecular mechanisms of selfish element cheating and host suppression, we harness CRISPR/Cas9-mediated gene manipulation to unleash otherwise cryptic conflicts in contemporary genomes. *Drosophila* is our primary

model; however, we have recently initiated projects in the genus, *Mus*.

The Levine Lab is housed in UPenn's Department of Biology ([www.bio.upenn.edu](http://www.bio.upenn.edu)), a diverse, interactive community with breadth and depth in evolutionary genetics and genomics, cell biology, and molecular genetics. The Levine Lab is also a core member of the Epigenetics Institute at the Perelman School of Medicine (<https://hosting.med.upenn.edu/epigenetics/>), a group of 29 lab groups dedicated to mechanistic dissection of epigenetic regulation in healthy and disease states.

The Levine Lab aims to recruit applicants with EITHER a PhD in evolutionary genetics/genomics (but motivated to learn chromatin biochemistry and cell biology) OR a PhD in chromatin biology (but motivated to learn evolutionary genomics). Please send a cover letter (including statement of research goals), CV, and a list of three references as a single PDF to: [levinelab.upennpostdoc@gmail.com](mailto:levinelab.upennpostdoc@gmail.com). Applications will be reviewed starting November 20th.

Mia Levine Assistant Professor Department of Biology Epigenetics Institute University of Pennsylvania 204B Carolyn Lynch Laboratories 433 South University Avenue Philadelphia, PA 19104-6018

[m.levine@sas.upenn.edu](mailto:m.levine@sas.upenn.edu) 215-573-9709

"Levine, Mia Tauna" <[m.levine@sas.upenn.edu](mailto:m.levine@sas.upenn.edu)>

---

## UPennsylvania ExperimentalEvolution

Postdoctoral Position'XExperimental Evolution of Mutation Rates and Genetic Systems: The laboratory of Paul Sniegowski at the University of Pennsylvania has an opening for a postdoctoral fellow. We seek an individual who is interested in the evolution of mutation rates and genetic systems and has a PhD in one or more of the following areas: experimental microbial evolution; population and evolutionary genetic theory; genomics and bioinformatics. The postdoc will work closely with Sniegowski, his collaborators, and junior lab members and will share responsibilities for project conception and design, supervision of junior lab personnel, and paper and grant-writing. The ideal candidate will have at least two years of prior postdoctoral experience, but outstanding applicants earlier in their careers will be considered. The position is available for up to five years, contingent on satisfactory performance. If interested,

email a single PDF document containing a cover letter addressing research interests, CV, 1-3 representative published papers, and the names of three references to Paul Sniegowski (paulsnie@sas.upenn.edu). Review of applications will begin immediately and will continue until the position is filled.

“Sniegowski, Paul D.” <paulsnie@sas.upenn.edu>

---

## UppsalaU HumanEvolutionaryGenetics

Postdoctoral position in human population genetics of African populations: A two-year position as a postdoctoral research fellow in the field of human evolutionary genetics is available at the Department of Organismal Biology, Uppsala University (Sweden)

The Postdoc position will be situated in the group of Dr. Carina Schlebusch within the Human Evolution sub-Program at the Department of Organismal Biology (Evolutionary Biology Center, Uppsala University). The Schlebusch group is specifically interested in studying human history on the African continent and uses genetic data from modern day populations and ancient remains as a tool for the inference of African history. The Human Evolution sub-Program, in which the Schlebusch group is situated, has a broad interest in population genetics and human evolution. There are ample opportunities to work closely with postdocs and PhD students that focus on related projects. The research environment is international with English being the working language. See Dr. Schlebusch web-page for more information on the research and recent publications (<http://www.iob.uu.se/research/evolution-and-development/schlebusch/>) and Human Evolution Program web-page for more information on the Program (<http://www.iob.uu.se/research/evolution-and-development/human-evolution/>).

Project description: The spread of farming practices has had a marked influence on how humans are distributed around the globe today. Inferences about the spread of farming in Africa are mostly based on linguistic and archeological studies. Genome-wide studies started to make a contribution to research on the history of African farmers but many populations remain poorly represented, making detailed inferences problematic. The present study proposes to investigate spread of farming in Sub-Saharan Africa. The successful postdoc candidate will help to coordinate various projects in the group (including field work, laboratory work and

computational analyses) with the aim to generate and use genomic data from current day African populations and ancient remains to investigate the spread of farming to the various parts of the African continent.

Requirements: Doctoral degree, or an equivalent foreign degree, in a relevant field. To be qualified for an appointment as a postdoctoral fellow you must hold a doctorate or a foreign degree equivalent to a doctorate, and have completed the degree within three years before the application deadline. In special circumstances, the PhD can have been completed earlier, including leave of absence due to sickness, parental leave, etc.

A general eligibility requirement is that the applicant must possess the personal capabilities necessary to carry out fully the duties of the appointment. Greater emphasis will be placed on the quality of individual scientific publications than on the number of publications.

Additional qualifications: The ideal candidate is highly motivated with thorough education and strong interest in evolutionary genetics/genomics, population genetics and human evolution. Previous experience with large-scale genetic data analysis, bioinformatics, and programming is advantageous. Mathematical, computational and statistical training is also advantageous. Field work experience (especially in Africa) and an interest/background in African history is also advantageous.

Uppsala University strives to be an inclusive workplace that promotes equal opportunities and attracts qualified candidates who can contribute to the University's excellence and diversity. We welcome applications from all sections of the community and from people of all backgrounds.

Uppsala University is an international research university focused on the development of science and education. Our most important assets are all the individuals who with their curiosity and their dedication make Uppsala University one of Sweden's most exciting work places. Uppsala University has 40,000 students, 7,000 employees and a turnover of SEK 6,5 billion.

The Department of Organismal Biology teaches and explores the evolution, development and function of whole organisms. For more information see [www.iob.uu.se](http://www.iob.uu.se). Pay: Individual salary Starting: 2018-02-01 or as otherwise agreed. Type of employment: Temporary position ending 2020-01-31 Working hours: 100 % For further information about the position please contact Carina Schlebusch, e-mail [Carina.Schlebusch@ebc.uu.se](mailto:Carina.Schlebusch@ebc.uu.se). You are welcome to submit your application no later than 19 November

Link to application: <http://www.uu.se/en/about-uu/join-us/details/?positionId=172846> C.M. Schlebusch

(PhD, Genetics)

— / —

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>

## UppsalaU PopulationGeneticTheory

Postdoc in Population Genetics

The successful candidate will join an ERC funded project investigating the importance of selection on the haploid genotype in male gametes in animals. Any sexually reproducing eukaryote undergoes an alternation between diploid and haploid phases. Very few population genetic studies take both phases into account. Improving our understanding of the importance of selection at the haploid gametic level in predominantly diploid organisms such as flowering plants and metazoans has potentially far-reaching consequences for fundamental evolutionary processes, such as rate of adaptation and mutation-selection balance, as well as for clinical applications including assisted fertilisation techniques. Currently, our project is producing a variety of NGS datasets to address these questions, but we lack adequate theoretical and statistical frameworks in population genetics/genomics for well-founded in-depth analyses. The aim of this project is to develop these theoretical and statistical frameworks through the application of theoretical modelling and simulations, in combination with analyses of current and future datasets, to generate and test general and specific predictions addressing selection at the haploid gametic level.

The recent advances in high-throughput sequencing and computational power make it both relevant and realistic to create accurate simulation-based models to evaluate both, novel theory and abundant empirical data. With such models, the influence of different genetic architectures and forms of selection can be evaluated, as well as different “non-ideal” scenarios such as individual deviations in recombination rates, transmission biases such as meiotic drive, and technical complications such as allele-based bias in sequencing, genome alignment errors, etc.

You will have a minimum of a PhD in Population Genetics, Evolutionary Genomics, Medical Genetics, or Bioinformatics, and be able to fulfil all essential ele-

ments of the person specification. Research experience in population genetics/genomics and bioinformatics is a required pre-requisite, as is proficiency in Python or Perl.

This full time post is available immediately but the starting date is flexible and with a fixed term of 12 months (with the possibility of extension).

The School of Biological Sciences benefits from close interactions with other Schools within UEA, including the Schools of Chemistry and Pharmacy and the Norwich Medical School. UEA is also part of the Norwich Research Park that includes the Norfolk and Norwich University Hospital, the Institute of Food Research, the John Innes Centre and the Earlham Institute. More information about the School of Biological Sciences UEA can be found at: <http://www.uea.ac.uk/bio/> For informal enquiries please contact PI Simone Immler (s.immler@uea.ac.uk) and check out our webpage (<http://www.ieg.uu.se/evolutionary-biology/immler/>)

To apply for this position use this link: [goo.gl/bKL98G](http://goo.gl/bKL98G)

Closing date: 6 November 2017.

Dr Simone Immler Department of Evolutionary Biology Evolutionary Biology Centre Uppsala University Norbyvagen 18d SE - 752 36 Uppsala Sweden

Email: [simone.immler@ebc.uu.se](mailto:simone.immler@ebc.uu.se) Phone: +46 (0)18 471 6465 Fax: +46 (0)18 471 6310 <http://www.ebc.uu.se/-Research/IEG/evbiol/research/Immler/> Simone Immler <[simone.immler@ebc.uu.se](mailto:simone.immler@ebc.uu.se)>

## UPuertoRico EvolutionaryGenomics

JOB DESCRIPTION

Postdoc in evolutionary and functional genomics. An EPSCoR-funded postdoctoral position is available in the laboratory of Dr. Riccardo Papa in the Department of Biology of the University of Puerto Rico, R  o Piedras Campus, and in collaboration with Dr. Brian Counterman of the Department of Biological Sciences of Mississippi State University. The laboratory has a rich background in studying the natural history of *Heliconius* butterflies, with a focus on whole genome sequencing and performing functional assays to go after the developmental and genetic architecture of color pattern development in butterflies. These regions provide exciting candidates for further validation using functional approaches such as ATAC-seq, ChIP-seq and CRISPR

to better understand the pathways involved in color pattern development and their evolution.

#### SPECIAL REQUISITES

The candidate must have completed Ph.D. degree within the last 5 years, preferably in genomics, population genetics or statistical genetics. The position requires skills in the more bioinformatical areas of biology, and a strong record of research in these areas. High motivation and mobility will be necessary to collaborate with the Smithsonian Tropical Research Institute (STRI, Panama; Owen McMillan), Cornell University (US; Robert Reed), George Washington University (US; Arnaud Martin) and Cambridge University (UK; Chris Jiggins). The work will focus on bioinformatics methods to analyze genomic sequencing and functional genomic data. Specifically, this includes building pipelines to assemble and analyze whole genome resequencing data using multiple platforms and obtain and analyze ATAC-seq and ChIP-seq data. Strong knowledge of the *Heliconius* system is preferred but not required.

#### IMPORTANT INFORMATION

To apply, please submit (i) a cover letter including motivation and research interests, (ii) a full CV that includes all requisites for the position, and (iii) contact information for two references electronically, and (iv) copies of all academic degrees \*(diplomas and certifications). Review of applications will start immediately and will continue until the position is filled. Inquiries about the position can be directed to [brenda.santiago@upr.edu](mailto:brenda.santiago@upr.edu). APPLICATIONS SUBMITTED WITH INCOMPLETE INFORMATION WILL NOT BE CONSIDERED. CANDIDATES WITH A PH.D. DEGREE OF 5 YEARS OR MORE ARE NOT ELIGIBLE FOR THIS POSITION.

Please email your application to:

Riccardo Papa

[rpapa.lab@gmail.com](mailto:rpapa.lab@gmail.com)

Riccardo Papa <[rpapa.lab@gmail.com](mailto:rpapa.lab@gmail.com)>

---

### USouthPacific FishGenomics

FACULTY OF SCIENCE, TECHNOLOGY AND ENVIRONMENT School of Marine Studies - Post LMS028 Applications are invited for the position of Research Fellow in the School of Marine Studies at The University of the South Pacific in Suva, Fiji Islands. We are seeking a highly motivated evolutionary biologist with excellent

training and expertise in population genetics in fisheries or aquaculture. Experience in at least two, preferably three of the following topics is essential: fisheries and/or aquaculture population genetics, mixed stock analysis in fisheries, pedigree and kinship analyses, genetic impacts of stocking, and transcriptomics. The School offers education and training in Marine Sciences at undergraduate and post-graduate levels, conducts research and offers consultancy in fisheries and aquaculture, maintains links and collaborations with partner institutions internationally and, jointly with the Institute of Marine Resources and the private sector in Fiji.

**The Opportunity** The appointee will be a highly motivated individual with excellent training and expertise in fisheries/aquaculture genetics/genomics to join our ongoing research program in integrative conservation and evolutionary genomics of natural renewable resources. The successful candidate will be responsible for providing bioinformatics consultancy to a range of marine, aquaculture, fisheries and natural resources science projects and will have a unique opportunity to contribute in the development of the genomics research agenda of the western and central Pacific Ocean, the largest hotspot of marine biodiversity in the world. Main duties will involve analysing high throughput/high-dimensional 'omics data from mostly non-model organisms, this includes the design, development, implementation and testing of bioinformatics pipelines for Next-Generation Sequencing (NGS) data, assembly and expression analysis of NGS and DNA microarray data and contribution towards interpreting the results.

The appointee will play an essential role in the running of the Molecular Analytics Laboratory and will assist in developing several research proposals that will be submitted over the next 3 years to different calls of Horizon 2020. This is a highly collaborative role, where the appointee will be working alongside postgraduate students and scientists on a regular basis thus requiring a good knowledge of fisheries or aquaculture population genetics.

**The Person We Seek** To be considered for this position, applicants must have: - A PhD in population genetics applied to fisheries or aquaculture and at least five indexed scientific publications in the Web of Science and experience in the management and execution of scientific projects. - Experience in working with genotyping by sequencing (GBS) data such as RAD-Seq or DArT-Seq is essential; - An understanding of biological databases along with various bioinformatics tools, such as STRUCTURE, Arlequin, Genetix, Fstat, NeEstimator, BayeScan, and LOSITAN is required. - Excellent oral presentation and written communication skills.

Preference will be given to applicants with: - Experience with analysing high throughput/high-dimensional 'omics data from mostly non-model organisms; - Experience with the design, development, implementation and testing of bioinformatics pipelines for Next-Generation Sequencing (NGS) data, assembly and expression analysis of NGS and DNA microarray data; - A thorough knowledge of Linux/Unix and R scripting language (along with Perl/Python will be an advantage) and knowledge of Arc-GIS is also desirable; - Strong communication skills and the ability to effectively articulate complex technical information to the clients is highly desirable; - Good organisational abilities; - Excellent interpersonal relationship building skills; - Experience in research projects in oceanic island environments, particularly in the South Pacific; - Experience in grant proposal writing.

Remuneration The position is available for a fixed term of 3 years.

Salary Range: Research Fellow FJ \$66, 990 to FJ \$88, 144 per annum In addition to the above benefits, the University contributes 10% of basic salary to an approved superannuation scheme, provides airfare and relocation costs where appropriate.

Enquiries: Professor Ciro Rico; tel.: (679) 32 32933; email: ciro.rico@usp.ac.fj Closing date for applications: 5 November, 2017 How to Apply Candidates may use the University's online E-Recruitment system to view full details and apply for this position at <https://www.usprecruits.usp.ac.fj> Manual and emailed applications are no longer accepted. Candidates may request further information from the Human Resources Office; tel.: (679) 32 32072; email: hrhelp@usp.ac.fj

— / —

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>

---

## USussex Genomics

Postdoc:UniSussex.Genomics Contract: fixed term until December 2021 Salary: starting 32,548 and rising to 38,833 per annum Closing date: 23 November 2017

The Fraser lab is looking for a postdoc with experience in genomic analysis to work on an ERC funded project investigating convergent evolution in the Trinidadian

guppy. The Trinidadian guppy is a textbook example of convergent evolution at the phenotypic level but we have little insight into its evolution at the genomic level. The overall goal of this project is to understand how convergence occurred in this important wild system. This will be achieved by testing whether replicated selection led to convergence at the genomic level (e.g. population genomics and de novo assembly of genomes), and by determining the genetic basis of convergent adaptations (e.g. quantitative genetics). An overview of research within the Fraser lab can be found [www.sussex.ac.uk/lifesci/fraserlab/index](http://www.sussex.ac.uk/lifesci/fraserlab/index) The School is committed to equality and valuing diversity, and currently holds an Athena SWAN Silver Award. Applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in science and engineering at Sussex. The School of Life Sciences welcomes applications to academic posts from candidates who wish to work part-time or as job-sharers. The University offers various schemes to provide real benefits to parents, these can be found at Family Friendly Policies < <http://www.sussex.ac.uk/humanresources/personnel/familyfriendlypolicies> >. Potential candidates are strongly encouraged to make informal contact with Bonnie Fraser (b.fraser@sussex.ac.uk) before applying.

The University of Sussex is located just outside the city of Brighton and approximately 20 minutes to Gatwick Airport and a one hour commute to London (by train). Brighton is a lively and diverse city known for its famous seafront and is closely located to the South Downs National Park and stunning white chalk cliffs of the south coast.

Please apply through the University's website: <http://www.sussex.ac.uk/about/jobs/post-doctoral-researcher-ref-2653> .Reference 2653

Bonnie Fraser <B.Fraser@sussex.ac.uk>

---

## UTexas-Houston InferringDemographicHistory

Postdoctoral Fellow - Method Development in Inferring Demographic History. A postdoctoral fellow position in computational population genomics is available at Liu Lab ([www.liulab.science](http://www.liulab.science)) at University of Texas School of Public Health (UTSPH), Houston, Texas, USA. The hired postdoctoral fellow will engage in method development and application related to inferring population

demographic history using large-scale DNA sequence data (see references below). A graduate level training in population genetics is required. Previous methodology development and/or Java programming experience is preferred. PhDs without population genetics training but with extensive algorithm development and Java programming experience and strong interest in population genetics questions are also encouraged to apply. The hired postdoctoral fellow will also have chance to work with Dr. Yun-Xin Fu at UTSPH and our collaborators at Human Genome Sequencing Center at Baylor College of Medicine on other exciting population genetics studies of human and primate populations. Contact: Xiaoming Liu (Xiaoming.Liu@uth.tmc.edu). Reference: Liu X and Fu YX. (2015) Exploring population size changes using SNP frequency spectra. *Nature Genetics*. 47(5):555-559.

“xiaoming.liu@uth.tmc.edu”

---

## WayneStateU FishEvolutionaryGenomics

### POSTDOCTORAL FELLOW - EVOLUTIONARY GENOMICS OF FISHES

The Dowling lab in the Department of Biological Sciences at Wayne State University invites applications for a Postdoctoral Fellow. The individual will assist with multiple aspects of research focused on evolution and conservation of fish biodiversity, with focus on species from the southwestern United States. Applicants are expected to have a Ph.D degree in biology or a related field, with bioinformatic and laboratory experience required. The principal duties will be the collection and analysis of genomic data and writing reports and manuscripts. Applicants should be proficient with basic molecular procedures (DNA/RNA extraction, PCR, electrophoresis, sequencing) and have experience with command line data analysis (e.g., R or Python). Preferred qualifications include experience with shell scripting (Unix/Linux systems), and preparation of RAD-seq or other NextGen sequencing libraries.

Salary will be commensurate with training and experience. Additional information on the position and instructions for application are provided at the following web address:

<https://jobs.wayne.edu/applicants/jsp/shared/-Welcome.css.jsp> Posting is job number 043026 under

Research Assistants/Associates.

If you have any questions please email Tom Dowling (thomas.dowling@wayne.edu).

Thomas Dowling

Department of Biological Sciences

5047 Gullen Mall

Wayne State University

Detroit MI 48202

313-577-3020

Thomas Dowling <thomas.dowling@wayne.edu>

---

## Yale NUS Singapore EvolutionaryBiol

The Yale-NUS Postdoctoral Fellowship Division of Science

The goal of the Yale-NUS Postdoctoral Fellowship is to attract talented young international scholars that have completed a doctoral degree to engage in high quality scientific research at the College. Postdoctoral appointees will be paired with a Yale-NUS faculty mentor, are expected to conduct high quality research within their particular field of expertise, and will teach one course per semester, with approximately half of the teaching within the Common Curriculum ( <https://www.yale-nus.edu.sg/curriculum/common-curriculum/>).

Potential applicants are strongly advised in the first instance to contact the relevant faculty member in their field ( <https://www.yale-nus.edu.sg/about/faculty/>) and discuss available research projects and teaching opportunities.

Appointment & Salary: Normally, individuals are appointed initially for a 1-year period with the possibility of a 2-year extension, and serve for a maximum of 3 years. Individuals who successfully complete a three-year fellowship with distinction may be considered for subsequent tenure-track or educator-track positions following the term of their fellowships, provided the College has tenure-track or educator track vacancies in the Division of Science. Postdoctoral Fellows should be prepared to start the position in time for the 2018-2019 academic year (1 st July 2018). Annual salary is \$72,000 (Singaporean dollars) with standard benefits. A modest research stipend may also be provided.

Application Process: The application deadline is 30th November 2017. For full consideration, submit the following materials via <https://academicjobsonline.org/ajo/YaleNUS>: \* Cover letter \* CV \* Statement on research interests and intended area of research \* Short description of teaching experience to date and any teaching evaluations, if available \* A curriculum contribution statement that briefly discusses the applicability of the candidate's teaching and scholarship to the Yale- NUS Common Curriculum \* Three (3) letters of reference to be submitted by the reference writers via the application portal

For applicants interested in working with me on an allied project, please check out our ongoing research and contact me. Other applicants please contact the faculty of interest directly. Evolutionary Photonics Lab [vinodkumar.saranathan@aya.yale.edu](mailto:vinodkumar.saranathan@aya.yale.edu) <http://->

[vinodal.weebly.com](http://vinodal.weebly.com) For questions concerning administrative aspects of the application, please contact Divisional Manager, Science, Ms Aniza A. Wahid, at: [Enquiry\\_ScienceDiv@yale-nus.edu.sg](mailto:Enquiry_ScienceDiv@yale-nus.edu.sg).

The College values diversity and is committed to equality of opportunity. For more information about Yale-NUS College, please visit our website at: <http://www.yale-nus.edu.sg/>. Candidates should understand that by sharing information with Yale-NUS College, they authorise Yale-NUS College to use their personal data for the purposes of this application. Candidates may also understand that Yale-NUS College will not use their data for any purposes beyond those relevant to the application process, and that their data remains secure and confidential.

["vinodkumar.saranathan@aya.yale.edu"](mailto:vinodkumar.saranathan@aya.yale.edu)

---

## WorkshopsCourses

AdelaideU AdvancedBioinformatics Nov13-17 . . . .	152	Roscoff BioinformaticsEvolutionNetwork Jun24-30	161
BangaloreIndia PopGen Mar5-Mar17 . . . . .	152	SanDiego PAG-PopulationConservationGenomics	
Barcelona PhenotypeGenotype Jan23-26 Scholarships	152	Jan13-17 . . . . .	162
Berlin AdvancedPython Nov13-17 deadline . . . . .	153	Switzerland WholeGenomeSeqAnalysis Feb4 . . . . .	163
Berlin EukaryoticMetabarcoding Feb26-Mar2 . . . . .	154	UEdinburgh LinuxWorkflows Dec11-15 . . . . .	163
Berlin EvolutionTransposableElements Apr23-27 .	155	UK AdvancingInR Dec4-8 . . . . .	164
Berlin GenomeAssemblyAnnotation Feb12-16 . . . .	156	UK IntroToPythonForBiologists Nov27-Dec1 . . . . .	165
Berlin GenomicSelectionInR May21-25 . . . . .	157	UK LandscapeGenomics Nov6-10 FINALCALL . .	166
Berlin RADseq Dec4-8 . . . . .	158	UManchester OnlineCourseMorphometrics Nov6-Dec15	167
Crete ComputationalMolEvol May6-17 . . . . .	159	UManchester OnlineCourseMorphometrics Nov6-Dec15	168
DukeU EvolutionaryPhenotype Dec11-14 . . . . .	159	reopened . . . . .	168
Huddersfield UK ComputingSkillsMolBiology Dec13-15	160	UYork UK PythonBioinformatics Jan10-11 . . . . .	169
Online LandscapeGenetics Jan17-May9 . . . . .	160	Weggis Switzerland AdaptationBioinformatics Feb11-17	169
Paris StatisticsForEvolEcol Nov20-24 Reminder . .	161		

---

## AdelaideU AdvancedBioinformatics Nov13-17

Advanced Bioinformatics workshop for ECRs.

November 13-17, 2017 University of Adelaide

Hosted by the Australian Centre for Ancient DNA (ACAD), and sponsored by CABAH, this workshop is back for 2017 as two separate programs. Three days dedicated to metagenomics and 2 days for a NGS session, to better suit demand. The popular annual training course is based on the successful previous workshops (2016 -2010) encompassing an intensive 5 day hands-on course tutored by experts utilising the latest techniques and available software for the analysis of metagenomics and NGS data.

Pre-requisites apply: Delegates must be familiar with UNIX environments and basic command lines, and will require sound knowledge of the technology and analytical tools of NGS. Note there will be no introductory concepts covered during the 2 sessions.

Seats are limited, so be early to register. Further information can be found at the workshop website: <http://www.adelaide.edu.au/acad/events/bioinfo17/> Venue: The University of Adelaide North Terrace Campus, Adelaide

“raymond.tobler@adelaide.edu.au”  
<raymond.tobler@adelaide.edu.au>

---

## BangaloreIndia PopGen Mar5-Mar17

Dear Colleagues,

We are happy to announce the ‘Third Bangalore school on Population Genetics and Evolution’ (<https://www.icts.res.in/program/PGE2018>). This school aims to expose students and researchers from diverse backgrounds to the basics and the forefront of current research in population genetics. In addition to evolutionary biology students, we welcome students of mathematics, medicine, physics and statistics who are interested in evolutionary theory.

There is no registration fee for participating in this program.

Dates: March 5-March 17, 2018

Venue: ICTS, Bangalore, India

Application deadline: November 15, 2017

Lecturers:

Santiago Elena (IBMCP, Spain) Daniel Fisher (Stanford University, USA) Joachim Krug (Cologne University, Germany) Magnus Nordborg (Gregor Mendel Institute, Vienna, Austria) Maria Orive (University of Kansas, USA) Ophelie Ronce (ISEM, Montpellier, France)

Organisers: Deepa Agashe (NCBS, Bangalore), Kavita Jain (JNCASR, Bangalore)

Please contact us at: [popgen2018@icts.res.in](mailto:popgen2018@icts.res.in)

“popgen2018@icts.res.in” <popgen2018@icts.res.in>

---

## Barcelona PhenotypeGenotype Jan23-26 Scholarships

Dear colleagues,

There are some scholarships available for Transmitting Science course “From Phenotype to Genotype: The Genetic Basis of Shape”

Application: <http://www.transmittingscience.org/funding/scholarships/> Deadline for applications: Oct 31st, 2017.

Instructors: Dr. Neus Martínez-Abadías (Centre for Genomic Regulation, Spain) and Dr. Nicolas Navarro (École Pratique des Hautes Études, France).

Dates: Jan 23-26, Barcelona (Spain).

Site: Premises of Sabadell of the Institut Català de Paleontologia Miquel Crusafont (Barcelona, Spain).

Course Webpage: <http://www.transmittingscience.org/courses/genetics-and-genomics/phenotype-genotype-genetic-basis-shape/> Program:

Tuesday, January 23rd, 2018.

Overview of Quantitative Genetics.

Resemblance between relatives.

Fishers variance decomposition: Phenotypic, genetic and environmental variation.

Methods to estimate heritability: From correlation to REML.

Practical.

Heritability of simple univariate shape traits.

Programs: SOLAR, VCE, Wombat.

Wednesday, January 24th, 2018.

Quantitative genetics of shape on a multivariate framework.

Geometric Morphometrics analysis of shape.

Mixed Models for estimating heritability.

G and P: Genetic and phenotypic variance-covariance matrices.

Practical.

Estimation and comparison between G and P components of shape.

Programs: VCE, Wombat, MorphoJ.

Thursday, January 25th, 2018.

Shape and selection.

Response to selection.

Estimation of natural selection.

Practical.

Estimation of hypothetical response to selection: Breeder's equation.

Multiple regression of fitness on shape.

Programs: MorphoJ.

Friday, January 26th, 2018.

QTL mapping of multivariate traits.

Crosses for QTL mapping.

Recombination model.

Interval mapping and Haley-Knott regression.

Practical.

Compute genotype probabilities.

Multivariate regression of shape on genotype probabilities.

Programs: MorphoJ, R / qtl.

Best wishes Sole

Soledad De Esteban-Trivigno, PhD. Scientific Director Transmitting Science  
<http://www.transmittingscience.org/>  
 soledad.esteban@transmittingscience.org

## Berlin AdvancedPython Nov13-17 deadline

Dear all,

we have the last 3 spots available for the course: "Advanced Python for biologists" and the registration deadline is next Friday (20th October; <https://www.physalia-courses.org/courses/course12/>)

Dates: 13-17 November 2017

Where: Berlin (Germany)

Instructor: Dr. Martin Jones (founder, Python for Biologists; <http://www.physalia-courses.org/instructors/t1/>)

Overview

This course is aimed at people who already have a basic knowledge of Python and are interested in using the language to tackle larger problems. In it, we will look in detail at the parts of the language which are particularly useful in scientific programming, and at the tools Python offers for making development faster and easier. The course will use examples and exercises drawn from various aspects of bioinformatics work. After completing the workshop, students should be in a position to (1) take advantage of the advanced language features in their own programs and (2) use appropriate tools when developing software programs.

Who should attend

This course is aimed at researchers and technical workers with a background in biology and a basic knowledge of Python. The Advanced course is aimed at people who want to develop bigger or more complicated programs in Python, or to learn more about the language, or to explore different approaches (object-oriented, functional) to programming. The material covered is very general purpose and can be applied to any kind of problem.

Requirements

Students should have enough biological/bioinformatics background to appreciate the examples and exercise problems (i.e. they should know what a protein accession number, BLAST report, and FASTA sequence is). They should also have basic Python experience (the Introduction to Python for Biologists course will fulfil these requirements). Students should be familiar with the use of lists, loops, functions and conditions in Python and have written at least a few small programs

from scratch.

For the detailed program, please visit our website: <https://www.physalia-courses.org/courses-workshops/-course12/curriculum-12/> Here is the full list of our courses and Workshops: <https://www.physalia-courses.org/courses-workshops/> –

Carlo Pecoraro, Ph.D

Physalia-courses DIRECTOR

info@physalia-courses.org

<http://www.physalia-courses.org/>  
@physacourses

mobile: +49 15771084054

<https://groups.google.com/forum/#!forum/physalia-courses>

Twitter:

course materials (including copies of presentations, practical exercises, data files, and example scripts prepared by the instructing team) will be provided electronically to participants.

Intended audience:

This workshop is mainly aimed at researchers and technical workers with a background in ecology, biodiversity or community biology who want to use molecular tools for biodiversity research and at researchers in other areas of bioinformatics who want to learn ecological applications for biodiversity-assessment. In general, it is suitable for every researcher who wants to join the growing community of metabarcoders worldwide. This workshop will review mostly techniques and software useful for eukaryotic metabarcoding. Other workshops focused on procedures currently used in microbial metabarcoding will be available from Physalia-courses.

Teaching format:

The workshop is delivered over ten half-day sessions (see the detailed curriculum below). Each session consists of roughly a one hour lecture followed by two hours of practical exercises, with breaks at the organizer's discretion.

Assumed background:

No programming or scripting experience is necessary, but some previous expertise using the Linux console and/or R will be most welcome. All examples will be run either in Linux or Mac environments, with some ssh connections to remote servers. For Windows users, a virtual box running Linux under Windows and/or the installation of an ssh client (e.g. PuTTY) will be needed. For MacOSX systems, installation of some additional Python packages might be needed for running the OBITools software suite. The syllabus has been planned for people which have some previous experience running simple commands from a terminal in Linux or Mac and using the R environment (preferently RStudio) for performing basic plots and statistical procedures. You will need to have a laptop with Python 2.7 installed for running OBITools, but no experience with Python is necessary. If in doubt, take a look at the detailed session content below or send an email to us.

Program:

Monday 26th - Classes from 09:30 to 17:30

Session 1. Introduction to metabarcoding procedures. The metabarcoding pipeline.

In this session students will be introduced to the key concepts of metabarcoding and the different next-generation sequencing platforms currently available for implementing this technology. Some examples of results that can

## Berlin Eukaryotic Metabarcoding Feb26-Mar2

2nd edition of our Eukaryotic Metabarcoding Workshop February 26th-March 2nd, 2018 in Berlin (Germany): <https://www.physalia-courses.org/courses-workshops/-course4/> Instructors

Dr Owen S. Wangenstein (University of Salford, UK) <https://www.physalia-courses.org/instructors/t2/> Dr. Vasco Elbrecht (University of Guelph, Canada) <https://www.physalia-courses.org/instructors/t7/> Overview:

Metabarcoding techniques are a set of novel genetic tools for qualitatively and quantitatively assessing biodiversity of natural communities. Their potential applications include (but are not limited to) accurate water quality, soil diversity assessment, trophic analyses of digestive contents, diagnosis of health status of fisheries, early detection of non-indigenous species, studies of global ecological patterns and biomonitoring of anthropogenic impacts. This workshop gives an overview of metabarcoding procedures with an emphasis on practical problem-solving and hands-on work using analysis pipelines on real datasets. After completing the workshop, students should be in a position to (1) understand the potential and capabilities of metabarcoding, (2) run complete analyses of metabarcoding pipelines and obtain diversity inventories and ecologically interpretable data from raw next-generation sequence data and (3) design their own metabarcoding projects, including bioinformatic data analysis and planning of laboratory work. All

be obtained from metabarcoding projects are explained. We will outline the different steps of a typical metabarcoding pipeline and introduce some key concepts. We will also explain the format of the course. In this session, we will check that the computing infrastructure for the rest of the course is in place and all the needed software is installed. Core concepts introduced: high-throughput sequencing, multiplexing, NGS library, metabarcoding pipeline, metabarcoding marker, clustering algorithms, molecular operational taxonomic unit (MOTU), taxonomic assignment.

Session 2. Molecular laboratory protocols. DNA extraction. Metabarcoding markers. Primer design. PCR and library preparation. Good laboratory practice.

In this session we will learn the basics about molecular laboratory procedures needed for metabarcoding. While there will be no hands-on

— / —

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

---

## Berlin Evolution Transposable Elements Apr23-27

Transposable elements

Berlin, 23-27 April 2018

<https://www.physalia-courses.org/courses-workshops/-course24/> Instructor:

Dr. Alexander Suh <https://scholar.google.com/citations?user=3D-J4CG5QAAAAJ&hl=it&oi=ao> (Uppsala University, Sweden)

<https://www.physalia-courses.org/instructors/t22/>  
<https://genomicocosm.wordpress.com/> Topic

Evolution of transposable elements and their de-novo annotation in non-model genomes

Overview

Transposable elements (TEs) are selfish genetic elements which exist in virtually all eukaryotic genomes. Because TEs contain regulatory or coding sequence for their own 'survival' and often occur in large numbers within a genome, they can have strong effects on the transcription or methylation of nearby genes and significantly

promote structural variation or genome size expansion. Accurate annotation of TEs is thus important for many studies in genomics and evolutionary biology. However, TEs are rapidly evolving due to arms races with their host genomes and thus often remain undetected in newly sequenced genomes. One may argue that in-depth annotation of TEs is currently one of the biggest bottlenecks in genomics research of non-model organisms. This is because computational TE analyses require knowledge of TE biology as well as some degree of manual curation to overcome incomplete or erroneous annotations. The present course aims to address this bottleneck by teaching TE biology, computational analyses of TEs in genome assemblies (RepeatModeler, RepeatMasker) and raw read data (dnaPipeTE), and manual analyses of TEs (consensus curation, classification).

Format

At the end of this course, attendants should be able to conduct computational analyses of TEs, interpret the results in the light of TE biology, and improve TE annotations through manual curation. To achieve this, the first three days of the course will provide lectures and practicals on all these topics. The last two days of the course consist entirely of supervised individual practicals to further refine the attendants' skills in computational and manual analyses of TEs, either in their own data or in a course-specific collaborative project. Participation in the collaborative project will be acknowledged through co-authorship on a planned TE manuscript.

Audience

The course is aimed at biologists on the PhD student and postdoc level who are new to TE analyses and/or de-novo annotation of the repetitive fraction of non-model genomes.

Requirements

Attendants will need to use the command line and a sequence alignment program (e.g., BioEdit) on their laptops. Basic knowledge of these will be helpful but is not required. Attendants are encouraged to bring their own genome assembly and/or raw read data but are welcome to join the collaborative project.

Program

Monday 23rd. 09:30-17:30

Day 1: Introduction to TE biology

Lecture on TE diversity

Lecture on TE mechanisms

Lecture on TE classification and nomenclature

Practical on running RepeatMod-

eler/RepeatMasker/dnaPipeTE (I)

Tuesday 24th. 09:30-17:30

Day 2: Introduction to computational analyses of TEs

Lecture on genome size evolution

Practical on running RepeatMod-  
eler/RepeatMasker/dnaPipeTE (II)

Practical on running RepeatMod-  
eler/RepeatMasker/dnaPipeTE (III)

Practical on classification and nomenclature of TEs

Practical on manual curation of TEs (I)

Wednesday 25th. 09:30-17:30

Day 3: Introduction to manual analyses of TEs

Lecture on genetic conflicts

Practical on manual curation of TEs (II)

Practical on manual curation of TEs (III)

Thursday 26th. 09:30-17:30

Day 4: Individual data analyses

Supervised analysis of own data or participation in a  
collaborative project (I)

Supervised analysis of own data or participation in a  
collaborative project (II)

Friday 27th. 09:30-17:30

Day 5: Individual data analyses

Supervised analysis of own data or participation in a  
collaborative project (III)

Supervised analysis of own data or participation in a  
collaborative project (IV)

Available packages: <https://www.physalia-courses.org/courses-workshops/course24/> 1) course-only: course materials and coffee breaks (430 euros VAT incl.)

2) all-inclusive: course materials, coffee breaks, accom-  
modation and meals (695 euros VAT incl.)

Full list of our courses and Workshops

<https://www.physalia-courses.org/courses-workshops/>

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR  
info@physalia-courses.org <http://www.physalia-courses.org/> Twitter: @physacourses mobile: +49  
15771084054

— / —

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](http://mcmaster.ca/~brian/evoldir.html)

## Berlin GenomeAssemblyAnnotation Feb12-16

Dear all,

we have the last few spots left for our course “Assembly and Annotation of genomes” <https://www.physalia-courses.org/courses-workshops/course20/> <https://www.physalia-courses.org/courses-workshops/course20/> to be held in Berlin on February 12-16.

Instructor: Dr. Thomas D. Otto (University of Glasgow, UK; <http://bit.ly/2xevKXw>)

Registration deadline: 12th January, 2018. Last attendees will be seated on a first-come, first-served basis.

Overview

This course will introduce biologists and bioinformaticians to the concepts of de novo assembly and annotation. Different technologies, from Illumina, PacBio, Oxford Nanopore and maybe 10X will be used mixed with different approaches like correction, HiC scaffolding to generate good draft assemblies. Particular attention will be given to the quality control of the assemblies and to the understanding how errors occur. Further, annotation tools using RNA-Seq data will be introduced. An outlook of potential analysis is given. In the end of the course the students should be able to understand what is needed to generate a good annotated genome.

Targeted Audience & Assumed Background

The course is aimed at researchers interested in learning more about genome assembly and annotation. It will include information useful for both the beginner and the more advanced user. We will start by introducing general concepts and then continue to step-by-step describe all major components of a genome assembly and annotation workflow, from raw data all the way to a final assembled and annotated genome. There will be a mix of lectures and hands-on practical exercises using command line Linux.

Attendees should have a background in biology. We will dedicate one session to some basic and advanced Linux concepts. Attendees should have also some familiarity with genomic data such as that arising from NGS sequencers.

Session content

Monday 12th 'V Classes from 09:30 to 17:30 - "get it starting"

#### Session 1: Introduction

In this session I will kick off with an introduction lecture about genome assembly and annotation - the past, the present and the future. I will use this introduction to motivate the five-day course. Next, I will explain the use of the virtual machine (VM), and the use of cloud computing. This is followed by short introduction to Linux (although I would prefer if student know a bit of Linux). Through the morning we will kick off our first assembly and put it through an annotation tool (Companion).

#### Session 2: Visualization

During this afternoon, we are going to visualize the assembled and annotation genome from this morning in Artemis. The aim is to use the viewer to inspect the annotation, correct annotation and write out files. Next, we are going to perform a comparative exercise, (comparing the genome from the morning with a close reference) to understand the concept of syntenic, breakpoint or errors.

#### Session 3: Mapping

In this module, I will teach the basics of read mapping. We will map reads with bwa mem onto a reference and will examine duplications and errors through not proper mapped read pairs. This is important to examine the correctness of assemblies and will be used later the week.

Tuesday 13th 'V Classes from 09:30 to 17:30 - "learn it the old way"

#### Session 4: De Bruijn graph and PAGIT

This module is dedicated to short read assembly. Although it might be superseded due to long reads, understanding the concept of short reads and De Bruijn graph is crucial. After a seminar about this subject, we will assemble the same genome as before, but this time with Illumina: de novo assembly with velvet, contig ordering, error correction. Through comparative genomics we are going to look at errors in the assembly, and how they could be found with remapping short reads, and also split long reads. Last, we are going to compare the assembly to the assembly from Monday. This session will go into the afternoon of Tuesday.

#### Session 5: RNA-Seq

In this session, we will analysis the transcriptome of the sample we assembled so far, motivated through a little talk. In the exercise, we will map RNA-Seq reads, (short and long reads) understanding first the basics of RNA-

Seq, but then will use the reads to correct gene models. We will discuss the concept of alternative splicing.

Finally, we will annotate our assembly with Augustus, using the mapped RNA-Seq data and some manually corrected genes.

Wednesday 14th 'V Classes from 09:30 to 17:30 - "do it yourself" A

#### Session 6: Large genome assembly

First we are going to kick off an assembly of a larger genome, and let it run in the cloud over the day and the night. It will be important during the day to check if the assembly is still running.

#### Session 7: Group Taks I

— / —

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

## Berlin GenomicSelectionInR May21-25

Moving from Association Studies and Genome-wide Scans for Selection towards Genomic Selection (GS) in R

Berlin, May 21st - 25th, 2018

<https://www.physalia-courses.org/courses-workshops/course23/> Instructors

Andrés J. Cortés. University of Gothenburg, Sweden [andres.cortes@bioenv.gu.se](mailto:andres.cortes@bioenv.gu.se)  
<mailto:andres.cortes@bioenv.gu.se>

Matthew W. Blair. Tennessee State University, USA  
[mblair@tnstate.edu](mailto:mblair@tnstate.edu) <mailto:mblair@tnstate.edu>

#### Topics

\* Quantitative Genetics \* QTL mapping and Association Studies \* Genome-Wide Scans for Selection / Genotype-by-Environment (GxE) Interaction \* Breeding Values and Genomic Prediction

#### Goals

\* Understand the utility of genome-wide scans for selection and association studies to improve genomic prediction models \* Learn how to detect and measure

genotype-by-environment (GxE) interaction \* Introduce the basic concepts of genomic selection and its applications \* Illustrate the implementation of various models for genomic prediction in R \* Learn how to validate genomic prediction models \* Discuss some examples on the usefulness of genomic selection

#### Requirements

Bring your own laptop with the following programs installed:

\* Last version of R: <https://www.r-project.org/> \* Last version of the package BGLR: <https://cran.r-project.org/web/packages/BGLR/index.html> \* Last version of Tassel: <http://www.maizegenetics.net/-tassel> \* Last version of Java SE runtime environment (64 bits): <http://www.oracle.com/technetwork/java/javase/downloads/index.html> Program

Every day we will have theoretical sessions in the morning and practical exercises in R in the afternoon.

Day 1. Basics in population genetics and quantitative genetics (linkage and linkage disequilibrium, co-ancestry, breeding values), breeder's equation.

Day 2. Basics in QTL mapping, design and analyses of multi-environment trials, methods for estimating genotype-by-environment (GxE) interaction.

Day 3. Basics in genome-wide scan for selection and association studies.

Day 4. Phenotypic and genotypic variances, covariance between relatives, basic genetic models, methods for estimation and predicting breeding values.

Day 5. Complexity of genomic prediction, methods for genomic prediction coupled with GWAS and some empirical results.

For the detailed program, please visit our website: <https://www.physalia-courses.org/courses-workshops/-course23/curriculum-23/> Available packages:

- 1) course-only: course materials and coffee breaks (480 euros VAT incl.)
- 2) all-inclusive: course materials, coffee breaks, accommodation and meals (795 euros VAT incl.)

Full list of our courses and Workshops

<https://www.physalia-courses.org/courses-workshops/>

Carlo Pecoraro, Ph.D

Physalia-courses DIRECTOR

info@physalia-courses.org

<http://www.physalia-courses.org/>

@physiacourses

mobile: +49 15771084054

<https://groups.google.com/forum/#!forum/physalia-courses> Carlo Pecoraro <info@physalia-courses.org>

---

## Berlin RADseq Dec4-8

Dear all,

we still have a few spots left for the course "RADseq data analysis" (<https://www.physalia-courses.org/-courses-workshops/course16/>)

Registration deadline: November 3rd, 2017.

Dates: 4-8 December 2017

Where: Berlin

Instructors:

Dr. Naiara Rodriguez Ezpeleta (Azti tecnalia, Spain)

Dr. Josie Paris (University of Sussex, UK)

Topic:

Reduced representation genome sequencing (RADseq) data analysis for population genetics, association studies and phylogenetics

Overview

Reduced representation genome sequencing methods are revolutionizing evolutionary analyses of non-model organisms. Several data generation and data analysis protocols have been developed to generate thousands of sequence variants in hundreds of individuals at relative low cost and speed. In this course, we will introduce the different approaches for obtaining reduced representation genome sequencing data and will specially focus on the data analysis. We will cover all necessary steps to obtain genome variants from short read data that are informative for population genetics, phylogenetic and association studies.

Format

The course will be delivered over the course of five days. Each day will include an introductory lecture with class discussion of key concepts. The remainder of each day will consist of practical hands-on sessions. These sessions will involve a combination of both mirroring exercises with the instructor to demonstrate a skill as well as applying these skills on your own to complete individual exercises. After and during each exercise, interpretation

Twitter:

of results will be discussed as a group.

Who should attend

This course is aimed at researchers and technical workers who are generating and/or analyzing reduced representation genome sequencing data (RAD-seq, ddRAD, 2bRAD, GBS). Examples demonstrated in this course will involve primarily non-model organisms and examples of applications of this data type for different purposes will be covered. Attendees should have a background in biology. We will dedicate one session to some basic and advanced Linux concepts. Attendees should have also some familiarity with genomic data such as that arising from NGS sequencers.

For the detailed program, please visit our website: <https://www.physalia-courses.org/courses-workshops/-course16/curriculum-16/> Here is the full list of our courses and Workshops: <https://www.physalia-courses.org/courses-workshops/> -

Carlo Pecoraro, Ph.D

Physalia-courses DIRECTOR

info@physalia-courses.org

<http://www.physalia-courses.org/>  
@physacourses

mobile: +49 15771084054

<https://groups.google.com/forum/#!forum/physalia-courses> Carlo Pecoraro <info@physalia-courses.org>

---

## Crete ComputationalMolEvol May6-17

REMINDER:-

Dear Community,

The 10th summer school on Computational Molecular Evolution organized by Alexis Stamatakis, Ziheng Yang, Nick Goldman, Cilia Antoniou, and Laura Emery will take place from May 6 - 17 2018 in Crete, Greece again.

Please visit the course web-site for further details, applications are now open. Please feel free to circulate this message.

<http://meetings.embo.org/event/18-computational-evolution> Nick Goldman

Nick Goldman <http://www.ebi.ac.uk/research/goldman>  
European Molecular Biology Laboratory tel: +44-

(0)1223-492530 European Bioinformatics Institute tel: +44-(0)1223-494522 Wellcome Genome Campus, Hinxton, Cambridge CB10 1SD, UK

“goldman@ebi.ac.uk” <goldman@ebi.ac.uk>

---

## DukeU EvolutionaryPhenotype Dec11-14

This is a resend to remind interested folks that the deadline for applications is this coming Monday. Please distribute to others who you know might be interested!

Call for Participation:

Computable evolutionary phenotype knowledge: a hands-on workshop

The Phenoscope (<http://phenoscope.org>) project is hosting a hands-on workshop on Dec 11-14, 2017, at Duke University in Durham, North Carolina.

Evolutionary phenotype data that is amenable to computational data science, including computation-driven discovery, remains relatively new to science. Therefore use-cases and applications that effectively exploit these new capabilities are only beginning to emerge. If you are interested in discovering, linking to, recombining, or computing with machine-interpretable evolutionary phenotypes, this is the workshop for you!

The event will bring together a diverse group of people to collaboratively design and work hands-on on targets of their interest that take advantage and promote reuse of [Phenoscope]'s online evolutionary data resources and services. The event is designed as a hands-on unconference-style workshop. Participants will break into subgroups to collaboratively tackle self-selected work targets.

The full Call for Participation, including motivation and scope, is posted here: <https://hackmd.io/s/Sk6Xa7Eq-#> To apply to participate in the event, please fill out the following form by Oct 9, 2017: < <https://goo.gl/-tt18gR> > Travel sponsorship is available but limited, as is space.

- Hilmar Lapp -:- genome.duke.edu -:- lappland.io

“Hilmar.Lapp@duke.edu” <Hilmar.Lapp@duke.edu>

---

## Huddersfield UK ComputingSkillsMolBiology Dec13-15

**Next Generation Biologists: Essential Computing Skills for Molecular Biology** is a BBSRC-STARs programme-funded project to introduce and train researchers in the essential skills and best practices in scientific computing and bioinformatics. The format of the materials and the nature of the delivery is based on the successful Software Carpentry (<http://software-carpentry.org/>) blended-learning model, where students learn by developing skills through hands-on live coding and peer programming sessions led by experienced Software Carpentry instructors and supported by a small team of helpers. This is the second workshop in the series.

**AUDIENCE** The workshop is aimed at researchers with little or no experience in programming and data analysis who nevertheless need these approaches in their research in the life sciences.

**ORGANISERS AND INSTRUCTORS** The main organisers of the workshops are Dr Mary J. O'Shea (Connell) (@EvolMolly), Dr Martin Callaghan (both at the University of Leeds) and Dr Jarek Bryk (@jarekbryk at the University of Huddersfield). Drs Callaghan and Bryk are Software Carpentry Instructors. The project is a joint initiative of the University of Leeds and the University of Huddersfield.

**PRELIMINARY PROGRAMME** Wednesday Introduction to the fundamentals of UNIX, command-line interface and shell.

Thursday Introduction to fundamentals of R with R Studio, including data and analysis reproducibility, concluded with example analysis of high-throughput data.

Friday A "hackathon" day, during which participants will use skills learned in earlier days to solve a real-life data analysis problem of their choosing or a walk-through of an analysis of a real-life dataset using learned skills in shell and R.

**DATE** The workshop will be run on the 13-15th December 2017 (Wednesday to Friday inclusive).

**VENUE** The workshop will take place at the University of Huddersfield, UK, right in between Manchester and Leeds on the Trans Pennine Railway in West Yorkshire (<https://www.hud.ac.uk/about/maps/#/where>).

**COSTS** The workshop is free of charge for all BBSRC-funded researchers, as well as staff and students from the Universities of Leeds and Huddersfield. For all other participants a course fee of \$170 will apply that will need to be paid before the workshop begins. Travel and accommodation costs are \*not\* covered by the organisers.

**HOW TO APPLY** To apply for a place on the workshop, prepare a maximum one-page long curriculum vitae and a 200 word statement detailing why this course is of particular importance to your current research. Please combine the two \*into a single pdf file\* and send it to Dr Mary J. O'Shea (Connell and Bede Constantinides at [NextGenBiolStars@gmail.com](mailto:NextGenBiolStars@gmail.com) \*by midnight 21st November 2017\*). The selection committee will notify successful applicants by the end of 23rd of November. The workshop will be limited to 25 participants, who are expected to bring their own computers on the workshop.

More details about the project and the workshop are available on our website at <http://nextgenbiologists.org>. We are also on Twitter at @nextgenbiol (the \$H(\$I(\$ is important :-)).

University of Huddersfield inspiring tomorrow's professionals.

Jarek Bryk <[J.Bryk@hud.ac.uk](mailto:J.Bryk@hud.ac.uk)>

---

## Online LandscapeGenetics Jan17-May9

Online Landscape Genetics Graduate Student Course Available Jan 17 - May 9, 2018, Wed 8:30 - 10:30 PST (also can be taken at any time using taped lectures)

Cost \$500 individuals, \$1000 Groups

Course Organizers: Helene Wagner, Melanie Murphy, and Lisette Waits Co-Instructors: Niko Balkenhol, Jeff Bowman, Sam Cushman, Anne Charpentier, Michelle DiLeo, Marie-Josée Fortin, Caren Goldberg, Nusha Keyghobadi, Erin Landguth, Stephanie Manel, Sean Schoville, Kim Selkoe, Steve Spear, and others

**Course description** This course on Landscape Genetics provides a unique opportunity for interdisciplinary training and provides an overview of the field of landscape genetics. The course caters to students in basic and applied ecology, conservation and population genetics, landscape ecology, evolutionary biology and conservation biology. A key objective of landscape genetics is to

study how landscape modification and habitat fragmentation affect organism dispersal and gene flow across the landscape. Landscape genetics requires highly interdisciplinary specialized skills making intensive use of technical population genetic skills and spatial analysis tools (spatial statistics, GIS tools and remote sensing). Even when students receive disciplinary training in these areas, educational programs often lack the necessary linkage and synthesis among disciplines. This linkage can only be accomplished after experts from each discipline work together to develop guiding principles for this new research area.

Landscape Genetics will be concurrently offered at multiple universities across the globe, giving students the opportunity to learn from international experts and work with peers from outside institutions. For students who are not members of the participating institutions, we are offering a web-based online course to reach a broader audience. Each course meeting will start with a live web-cast lecture (no special software required) by an expert on the topic that introduces foundations and methods and highlights points for discussion in local seminar groups.

After breaking out into local course group discussion (including a discussion group for online course students), a web-based discussion across campuses will wrap up the weekly topic. Students who are unable to make it to live-cast of lectures can view taped lectures. In addition, students can choose to participate in an optional lab section using R and/or interdisciplinary group term projects with web-based collaboration across institutions. The final two options are provided to help students develop analytical skills in Landscape Genetics. Students who participate in group projects will have the option of applying to attend a project synthesis meeting in Coeur d'Alene, Idaho in May 2018.

Course website: <https://sites.google.com/site/dgs2018landscapegenetics/> How to register? Please register here: <https://goo.gl/forms/iEMKsRSbKp8KN2511>. A link to the registration form can also be found on the course website.

Faculty who would like to add a local section of the course at their university can register as a group or multiple students at one institution can register as a group.

Lisette Waits, PhD Distinguished Professor Department Head Fish and Wildlife Sciences University of Idaho Moscow, ID 83844-1136 (208) 885-7823

“Waits, Lisette (lwaits@uidaho.edu)”  
<lwaits@uidaho.edu>

---

## Paris StatisticsForEvoEcol Nov20-24 Reminder

The staple of data in evolutionary ecology consist of counts, proportions and durations. This course will enable participants to represent and analyse their own data using GLM and mixed models (GLMM) developed for the analysis of such data. The course is organized by team VPA (Phenotypic Variability and Adaptation) from iEES Paris, the Institute of Ecology and Environmental Sciences. It is primarily targeted at PhD students, but open to everyone.

Participants will follow a number of lectures, and we are numerous present to assist them with the analysis of their own data, as in previous incarnations of this course. This is a convivial course where you can get something done.

The course will take place from 20-24 November 2017 at the CEREEP ecological station in Nemours, one hour from the centre of Paris and has GLM and mixed models as main subject, with extra teaching on graphics, coding hygiene and state space models.

The course website is <https://glm2017vpa.sciencesconf.org/>. We still have a number of places for participants. The course cost has been reduced as much as possible, to achieve a democratic course fee which is 250 euro including food and accommodation at the course site. The deadline for registration is November 1. Registration and payments are to be done online on the course website. More information: tvdooren@gmail.com

All the best, Tom Van Dooren tomvandooren.eu  
tvdooren@gmail.com

---

## Roscoff BioinformaticsEvolutionNetwork Jun24-30

Introduction to the concepts and methods of networks in evolutionary studies (sequence similarity networks, genome networks and multipartite graphs)

This free summer school will be held in Roscoff, France, between June 24th 2018 (date of arrival) and June 30th (date of departure).

—This school is designed in priority for biologists and bioinformaticians (completing a PhD degree or currently post-doctoral fellows, as well as researchers), who wish to learn the bases of network analyses.

—The main notions (regarding various types of networks, the relevance of their analyses, and some bases in graph theory) will be introduced by short theoretical classes, followed by practical case-studies, introducing the basics in programming required to run such network analyses as well as to use the existing software/tools. Our goal is that, by the end of this summer school, all applicants will be qualified to perform network analyses of their own datasets.

—More precisely, we will focus on the following concepts and methods:

— Introgressive evolution and large-scale diversity studies.

— Construction and analysis of sequence similarity networks (construction and sorting of connected components, definition of gene families, search for composite genes, implementation of centrality measures)

— Construction and analysis of genome networks (construction of weighted genome networks, implementation of their diameter, shortest paths, analyses of labeled nodes, etc.)

— Construction and analysis of gene-genome bipartite graphs (detection of connected components, and their articulation points, and twins)

—In addition, 9 conferences on networks and evolution will be delivered by leading European and American scientists— during this school.

—This summer school is funded by ERC grant (FP7/2007-2013 Grant Agreement # 615274). Hence, registration is free, housing and food (breakfast, lunch) are also fully covered. Applicants will only need to fund their travel to Roscoff and their evening dinners.

—10 places only are available, with a mandatory requirement: applicants must show basic computer skills (i.e. to be familiar with Linux environment and with at least one programming language, preferably Python).

—Applications are to be submitted asap, and no later than January 15th 2018, by email to :

eric.bapteste@upmc.fr, and contain a brief letter describing why this class will be of significant interest for the applicant and his/her future studies.

—Applicants will be selected based on their motivation, and their resume, including the names of two scientific referees for PhD and postdoctoral fellows.

— We are excited to meet you soon in Roscoff.

—Eric Bapteste + Philippe Lopez + Eduardo Corel

Eric Bapteste <epbapteste@gmail.com>

---

## SanDiego PAG- PopulationConservationGenomics Jan13-17

Call for Abstracts Population and Conservation Genomics Workshop Plant and Animal Genome XXVI International Conference <http://www.intlpag.org/> January 13-17, 2018 Town and Country Convention Centre, San Diego, California

The annual Population and Conservation Genomics workshop will be held at the Plant and Animal Genome XXVI International conference. The workshop is scheduled on Saturday, January 13, 2018 and Monday, January 15, 2018. You are invited to attend this Workshop and submit abstracts for oral presentations on any population and conservation genomics aspect of both plants and animals. The topics may include (but not limited to): population genomic diversity and structure; molecular evolution; landscape genomics; seascape genomics; natural selection and local adaptation; population epigenomics; eDNA; 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.

Due to a large number of high quality abstracts received in the recent years, the workshop time has been extended to two time slots. Thus, the workshop has a provision for 12 invited speakers. Most of the invited presentations will be selected from the submitted abstracts. Please send your abstract of no more than 250 words by email to Om Rajora (Om.Rajora@unb.ca) as an attached Word file no later than October 27, 2017. You will be notified by November 3, 2017 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](mailto:Om.Rajora@unb.ca) Tel: (506) 458-7477 Fax: (506) 453-3538

Om Rajora <[om.rajora@unb.ca](mailto:om.rajora@unb.ca)>

[om.rajora@unb.ca](mailto:om.rajora@unb.ca)

enquires please email Jessica Stapley at [monteverita@env.ethz.ch](mailto:monteverita@env.ethz.ch)

Jessica Stapley Fellow, Adaptation to a Changing Environment (ACE)

Institute of Integrative Biology, ETH Department of Environmental Sciences Universitätstrasse 16 ETH Zentrum, CHN G 31.2 CH-8092 Zürich

email: [jessica.stapley@env.ethz.ch](mailto:jessica.stapley@env.ethz.ch) web: <http://jessicastapley.com/> twitter: @jessstapley Tel: +41-44-632 8399

Jessica Stapley <[jessica.stapley@env.ethz.ch](mailto:jessica.stapley@env.ethz.ch)>

---

## Switzerland

### WholeGenomeSeqAnalysis Feb4

Whole Genome Sequence Assembly and Annotation: the long and the short of it.

The Winter School is a intensive 5-day workshop on how to Assemble and Annotate Whole Sequence Data - with a focus on de novo whole genome assembly and analysis of complex Eukaryote genomes. The Winter School will combine lectures and computer based practicals and will be most valuable to those who have, or will soon have, whole genome sequence data.

Date: 4-9 February 2018 Where: Monte Verità, Switzerland Webpage: <http://www.adaptation.ethz.ch/education/wgs-winter-school-2018.html> Outline of Topics and Instructors

Whole Genome Sequence Assembly John Davey University of York, UK. <https://scholar.google.com/citations?user=Qeq92t8AAAAJ&hl=en> Hi-C and 3D Whole Genome Assembly Olga Dudchenko Baylor College of Medicine, USA. <http://www.aidenlab.org/publications.html> Whole Genome Sequence Annotation Carson Holt University of Utah, USA. <https://scholar.google.com/citations?user=4RG9y6EAAAAJ&hl=en> Manual Gene Annotation Monica Monuz-Torres Phoenix Bioinformatics, USA. <https://scholar.google.com/citations?user=GaQVcBAAAAAJ> Transposable Element Annotation Anne Roulin University of Zurich, Switzerland. <http://www.botinst.uzh.ch/en/research/genetics/roulin/people.html> Whole Genome Sequence Annotation Robert Waterhouse University of Lausanne, Switzerland. <http://rmwaterhouse.org/> Registration closes 10th November 2017

Spaces are limited to 30 participants. See our webpage for more details. <http://www.adaptation.ethz.ch/education/wgs-winter-school-2018.html> For further

---

## UEdinburgh LinuxWorkflows Dec11-15

INTRODUCTION TO LINUX AND WORKFLOWS FOR BIOLOGISTS DATE: Monday 11 - Friday 15 December 2017 VENUE: The King's Buildings, The University of Edinburgh, Edinburgh, Scotland, UK

REGISTRATION DEADLINE: Monday 27 November 2017 noon CANCELLATION DEADLINE: Monday 4 December 2017 noon PLACES: 20 (first come, first served) REGISTRATION FEE: ???525 (includes coffee/tea, but no lunch) INFORMATION: Bert Overduin ([bert.overduin@ed.ac.uk](mailto:bert.overduin@ed.ac.uk)), Martin Jones ([martin@pythonforbiologists.com](mailto:martin@pythonforbiologists.com)) TO REGISTER: <http://genomics.ed.ac.uk/services/introduction-linux-and-workflows-biologists>

Most high-throughput bioinformatics work these days takes place on the Linux command line. The programs which do the majority of the computational heavy lifting – genome assemblers, read mappers, and annotation tools – are designed to work best when used with a command-line interface. Because the command line can be an intimidating environment, many biologists learn the bare minimum needed to get their analysis tools working. This means that they miss out on the power of Linux to customise their environment and automate many parts of the bioinformatics workflow. This course will introduce the Linux command line environment from scratch and teach students how to make the most of its tools to achieve a high level of productivity when working with biological data.

INSTRUCTORS Dr. Martin Jones (Founder, Python for Biologists) Dr. Bert Overduin (Training and Outreach Bioinformatician, Edinburgh Genomics) WORK-

**SHOP FORMAT** The workshop is delivered over nine half-day sessions (see the detailed curriculum below). Each session consists of roughly a one hour lecture followed by two hours of practical exercises, with breaks at the organiser's discretion. There will also be plenty of time for students to discuss their own problems and data.

**WHO SHOULD ATTEND** This workshop is aimed at researchers and technical workers with a background in biology who want to learn to use the Linux operating system and the command line environment.

**REQUIREMENTS** Students should have enough biological background to appreciate the examples and exercise problems, and have at least some interest in working with DNA sequence data. No previous computer skills are necessary, as we will introduce Linux starting with the very basics.

Students need to bring a laptop with a Linux virtual machine installed (we will distribute instructions for downloading and installing the virtual machine before the course starts).

**SESSION CONTENT 1.** The design of Linux In the first session we briefly cover the design of Linux: how is it different from Windows/OSX and how is it best used? We'll then jump straight onto the command line and learn about the layout of the Linux filesystem and how to navigate it. We'll describe Linux's file permission system (which often trips up beginners), how paths work, and how we actually run programs on the command line. We'll learn a few tricks for using the command line more efficiently, and how to deal with programs that are misbehaving. We'll finish this session by looking at the built in help system and how to read and interpret manual pages.

2. System management We'll first look at a few command line tools for monitoring the status of the system and keeping track of what's happening to processor power, memory, and disk space. We'll go over the process of installing new software from the built in repositories (which is easy) and from source code downloads (which is trickier). We'll also introduce some tools for benchmarking software (measuring the time/memory requirements of processing large datasets).

3. Manipulating tabular data Many data types we want to work with in bioinformatics are stored as tabular plain text files, and here we learn all about manipulating tabular data on the command line. We'll start with simple things like extracting columns, filtering and sorting, searching for text before moving on to more complex tasks like searching for duplicated values, summarizing large files, and combining simple tools into

long commands.

4. Constructing pipelines In this session we will look at the various tools Linux has for constructing pipelines out of individual commands. Aliases, shell redirection, pipes, and shell scripting will all be introduced here.

We'll also look at a couple of specific tools to help with running tools on multiple processors, and for monitoring the progress of long running tasks.

5. EMBOSS EMBOSS is a suite of bioinformatics command-line tools explicitly designed to work in the Linux paradigm. We'll get an overview of the different sequence data formats that we might expect to work with, and put what we learned about shell scripting to biological use by building a pipeline to compare codon usage across two collections of DNA sequences.

6. Using a Linux server Often in bioinformatics we'll be working on a Linux server rather

— / —

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>

## UK AdvancingInR Dec4-8

PR statistics has a great course coming up aimed at evolutionary biologists with basic stats knowledge and R experience.

“Advancing in statistical modelling for evolutionary biologists and ecologists using R”

The course is aimed at biologists with a basic to moderate knowledge in R. The course content is designed to bridge the gap between basic R coding and more advanced statistical modelling. This five day course will consist of series of modules, each lasting roughly half a day and comprised of lectures and practicals designed to either build required skills for future modules or to perform a family of analyses that is frequently encountered in the biological literature.

Delivered by Dr. Luc Bussiere and Dr. Tom Houslay

[www.prstatistics.com/course/advancing-statistical-modelling-using-r-advr07/](http://www.prstatistics.com/course/advancing-statistical-modelling-using-r-advr07/) This course will run from 4th - 8th December 2017 at Margam Discovery Centre, Wales

Course content is as follows

Monday 4th - Classes from 09:00 to 17:00 Course introduction; techniques for data manipulation, aggregation, and visualisation; introduction to linear regression. Packages: {tidyr}, {dplyr}, {ggplot2}

Tuesday 5th - Classes from 09:00 to 17:00 Linear models (diagnostics, collinearity, scaling, plotting fitted values); fitting and interpreting interaction terms; model selection and simplification; general linear models and ANCOVA. Packages: {stats}, {car}

Wednesday 6th - Classes from 09:00 to 17:00 Generalized linear models (logistic and Poisson regression); predicting using model objects and visualizing model fits. Packages: {broom}, {visreg}, {ggplot2}

Thursday 7th - Classes from 09:00 to 17:00 Mixed effects models in theory and practice; visualising fixed and random effects. Packages: {lme4}, {broom}, {ggplot2}, {sjPlot}

Friday 8th - Classes from 09:00 to 16:00 Fitting non-linear functions (polynomial & mechanistic models); brief introduction to more advanced topics & combining methods (e.g., generalised linear mixed effects, nonlinear mixed effects, and zero-inflated and zero-altered models). Packages: {nlstools}

Please email any inquiries to [oliver-hooker@prstatistics.com](mailto:oliver-hooker@prstatistics.com) or visit our website [www.prstatistics.com](http://www.prstatistics.com) Please feel free to distribute this material anywhere you feel is suitable

Other up coming courses

1. ECOLOGICAL NICHE MODELLING USING R #ENMR 16th - 20th October 2017, SCENE, Scotland, Dr. Neftali Sillero <http://www.prstatistics.com/course/ecological-niche-modelling-using-r-enmr01/> 2. INTRODUCTION TO BIOINFORMATICS USING LINUX #IBUL 16th - 20th October, SCENE, Scotland, Dr. Martin Jones <https://www.prinformatics.com/course/introduction-to-bioinformatics-using-linux-ibul02/> 3. REPRODUCIBLE DATA SCIENCE FOR POPULATION GENETICS #RDPG 23rd - 27th October 2017, Wales, Dr. Thibaut Jombart, Zhian Kavar <https://www.prstatistics.com/course/reproducible-data-science-for-population-genetics-rdpg01/> 4. STRUCTURAL EQUATION MODELLING FOR ECOLOGISTS AND EVOLUTIONARY BIOLOGISTS USING R #SEMR 23rd - 27th October 2017, Wales, Prof Jarrett Byrnes, Dr. Jon Lefcheck <http://www.prstatistics.com/course/structural-equation-modelling-for-ecologists-and-evolutionary-biologists-semr01/> 5. LANDSCAPE (POPULATION) GENETIC DATA ANALYSIS USING R #LNDG 6th - 10th November 2017, Wales, Prof. Rodney Dyer <http://www.prstatistics.com/course/landscape->

[genetic-data-analysis-using-r-lndg02/](http://www.prstatistics.com/course/genetic-data-analysis-using-r-lndg02/) 6. APPLIED BAYESIAN MODELLING FOR ECOLOGISTS AND EPIDEMIOLOGISTS #ABME 20th - 25th November 2017, SCENE, Scotland, Dr. Matt Denwood <http://www.prstatistics.com/course/applied-bayesian-modelling-ecologists-epidemiologists-abme03/> 7. INTRODUCTION TO PYTHON FOR BIOLOGISTS #IPYB 27th Nov - 1st Dec, Wales, Dr. Martin Jones <http://www.prinformatics.com/course/introduction-to-python-for-biologists-ipyb04/> 8. ADVANCING IN STATISTICAL MODELLING USING R #ADV R 4th - 8th December 2017, Wales, Dr. Luc Bussiere, Dr. Tom Houslay, Dr. Ane Timenes Laugen,

— / —

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>

## UK IntroToPythonForBiologists Nov27-Dec1

INTRODUCTION TO PYTHON FOR BIOLOGISTS <http://www.prinformatics.com/course/introduction-to-python-for-biologists-ipyb04/> This course is being delivered by Dr Martin Jones, an expert in Python and author of two text books, Python for Biologists [<http://www.amazon.com/Python-Biologists-complete-programming-beginners/dp/1492346136/>] Advanced Python for Biologists [<http://www.amazon.com/Advanced-Python-Biologists-Martin-Jones/dp/1495244377/>].

Prices start at £475 and accommodation packages can be added for an additional £260, includes all meals and accommodation on site for the week, arrival Sunday before the course starts) Course overview: Python is a dynamic, readable language that is a popular platform for all types of bioinformatics work, from simple one-off scripts to large, complex software projects. This workshop is aimed at complete beginners and assumes no prior programming experience. It gives an overview of the language with an emphasis on practical problem-solving, using examples and exercises drawn from various aspects of bioinformatics work. After completing the workshop, students should be in a position to (1) apply the skills they have learned to tackle problems in their own research and (2) continue their Python education in a self-directed way.

Intended audience: This workshop is aimed at all researchers and technical workers with a background in biology who want to learn programming. The syllabus has been planned with complete beginners in mind; people with previous programming experience are welcome to attend as a refresher but may find the pace a bit slow.

Teaching format: The workshop is delivered over ten half-day sessions (see the detailed curriculum below). Each session consists of roughly a one hour lecture followed by two hours of practical exercises, with breaks at the organizer's discretion. There will also be plenty of time for students to discuss their own problems and data.

Assumed background: Students should have enough biological background to appreciate the examples and exercise problems (i.e. they should know about DNA and protein sequences, what translation is, and what introns and exons are). No previous programming experience or computer skills (beyond the ability to use a text editor) are necessary, but you'll need to have a laptop with Python installed.

Curriculum:

Monday 27th Module 1: Introduction.

We will start with a general introduction to Python and explain why it is useful and how learning to program can benefit your research. Some time will be taken to explain the format of the course. We will outline the edit-run-fix cycle of software development and talk about how to avoid common text editing errors. In this session, we also check that the computing infrastructure for the rest of the course is in place. Core concepts introduced: source code; text editors; whitespace; syntax and syntax error; and Python versions.

Module 2: Output and text manipulation. This session will show students how to write very simple programs that produce output to the terminal and in doing so become comfortable with editing and running Python code. This session also introduces many of the technical terms that we'll rely on in future sessions. We will run through some examples of tools for working with text and show how they work in the context of biological sequence manipulation. We also cover different types of errors and error messages and learn how to go about fixing them methodically. Core concepts introduced: terminals; standard output; variables and naming; strings and characters; special characters; output formatting; statements; functions; methods; arguments; comments.

Tuesday 28th

Module 3: File IO and user interfaces. We will discuss

about the importance of files in bioinformatics pipelines and workflows during this session, and we then explore the Python interfaces for reading from and writing to files. This involves introducing the idea of types and objects and a bit of discussion about how Python interacts with the operating system. The practical session is spent combining the techniques from session 2 with the file IO tools to create basic file-processing scripts. Core concepts introduced: objects and classes; paths and folders; relationships between variables and values; text and binary files; newlines.

Module 4: Flow control 1: loops. A discussion of the limitations of the techniques learned in session 3 quickly reveals that flow control is required to write more sophisticated file-processing programs, at this point we will progress on to the concept of loops. We look at the way in which Python loops work, and how they can be used in a variety of contexts. We explore the use of loops and lists together to tackle some more difficult

— / —

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>

## UK LandscapeGenomics Nov6-10 FINALCALL

FINAL CALL for “Landscape genomics/genetics using R”

Delivered by Dr. Rodney Dyer a leading expert in landscape genetics.

<http://www.prstatistics.com/course/landscape-genetic-data-analysis-using-r-ldg02/> This course will run from 6th - 10th November 2016 at Margam Discovery Centre, Wales.

The term 'landscape genetics' has been applied studies that integrate ecological context and intervening landscape into population genetic analyses of contemporary processes such as gene flow and migration. This course will cover the basics of both quantitative landscape ecology and population genetics, focusing on how we develop and evaluate spatial/genetic analyses using the R platform

Course content is as follows Day 1 - Spatial & Ecological Data - Installation & configuring R & RStudio -

Acquiring spatial data, projections, and visualization - Vector and raster data

Day 2 - Genetic markers and basic analyses - Genetic markers and sampling - Genetic distance, diversity, and structure - Ordination techniques based upon genetic markers

Day 3 - Integrating spatial and genetic data - Barrier detection & population division - Resistance Modeling - Mantel and distance regressions - Remote sensing - LiDAR and Hyperspectral data

Day 4 - Integrating spatial and genetic data - Spatial autocorrelation - Network Approaches - PCMN & Redundancy

Day 5 - Adaptive Genetic Variance - Outliers & gradients - Quantitative genetics, why we should care. - Chromosome walking

Please email any inquiries to [oliver-hooker@prstatistics.com](mailto:oliver-hooker@prstatistics.com) or visit our website [www.prstatistics.com](http://www.prstatistics.com) Please feel free to distribute this material anywhere you feel is suitable

Upcoming PR statistics courses

1. 1. ECOLOGICAL NICHE MODELLING USING R #ENMR 16th - 20th October 2017, SCENE, Scotland, Dr. Neftali Sillero <http://www.prstatistics.com/course/ecological-niche-modelling-using-r-enmr01/>
2. INTRODUCTION TO BIOINFORMATICS USING LINUX #IBUL 16th - 20th October, SCENE, Scotland, Dr. Martin Jones <https://www.prinformatics.com/course/introduction-to-bioinformatics-using-linux-ibul02/>
3. REPRODUCIBLE DATA SCIENCE FOR POPULATION GENETICS #RDPG 23rd - 27th October 2017, Wales, Dr. Thibaut Jombart, Zhian Kavar <https://www.prstatistics.com/course/reproducible-data-science-for-population-genetics-rdpg01/>
4. STRUCTURAL EQUATION MODELLING FOR ECOLOGISTS AND EVOLUTIONARY BIOLOGISTS USING R #SEMR 23rd - 27th October 2017, Wales, Prof Jarrett Byrnes, Dr. Jon Lefcheck <http://www.prstatistics.com/course/structural-equation-modelling-for-ecologists-and-evolutionary-biologists-semr01/>
5. LANDSCAPE (POPULATION) GENETIC DATA ANALYSIS USING R #LNDG 6th - 10th November 2017, Wales, Prof. Rodney Dyer <http://www.prstatistics.com/course/landscape-genetic-data-analysis-using-r-lndg02/>
6. APPLIED BAYESIAN MODELLING FOR ECOLOGISTS AND EPIDEMIOLOGISTS #ABME 20th - 25th November 2017, SCENE, Scotland, Dr. Matt Denwood <http://www.prstatistics.com/course/applied-bayesian-modelling-ecologists-epidemiologists-abme03/>
7. INTRODUCTION TO PYTHON FOR BIOLOGISTS #IPYB 27th Nov - 1st Dec, Wales,

- Dr. Martin Jones <http://www.prinformatics.com/course/introduction-to-python-for-biologists-ipyb04/>
8. ADVANCING IN STATISTICAL MODELLING USING R #ADVR 4th - 8th December 2017, Wales, Dr. Luc Bussiere, Dr. Tom Houslay, Dr. Ane Timenes Laugen, <http://www.prstatistics.com/course/advancing-statistical-modelling-using-r-advr07/>
9. INTRODUCTION TO BAYESIAN HIERARCHICAL MODELLING #IBHM 29th Jan - 2nd Feb 2018, SCENE, Scotland, Dr. Andrew Parnell <http://www.prstatistics.com/course/introduction-to-bayesian-hierarchical-modelling-using-r-ibhm02/>
10. PHYLOGENETIC DATA ANALYSIS USING R #PHYL 28th Jan - Feb 2nd 2018, SCENE, Scotland, Dr. Emmanuel Paradis

— / —

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>

---

**UManchester**  
**OnlineCourseMorphometrics**  
**Nov6-Dec15**

Dear Colleagues

I am pleased to announce this year's morphometrics course from the University of Manchester. This year's course will run in the six weeks from 6 November to 15 December 2017.

Course content: \* Data acquisition: the kinds of data and the equipment used to collect them. \* Definitions of size and shape \* Geometric methods to characterise shape from a configuration of landmark points (Procrustes superimposition) \* Statistics of variation, scatter plots, basic multivariate statistics \* Principal component analysis \* Measurement error and outliers \* Shape transformations and 'warping' – the thin plate spline \* Analysis of outline shapes \* Distinguishing between groups (taxonomy, clinical diagnosis, etc.) \* Allometry and size correction \* Influence of external factors on shape (ecomorphology, dose-response studies) \* Symmetric forms and measurement of asymmetry. \* Morphometric inferences on developmental processes \* Morphological integration and modularity \* Genetics of shape: analyses of resemblance between relatives, QTL analyses. \* Phylogeny: examining the history of evolutionary changes of shape

Practice examples: As far as possible, practical exercises are provided to accompany the course content. These practice exercises consist of data sets and explanations on how to run the respective analyses using the MorphoJ software ([http://www.flywings.org.uk/-MorphoJ\\_page.htm](http://www.flywings.org.uk/-MorphoJ_page.htm)). Participants who already have their own data are encouraged to use those and to discuss them as part of the course. I hope there will be a bit of a 'workshop' feel to the course unit.

Group work: Participants will work in small groups to prepare web presentations of possible morphometric studies (wikis prepared by the groups). This activity stimulates discussion and provides a broad overview of the broad range of questions that can be addressed with morphometric methods.

Further information on the course and a link to the registration page can be found on the following website: <http://www.flywings.org.uk/MorphoCourse> Registration uses the university's e-store, which can process automatic \*payments by credit card or debit card\*. The deadline for registration via this site is the \*20 October 2017\*.

The direct link to the e-store is this: <http://estore.manchester.ac.uk/short-courses/faculty-of-biology-medicine-and-health/school-of-biological-sciences/analysis-of-organismal-form> The fee for the course is GBP 350.00.

If you cannot pay by credit or debit card, or \*if you require a formal invoice\* (e.g. for reimbursement by your institution), you need to contact the Short Course Office in our faculty via this E-mail: [ShortCourses-biosciences@manchester.ac.uk](mailto:ShortCourses-biosciences@manchester.ac.uk) If you need to use this option, please do so as soon as possible, but definitely \*well before October\*.

Best wishes, Chris Klingenberg

Christian Peter Klingenberg Faculty of Life Sciences  
The University of Manchester Michael Smith Building  
Oxford Road Manchester M13 9PT United Kingdom

Telephone: +44 161 275 3899 Fax: +44 161 275 5082  
E-mail: [cpk@manchester.ac.uk](mailto:cpk@manchester.ac.uk) Web: <http://www.flywings.org.uk> Skype: [chris.klingenberg](mailto:chris.klingenberg)

"[cpk@manchester.ac.uk](mailto:cpk@manchester.ac.uk)" <[cpk@manchester.ac.uk](mailto:cpk@manchester.ac.uk)>

---

## UManchester OnlineCourseMorphometrics Nov6-Dec15 reopened

Dear colleagues

Due to a technical problem that may have prevented some people from signing up, the registration for this year's morphometrics course from the University of Manchester has been reopened until 3 November.

The course will run in the six weeks from 6 November to 15 December 2017.

Course content: \* Data acquisition: the kinds of data and the equipment used to collect them. \* Definitions of size and shape \* Geometric methods to characterise shape from a configuration of landmark points (Procrustes superimposition) \* Statistics of variation, scatter plots, basic multivariate statistics \* Principal component analysis \* Measurement error and outliers \* Shape transformations and 'warping' – the thin plate spline \* Analysis of outline shapes \* Distinguishing between groups (taxonomy, clinical diagnosis, etc.) \* Allometry and size correction \* Influence of external factors on shape (ecomorphology, dose-response studies) \* Symmetric forms and measurement of asymmetry. \* Morphometric inferences on developmental processes \* Morphological integration and modularity \* Genetics of shape: analyses of resemblance between relatives, QTL analyses. \* Phylogeny: examining the history of evolutionary changes of shape

Practice examples: As far as possible, practical exercises are provided to accompany the course content. These practice exercises consist of data sets and explanations on how to run the respective analyses using the MorphoJ software ([http://www.flywings.org.uk/-MorphoJ\\_page.htm](http://www.flywings.org.uk/-MorphoJ_page.htm)). Participants who already have their own data are encouraged to use those and to discuss them as part of the course. I hope there will be a bit of a 'workshop' feel to the course unit.

Group work: Participants will work in small groups to prepare web presentations of possible morphometric studies (wikis prepared by the groups). This activity stimulates discussion and provides a broad overview of the broad range of questions that can be addressed with morphometric methods.

Further information on the course and a link to the

registration page can be found on the following website: <http://www.flywings.org.uk/MorphoCourse> Registration uses the university's e-store, which can process automatic \*payments by credit card or debit card\*. The extended deadline for registration via this site is the \*3 November 2017\*.

The direct link to the e-store is this: <http://estore.manchester.ac.uk/short-courses/faculty-of-biology-medicine-and-health/school-of-biological-sciences> The fee for the course is GBP 350.00.

Best wishes, Chris

–

Christian Peter Klingenberg Faculty of Life Sciences  
The University of Manchester Michael Smith Building  
Oxford Road Manchester M13 9PT United Kingdom

Telephone: +44 161 275 3899 Fax: +44 161 275  
5082 E-mail: [cpk@manchester.ac.uk](mailto:cpk@manchester.ac.uk) Web: <http://www.flywings.org.uk> Skype: [chris.klingenberg](https://www.skype.com/people/chris.klingenberg)

Chris Klingenberg <[cpk@manchester.ac.uk](mailto:cpk@manchester.ac.uk)>

---

## UYork UK PythonBioinformatics Jan10-11

Dear all,

Registration is now open for the following bioinformatics courses at the University of York in the UK. Please see the links below for details.

Many thanks John Davey

York Bioinformatics [john.davey@york.ac.uk](mailto:john.davey@york.ac.uk)

Introduction to Python Programming 10-11 January 2018 and 15-16 August 2018 Academic Rate 220 / Commercial Rate 320 <https://www.york.ac.uk/biology/technology-facility/bioinformatics/bi-tf-courses/python-course/>

Python is now well established as one of the best programming languages to use for complex data analysis tasks, and has extensible libraries available for handling a wide range of biological data. This two day course is aimed at getting those without previous programming experience to have enough confidence to start writing small scripts for doing routine data analysis tasks.

Gene Expression Technologies 28-29 March 2018 Academic Rate 220 / Commercial Rate 320

<https://www.york.ac.uk/biology/technology-facility/>

[genomics/gl-courses/](#) Gene expression technologies are central to a wide range of biological research projects, from medical research, such as looking at effects of drug candidates at the molecular level or understanding the cellular changes during cancer development, through to ecological work, such as measuring the changes in complex microbial communities under different environmental stresses. This two-day course covers the dominant technologies that are used to measure gene expression: qPCR and RNASeq. For each technology, the principles of the technique are described followed by the details of the implementation.

John Davey <[john.davey@york.ac.uk](mailto:john.davey@york.ac.uk)>

---

## Weggis Switzerland AdaptationBioinformatics Feb11-17

Winter School - Bioinformatics for Adaptation Genomics (B@G4 2018)

DATE: February 11-17, 2018

Given the positive experiences of the previous three editions of the B@G Winter School that received enthusiastic feedback from both the instructors and the students, we are happy to announce that the School will take place again with a similar program and format.

For more information: <http://www.adaptation.ethz.ch/education/bag-winter-school-2018.html> AIMS AND OBJECTIVES The application of next-generation sequencing (NGS) technologies to non-model organisms is now well-established and has unlocked new frontiers for research on adaptation genomics. Despite recent technological developments enabling an increasing number of projects to use genome-scale data, the analysis of such complex data sets still raises substantial hurdles for researchers with primarily a biological background. Bioinformatic pipelines offer an invaluable resource to process genomic data, but their underlying rationale often remains hard to understand, which poses significant challenges for their rigorous use and for the accurate interpretation of the results. The B@G Winter School provides an opportunity for researchers to penetrate the 'black box' behind the complex bioinformatics approaches available for investigating adaptation genomics throughout the analytical pipeline; from the programs and assumptions necessary to produce a high-quality SNP dataset to the in-depth interpretation of methods designed to address key evolutionary questions. B@G

teachers are established scientists with a primary role in the development of widely used bioinformatic software, and will provide insights into the foundations of the algorithms and suggest best practice in experimental design and analysis.

**AUDIENCE** The School is primarily aimed at evolutionary biologists and bioinformaticians who want to gain deeper knowledge on state-of-the-art methods used to detect evolutionary patterns from genome-wide nucleotide data. Applications from early career researchers (motivated Master students, PhD and post-doctoral level), as well as faculty with a background in ecology, genetics, or bioinformatics, will be considered. The workshop is particularly aimed at candidates with experience of the Unix environment and with preliminary knowledge on analytical pipelines for genomic data. Participants will be requested to bring their own laptop with which to connect to a server for the practical sessions. Classes will include lectures on the theoretical background of the programs and practical demonstrations given by the instructor followed by hands-on exercises performed by the participants under guided supervision.

**VENUE** The school will be hosted at the Alexander & Gerbi Hotel in Weggis, Switzerland (<http://www.alexander-gerbi.ch>).

**COST** Total fee for participants is 750.- CHF. This includes tuition and accommodation in double rooms with full board (Breakfast, Lunch, Dinner and coffee breaks) at the Alexander & Gerbi Hotel during the workshop. A limited number of single rooms may be available upon request at an additional fee of 300.- CHF.

**REGISTRATION** The workshop will be limited to 30

participants. We ask that all interested participants submit a cover letter (1 page max) detailing their research interests, their level of bioinformatics experience, and motivation for attending the workshop, as well as their CV (2 pages max) to [BioinfAdapt@env.ethz.ch](mailto:BioinfAdapt@env.ethz.ch) by November 19th 2017. Participants will be notified of the outcome of the selection process by December 4th 2017.

**SCHOOL LECTURERS** Prof. Dr. Jonathan Puritz - University of Rhode Island, USA Website: <http://www.marinevoeco.com> Mr. Erik Garrison - Wellcome Trust Sanger Institute, UK Website: [http://hypervolu.me/~erik/erik\\_garrison.html](http://hypervolu.me/~erik/erik_garrison.html) Prof. Dr. Anders Albrechtsen - Copenhagen University, Denmark Website: <http://popgen.dk/albrecht/web/WelcomePage.html> Prof. Dr. Daniel Wegmann - University of Fribourg, Switzerland Website: <http://www.unifr.ch/biochem/index.php?id=789> Dr. Simone Tiberi - University of Zurich, Switzerland Website: <https://sites.google.com/view/simonetiberi> ORGANISERS Dr. Simone Fior, ETH Zurich, Switzerland ([simone.fior@env.ethz.ch](mailto:simone.fior@env.ethz.ch)) Dr. Martin C. Fischer, ETH Zurich, Switzerland ([martin.fischer@env.ethz.ch](mailto:martin.fischer@env.ethz.ch)) Prof. Dr. Alex Widmer, ETH Zurich, Switzerland ([alex.widmer@env.ethz.ch](mailto:alex.widmer@env.ethz.ch)) Genetic Diversity Centre (GDC): <http://www.gdc.ethz.ch> Funded by Adaptation to a Changing Environment (ACE) initiative, ETH Zürich, Switzerland

— / —

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>

---

## Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to [Golding@McMaster.CA](mailto: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<sup>A</sup>T<sub>E</sub>X files, Excel files, etc. . . . plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category “Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:” and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formatted) the message will be sent to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

## Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformatting is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by L<sup>A</sup>T<sub>E</sub>X do not try to embed L<sup>A</sup>T<sub>E</sub>X or T<sub>E</sub>X in your message (or other formats) since my program will strip these from the message.