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# E v o l D i r

December 1, 2012

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

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## 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.



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### Basel OrganismalAndEvolutionaryBiol Feb7-8

Dear Colleagues,

it is our pleasure to announce the joint congress of the Swiss Organismal Biology Societies

biology13

held in Basel on 7 & 8 February 2013.

The biology conference is the yearly joint congress of the Swiss Zoological Society, the Swiss Botanical Society, and the Swiss Systematics Society hosted by a Swiss University. The University of Basel is proud to host the biology back at its birthplace in 2013!

As is the tradition, the conference is open to everybody to attend. Masters and PhD-students as well as Post-Docs from Swiss universities and research institutions are encouraged to make a scientific contribution in form of a talk or a poster. A highlight not to be missed will be the Darwin Dinner in downtown Basel honoring Charles Darwin. An invited international speaker will enrich the evening with an entertaining talk and there will be plenty of opportunity for discussions, also with our keynote speakers.

The following keynote speakers are confirmed so far:

Marta Barluenga, Natural History Museum Madrid  
Jenny Boughman, University of Maryland  
Carlos Herrera, CSIC Sevilla  
Chris Jiggins, University of Cambridge  
Mark Wilkinson, Natural History Museum London

All updated information on the conference can be taken from the conference-homepage: <http://-evolution.unibas.ch/biology13> Registration opens 5 November 2012. Abstract submission deadline for talks and posters is 6 January 2013. If you have any questions please contact us under [biology13@unibas.ch](mailto:biology13@unibas.ch).

We are looking forward to welcoming you in Basel, your organizing committee

Marco Colombo, Halil Kesselring, Simon Loader, César Metzger, Dario Moser, Marius Roesti, Juerg Stoecklin & Walter Salzburger

[biology13@unibas.ch](mailto:biology13@unibas.ch)

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### Chicago SMBE Jul7-11 DeadlineExtended

DEADLINE EXTENDED for Symposia Topic Submis-

sion to SMBE 2013

Due to increased interest, we have extended the deadline for Symposia Topic Submission to November 30, 2012. This is your chance to help develop the content for SMBE 2013!

Visit us online at <http://smbe2013.org/2013/-Symposia-Submissions.aspx> to submit your symposium topic. You will be asked to provide a symposium title, brief abstract, your name, email address, and the names and email addresses of three proposed speakers who would be willing to attend.

PLEASE NOTE: You must contact the speakers to insure their availability prior to submitting your proposal. Without that commitment, we won't be able to schedule your symposia if selected.

While you're submitting your symposium topic, don't forget to book your hotel to secure the discounted SMBE2013 hotel rate just for attendees! This rate is only available through the SMBE2013 Registration Portal at <http://smbe2013.org>. Discover the difference between a hotel and a Hyatt when you stay with us at the AAA Four Diamond Hyatt Regency Chicago hotel in the heart of downtown Chicago, Illinois.

Don't wait for email – get updates faster by following us on Facebook and Twitter! New deadlines, announcements and information about science programming will be shared first via social media, so Like us at [facebook.com/Smbe2013Chicago](https://www.facebook.com/Smbe2013Chicago) and follow @SMBE2013Chicago.

Please contact [secretariat@smbe2013.org](mailto:secretariat@smbe2013.org) with any questions.

IMPORTANT DATES: Call for Symposium Topics Deadline Extended to November 30, 2012 Abstract Submission & Registration Opens December 2012

Submit a Symposium [<http://smbe2013.org/2013/-Symposia-Submissions.aspx>] Book Your Discounted Hotel Accommodations [[https://resweb.passkey.com/-Resweb.do?mode=welcome\\_gi\\_new&groupID=-8960229](https://resweb.passkey.com/-Resweb.do?mode=welcome_gi_new&groupID=-8960229)] Interact, Network, Follow: SMBE2013 on Facebook [<https://www.facebook.com/-Smbe2013Chicago>] SMBE2013 on Twitter [<http://twitter.com/SMBE2013Chicago>] Emily Hudson <[secretariat@smbe2013.org](mailto:secretariat@smbe2013.org)>

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**CityU New York BiolTheory**  
**Apr12-14**

CUNY Graduate Center CFP: Philosophy & Theory in Biology Young Investigators Symposium Theorists have long probed, and often crossed, the boundaries between biology and philosophy through conceptual reflection, mathematical modeling, and the analysis of complex empirical patterns.

>From Aristotle to Darwin and beyond the growth of biological theory has gone hand-in-hand with philosophical inquiry into biological phenomena. The work done at these frontiers by theoretically-minded biologists and scientifically-informed philosophers is of mutual benefit to both disciplines.

These frontiers are often most evident in the next generation of researchers who are open to new possibilities and aware of novel perspectives or innovative tools. We therefore invite the emerging next generation of theorists to catalyze this dialogue with a symposium in New York City, one of the nation's thriving centers of research in both biology and philosophy of biology, to be held on April 12-14, 2013 at Lehman College, part of the City University of New York.

Attendance is open to all, but we accept papers by young investigators in theoretical biology or philosophy of biology, defined as graduate students, post-docs, or non-tenured faculty. Papers should be of a maximum length of \*5,000 words\* (including references) and need to be submitted at the latest by \*November 25, 2012\*. Information, registration and instructions to submit papers can be found at <https://sites.google.com/site/philobiosymposium/> Leonard Finkelman <[lfinkelman@gc.cuny.edu](mailto:lfinkelman@gc.cuny.edu)>

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## Edinburgh PlantSystematicsEvolution Jul1-5

Dear Colleagues,

The 8th PLoSWA Plant Life of SW Asia conference will be hosted by the Centre for Middle Eastern Plants at the Royal Botanic Garden Edinburgh from 1-5 July 2013.

Since its inception in 1970, this conference has brought together a wide range of people with an interest in the plants of SW Asia. We would like to encourage a wide range of presentations including in areas not traditionally featured: a broad scope of subjects, with sessions focusing on floras, systematics (including molecular and evolutionary approaches), various conservation topics

including protected areas and policies as well as the role of botanic gardens, landscaping and plants in culture will be included. It is also a chance to establish and strengthen partnerships and collaborations.

For conference details, please visit the conference website: <http://elmer.rbge.org.uk/ploswa8/> which will be updated regularly as abstracts are submitted.

Registration is now open, and early bird discounted registration has been extended until the end of 2012. We welcome the submission of abstracts in any of the advertised sessions, and also proposals for workshops.

If you require any information about PLoSWA8, please email: [ploswa8@rbge.org.uk](mailto:ploswa8@rbge.org.uk)

Best wishes,

Dr Alan Forrest Centre for Middle Eastern Plants (CMEP) | Royal Botanic Garden Edinburgh | 20A Inverleith Row | Edinburgh EH3 5LR | Scotland | UK  
Telephone: 0131 248 2967 Website: [www.cmepe.org.uk](http://www.cmepe.org.uk)  
The Royal Botanic Garden Edinburgh is a Charity registered in Scotland (No SC007983)

Alan Forrest <[A.Forrest@rbge.ac.uk](mailto:A.Forrest@rbge.ac.uk)>

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**ExeterU**  
**QuantEvolutionaryDynamics**  
**Apr17-19**

The purpose of this message is to announce the following meeting that may be of interest.

Quantitative Evolutionary Dynamics (QED) Microbial Communities: from the lab to natural environments 17th-19th April, 2013 Shaldon, Devon, by the sea near Dartmoor/Exeter University, UK: this is the village website <http://www.shaldon-devon.co.uk/> Aimed specifically at younger scientists, this conference is a forum for research into evolving microbial systems bridging the gap between mathematical models, laboratory models and natural ecosystems. Speakers will talk about plant and human pathogens, natural fungal ecosystems, consortia of symbionts, their responses to antibiotics and viruses and single-cell observations of bacteria in microfluidic devices.

This is a MMEMS meeting <http://www.mmems.org/> funded by an EPSRC Creativity@Home Award. To register, which is free, please go to <http://www.mmems.org/workshop.php#> but please note that there is a limit of 50 participants.

International Speakers: Tim Barraclough, Imperial College Justin Meyer, Harvard Medical School Lon Chubiz, Harvard Systems Biology Chris Marx, Harvard Systems Biology Remy Chait, Harvard Medical School Markus Arnoldini, ETHZ Luz Becks, Max Planck Ploen Pietro Cicuta, Cambridge University Rosalind Allen, Edinburgh University Ben Cooper, Oxford University Martin Ackermann, ETHZ

Exeter Speakers: Ivana Gudelj William Gaze Francesca Fiegna Angus Buckling Murray Grant

Robert Beardmore Professor of Mathematical Biosciences Biosciences Streatham Campus University of Exeter [r.e.beardmore@exeter.ac.uk](mailto:r.e.beardmore@exeter.ac.uk)

“Beardmore, Robert” <[R.E.Beardmore@exeter.ac.uk](mailto:R.E.Beardmore@exeter.ac.uk)>

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**Ferrara Italy**  
**ItalianSocEvolutionaryBiol**  
**Dec15-16**

Dear friends and colleagues,

On behalf of the Italian Society for Evolutionary Biology (SIBE), and in collaboration with the Department of Life Science and Biotechnology of the University of Ferrara and the Museum of Natural History of Ferrara, we are pleased to invite all interested parties to attend SIBE2012 – Simposio Evoluzione e Assemblée dei Soci (Symposium on Evolutionary Biology and Annual Business Meeting of SIBE members)

**WHEN**

15th - 16th December 2012. Beginning of scientific sessions on December 15th at 14.30

**WHERE**

15th December: Ferrara, Polo Chimico Bio Medico, via Borsari 46 (free parking inside)

16th December: Ferrara, Sala dei Comuni, Castello Estense (Communal Hall, Estense Castle)

**THE SYMPOSIUM**

The symposium is organized around six principal themes: population genetics, ecology and demography; sexual selection; phylogenies, species, and speciation; new technologies to study evolution; adaptation; human evolution. For each theme there will be an invited speaker as well as a presentation by a young researcher. All talks will be in English

## INVITED SPEAKERS

Laurent Excoffier, University of Bern

Andrea Pilastro, Università di Padova

Dan Rabosky, University of Michigan

Michele Morgante, Università di Udine

Lino Ometto, Fondazione E.Mach, Trento

Johannes Krause, University of Tübingen

## MEETING OF SIBE MEMBERS

The morning of December 16th will host the SIBE business meeting and with the election of the new President and Council Members. If you are not already a SIBE member, you can become one directly at the meeting by submitting the registration form and paying the annual dues of 30 euros (15 euros for students)

## REGISTRATION

Attendance of the scientific sessions of the symposium is free. We do, however, ask that all people interested in attending notify by email [sibe2012@unife.it](mailto:sibe2012@unife.it).

## SUBMITTING ABSTRACT - DEADLINE

Non-tenured researchers of 40 years or younger can send (before November 18th) an abstract, with an indication of the theme most pertinent to their research. For each theme one abstract will be chosen for an oral presentation. It is possible to submit an abstract not directly related to the themes of the symposium, but selection for a presentation is not guaranteed. All abstracts will be published on the meeting website.

## TRAVEL GRANTS

Young participants (not faculty) who intend to participate in SIBE2012 and who submit an abstract can request a small financial contribution to cover travel costs and accommodation. These will be awarded on a first come-first served basis.

## WEBSITE

More information (including logistics) can be found at [www.sites.google.com/a/unife.it/sibe2012/](http://www.sites.google.com/a/unife.it/sibe2012/) Giorgio Bertorelle, Università di Ferrara

Francesco Santini, Università di Torino

The SIBE council

– \*\*\*\* NEW ADDRESS \*\*\*\*

Francesco Santini

I.S.I. - Lagrange Visiting Fellow

Dipartimento di Scienze della Terra Università degli Studi di Torino

Via Valperga Caluso 35 10125 Torino  
Italy Phone: 0039-3391215011 E-mail:  
[francesco.santini@alumni.utoronto.ca](mailto:francesco.santini@alumni.utoronto.ca)

Francesco Santini <[francesco.santini@alumni.utoronto.ca](mailto:francesco.santini@alumni.utoronto.ca)>

## Innsbruck Austria AntEvolution Sep5-8

Dear evoldir member,

The 5th Central European Workshop of Myrmecology (CEWM) will be held in Innsbruck, Austria, in autumn 2013 - click here < <http://cewm2013.org/> > for the meeting's website and here < <http://cewm2013.org/-nl.php> > for subscribing to our newsletter!

The most important CEWM facts in a nutshell:

- Scope: All fields of ant research, including social evolution, behaviour, cognition and learning, population biology, systematics and phylogeny, biogeography and faunistics, ecology, and conservation biology. The techniques presented will range from molecular genetics and genomics to microscopy and ecological-niche modeling and from behavioural to chemical assays.

- Participants: people and topics will be warmly welcome from all over Europe - and beyond!

- Timeline: 5-8 September 2013.

- Venue: University of Innsbruck, Technikerstr. 25, 6020 Innsbruck, Austria.

- Registration fees: To be announced early 2013; we are currently completing a fundraising campaign in order to offer reduced fees comparable to the fees of the 4th CEWM in Cluj, Romania.

- Important dates: Click here < <http://cewm2013.org/-08-dates.php> >.

Please forward this email to others who you think are interested.

Looking forward to seeing you in Innsbruck,

Warmest, Birgit C. Schlick-Steiner, Wolfgang Arthofer,  
Florian M. Steiner

P.S. We apologise if you receive multiple copies of this posting.

5th CEWM - Central European Workshop of Myrmecology

Organising Committee

Molecular Ecology Group, University of Innsbruck  
Technikerstr. 25, 6020 Innsbruck, Austria Phone  
+43 (0) 512 507 51701 Fax +43 (0) 512 507  
51799 <http://www.cewm2013.org> CEWM 2013  
<office@cewm2013.org>

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## Irvine California BrainEvolution Jan11-12

January 11-12, 2013 In the Light of Evolution VII: The Human Mental Machinery Organizers: Camilo J. Cela-Conde, Raul Gutierrez Lombardo, John C. Avise and Francisco J. Ayala Beckman Center of the National Academies, Irvine, CA Co-sponsored by the Centro de Estudios Filosoficos Politicos y Sociales Vicente Lombardo Toledano

Scholars consider a comment in Charles Darwin's Notebook C to be one of his first insights into human nature. As Darwin noted, our mental machinery makes us different. For instance, it allows us to ask about ourselves, about what a human is. It allows us to question what we are and the meaning of the way we are. One thing we have discovered is that humans possess certain unique mental traits. Ethic and aesthetic values are among them, and they constitute an essential part of what we call the human condition. This Colloquium brings together leading scientists who have worked on several aspects of human morals and aesthetics considered as mental traits, their evolution, and their relationship to related behaviors in other primates.

[http://www.nasonline.org/programs/-sackler-colloquia/upcoming-colloquia/ILE-Human\\_Mental\\_Machinery.html](http://www.nasonline.org/programs/-sackler-colloquia/upcoming-colloquia/ILE-Human_Mental_Machinery.html) Registration Fee: \$150.00

Reduced Registration Fee for Graduate Students and Postdocs: \$100.00

Registration is limited and will be accepted online only when the registration fee is included and in the order in which it is received. Online registration is available for single and multiple registrations (i.e. work group) with MasterCard and Visa and check. The registration fee includes breakfast and lunch on Friday and Saturday and transportation from the Marriott Newport Beach Hotel to the Beckman Center.

The Welcome Dinner on Thursday and the Dinner on Friday night are optional and extra fees apply.

Register at < <http://www.cvent.com/d/vcqdzl/4W> >

## Lodging and Transportation

A block of rooms has been reserved at the Marriott Newport Beach Hotel and Spa at the discounted rate of \$125, single or double occupancy. (The rate is based on the current federal per diem rate, which is subject to change.) You can make a room reservation during the online registration process. After December 17th, we cannot guarantee that the discounted rate or a room will be available.

Transportation is provided once daily roundtrip from the hotel to the Beckman Center. See agenda for times.

For more information, contact Susan Marty <SMarty@nas.edu>.

"Francisco J. Ayala" <fjayala@uci.edu>

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## Lisbon EvolutionaryPatterns May27-29 CallAbstracts

1ST CALL FOR ABSTRACTS: INTERNATIONAL CONFERENCE ON EVOLUTIONARY PATTERNS Horizontal and Vertical Transmission and Micro- and Macroevolutionary Patterns of Biological and Sociocultural Evolution

May 27-29th, 2013 | Calouste Gulbenkian Foundation, Lisbon, Portugal

Website: <http://evolutionarypatterns.fc.ul.pt> ABOUT THE CONFERENCE

The 3-day International Conference aims to provide an interdisciplinary platform where evolutionary scholars from the exact, technological, life, human and socio-cultural sciences can exchange ideas and techniques on how to conceptualize, model, and quantify biological and sociocultural evolution. The Conference is organized by the Applied Evolutionary Epistemology Lab of the Centre for Philosophy of Science of the University of Lisbon, in collaboration with the Calouste Gulbenkian Foundation, and with the support of the John Templeton Foundation.

### PLENARY AND INVITED SPEAKERS

Plenary Speakers Michael Benton, Tal Dagan, John Jungck, Carl Knappett, Daniel McShea, Alex Mesoudi, Mark Pagel, Tyler Volk, and Richard Watson

Invited Speakers Quentin D. Atkinson, Alberto Bisin, Michael Bradie, Jorge Carneiro, Claudine Chaouiya, Mark Collard, Frank Kressing, Matthis Krischel, Telmo



Pievani, Luís Paulo N. Rebelo, Luis Mateus Rocha,  
more tba

The conference website contains biographies of all speakers as well as the abstracts of their talk.

#### CALL FOR ABSTRACTS

We call for bio-informaticians, evolutionary biologists, microbiologists, paleontologists, geologists, physicists, mathematicians, anthropologists, archeologists, linguists, sociologists, economists, and philosophers and historians of science to provide talks on the following topics: 1. Conceptualization, quantification and modeling of horizontal and vertical transmission in biological and sociocultural sciences 2. Conceptualization, quantification and modeling of micro- and macroevolution in biological and sociocultural sciences 3. Hierarchy theory and the units, levels and mechanisms of evolution 4. How the universal application of evolutionary theories enables new possibilities for inter- and trans-disciplinary research and the unification of the sciences We encourage submissions of (1) concrete models and simulations, (2) theoretical, reflexive talks, and (3) historical accounts on any of the above mentioned topics.

#### POSSIBLE FORMATS

We call for mini-symposia (3 or 6 talks), poster sessions (3 or 6 posters), as well as individual regular and poster talks.

#### IMPORTANT DATES

Deadline Submissions: February 1st, 2013 Notification of Acceptance: March 1st, 2013 Registration Deadline for all Presenters: April 1st, 2013 Registration Deadline Audience: May 1st, 2013 Conference Dates: May 27th-29th, 2013

#### REGISTRATION FEES

Professors: 300 ? | PhD and post-docs: 250 ? | Audience: 100 ?

#### DOWNLOAD OUR POSTER

<http://evolutionarypatterns.fc.ul.pt/docs/patterns.pdf>

#### SUBSCRIBE TO OUR MAILINGLIST

<http://eepurl.com/n2DTL> FURTHER INFORMATION

<http://evolutionarypatterns.fc.ul.pt;>

<http://appeel.fc.ul.pt>

[appeelannouncements@fc.ul.pt](mailto:appeelannouncements@fc.ul.pt)

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## LundU OrganismDispersal Jan30-Feb1

Dear all,

This is a reminder for the FIRST DEADLINE (Dec3rd) to register to the upcoming Symposium on “Causes and Consequences of Organism Dispersal” hosted by BECC and CAnMove, that will be held in Jan30th-Feb1st, 2013 Ecology Building, Lund University.

You are warmly welcome to present your work during the poster sessions, to attend the 3-day symposium, to participate during the discussion sessions and to join the lunch/dinners. Please register before the deadlines.

Registration, program and information are available on: <http://canmove.lu.se/CCODispersal> The organization committee.

Sylvie VM Tesson

CAnMove Postdoctoral Fellow Aquatic Ecology, Department of Biology Lund University Ecology Building, Sölvegatan, 37 22362 Lund, Sweden e-mail: [Sylvie.Tesson@biol.lu.se](mailto:Sylvie.Tesson@biol.lu.se) tel.: +46-4622-29479 <http://www.lu.se/aquaticecology/people/postdocs/-sylvie-teson> Upcoming Symposium on “Causes and Consequences of Organism Dispersal” Jan 30th - Feb 1, 2013, Lund, Sweden. Registration and information: <http://canmove.lu.se/CCODispersal> [sylvie.tesson@club-internet.fr](mailto:sylvie.tesson@club-internet.fr)

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## Marseilles 17thEvolBiol Sep17-20

We are pleased to inform you that the 17th Evolutionary Biology Meeting at Marseilles will take place on 17-20 September 2013, Marseilles, France.

The following subjects will be discussed:

- Evolutionary biology concepts and modelisations for biological annotation;
- Biodiversity and Systematics;
- Comparative genomics and post-genomics (at all taxonomic levels);
- Functional phylogeny;
- Environment and biological evolution;
- Origin of Life and exobiology;
- Non-adaptative versus adaptative evolution;

The « minor » phyla: their usefulness in evolutionary biology knowledge.

Registration and abstract submission

<http://sites.univ-provence.fr/evol-cgr/> Best regards

Marie-Hélène Rome For the 17th EBM meeting committee

Universite EGEE <Egee@univ-provence.fr>

Human Genetics, Oxford, UK)

For more information, see the website at:<http://www.lirmm.fr/mceb2013/> Please forward this announcement

Olivier gascuel <gascuel@lirmm.fr>

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**Montpellier**  
**MathCompEvolutionaryBiol**  
**May27-31**

MCEB conference: Mathematical and Computational Evolutionary Biology

Webpage:<http://www.lirmm.fr/mceb2013/>  
Pre-registration deadline: January 20

Scope: Mathematical and computational tools and concepts form an essential basis for modern evolutionary studies. The goal of the MCEB conference (at its 5th edition) is to bring together scientists with diverse backgrounds to present recent advances and discuss open problems in the field of mathematical and computational evolutionary biology. This year a special focus will be given to the applications to health, for example with regard to human and cancer genomics, genetic diseases and virus epidemics. General concepts, models, methods and algorithms will also be presented and discussed, just as during the previous conference editions.

Where and when: Hameau de l'Etoile (<http://www.hameaudeletoile.com/>) in the Montpellier region, South of France, 27-31 May 2013.

Cost: Conference fees including accommodation (4 nights), meals, coffee breaks, buses, etc., will range from 350 to 500 depending on the room type. PhDs and postdocs will benefit of the cheapest rooms.

Keynote speakers: Sebastian Boenhoeffer (ETH Zürich, CH) Bastien Bousseau (University of California, Berkeley, US) Alexei Drummond (University of Auckland, NZ) Ian Holmes (University of California, Berkeley, US) Steven Kelk (Maastricht University, NL) Darren Martin (University of Cape Town, ZA) Erick Matsen (Fred Hutchinson Cancer Research Center, Seattle, US) Tanja Stadler (ETH Zürich, CH) Simon Tavaré (University of Cambridge, UK and University of Southern California, US) Gil McVean (Wellcome Trust Centre for

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**NHM London YoungSystematists**  
**Nov29**

All are welcome. Programme available here: <http://www.systass.org/ysf/> Starting time 9:30am in the Flett Theatre, Natural History Museum, London. Please register if you plan to attend!

14th YOUNG SYSTEMATISTS FORUM

Thursday, 29 November 2012, 9:30 am

Venue: Flett Lecture Theatre, Natural History Museum, London, UK

The annual Young Systematists Forum represents an exciting setting for Masters, PhD and young postdoctoral researchers to present their data, often for the first time, to a scientific audience interested in taxonomy, systematics and phylogenetics. This well-established event provides an important opportunity for budding systematists to discuss their research in front of their peers within a supportive environment. Supervisors and other established systematists are also encouraged to attend. Prizes will be awarded for the most promising oral and poster presentation as judged by a small panel on the day.

Registration is FREE.

Send registration by e-mail to ([YSF.SystematicsAssociation@gmail.com](mailto:YSF.SystematicsAssociation@gmail.com)), supplying your name, contact address. Non-presenting attendees are very welcome.

The abstract deadline has passed. All registered attendants will receive further information about the meeting, including abstracts, by e-mail one week in advance. This information will also be displayed on the Systematics Association website ([www.systass.org](http://www.systass.org)).

Ellinor Michel <e.michel@nhm.ac.uk>



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## Oeiras Portugal Evolution Dec21

Dear colleagues of the evolution community,

Registrations are now open for the VIII Portuguese Evolutionary Biology Meeting (ENBE), to be held on the 21st of December, 2012, at the Instituto Gulbenkian de Ciência in Oeiras, Portugal.

!!!The deadline for abstract submission is NOVEMBER 30th, 2012!!!

You will be able to register here: <http://www.igc.gulbenkian.pt/enbe2012/>, as well as find the preliminary program and poster for the meeting. Please share this information and the poster with anyone that may be interested in the meeting.

We expect this meeting to be a landmark for the study of evolution in Portugal, since we will have the first elections for the Portuguese association for evolutionary biology. For more information regarding the APBE and its mission, please visit [www.biologia-evolutiva.net](http://www.biologia-evolutiva.net) (in portuguese).

Please forward this email to anyone you know that might be interested in participating.

The ENBE organizing committee

Lilia Perfeito <lilia.perfeito@gmail.com>

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## Oeiras Portugal Evolution Dec21 Deadline

Dear colleagues of the evolution community,

This is a reminder that the deadline for sending abstracts to the for the VIII Portuguese Evolutionary Biology Meeting is November 30th!! The meeting will be held in Oeiras, Portugal, on the 21st of December.

You can register and submit abstracts here: <http://www.igc.gulbenkian.pt/enbe2012/> In addition, if you want to have lunch at the Instituto Gulbenkian de Ciência, please follow the instructions in the site. We will need to have an estimate of the number of people interested in lunch before December 14th.

We expect this meeting to be a landmark for the study of evolution in Portugal, since we will have the first elections for the Portuguese association for evolutionary biology. For more information regarding the APBE and its mission, please visit <http://www.apbe.pt>.

Please forward this email to anyone you know that might be interested in participating.

The ENBE organizing committee

Lilia Perfeito <lilia.perfeito@gmail.com>

[lilia.perfeito@gmail.com](mailto:lilia.perfeito@gmail.com)

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## Paris MicrobialEvolution Oct2-5

10th International Meeting on Microbial Epidemiological Markers, October 2-5, 2013

The ability of microbes - bacteria, viruses, fungi and parasites - to mutate rapidly, disseminate and adapt to new hosts and environments, forces us to increase our capabilities for the early recognition of novel strains of pathogens, and to understand the factors that contribute to their diversity, evolution and dissemination. IMM10 will address a variety of topics related to pathogen emergence, population-level diversity, evolution of virulence and antibiotic resistance, strain tracking, typing networks, public health and surveillance, novel typing approaches, high-throughput sequencing, genomics, and molecular epidemiology of infectious diseases. The meeting will take place at Institut Pasteur, in the heart of Paris.

On behalf of the Organizing Committee, Sylvain Brisse, Institut Pasteur, Paris, France

INVITED SPEAKERS Andrea Ammon, European Center for Disease Control, Stockholm, Sweden Siv Andersson, Uppsala University, Sweden Alessandra Carattoli, Institute of Public Health, Rome, Italy Stewart Cole, Global Health Institute, Lausanne, Switzerland Alex Friedrich, University Medical Center Groningen, Netherlands Peter Gerner-Smidt, CDC, Atlanta, USA Matthew Gilmour, Public Health Agency of Canada, Winnipeg, Canada Hajo Grundmann, RIVM, Bilthoven, Netherlands Joerg Hacker, German Academy of Sciences Leopoldina, Berlin, Germany Dag Harmsen, Universitätsklinikum Münster, Germany René Hendriksen, DTU, Denmark Keith Jolley, Oxford, UK Philippe Lemey, Leuven, Belgium Martin Maiden, Oxford University, UK Claudine Médigue,

CEA-Genoscope, Evry, France Julian Parkhill, Wellcome Trust Sanger Institute, Hinxton, UK Laurent Poirel, Univ. Paris Sud, Kremlin-Bicêtre, France Marc Struelens, eCDC, Stockholm, Sweden Anne-Mieke Vandamme, Katholieke Universiteit Leuven, Belgium

SCIENTIFIC SESSIONS Novel genomics technologies Population genetics, phylogenomics, gene flux Genomic typing of bacterial pathogens Phylodynamics of viral pathogens Emergence of virulence Emergence of resistance Typing and surveillance networks High-throughput sequencing and diagnostics/discovery Bioinformatics tools for surveillance and population biology Bioinformatics tools for comparative and evolutionary genomics

Early registration up to June 15, 2013 Standard fee: 400; Student fee: 300 The abstracts submission manager will open early 2013.

WEB SITE For more information and updates, please visit us at [www.immem-x.org](http://www.immem-x.org) CONTACT Chrystèle Blin Congress-Events Institut Pasteur, CIS 28 rue du Dr Roux 75015 PARIS France [immem-x@pasteur.fr](mailto:immem-x@pasteur.fr)

Sylvain BRISSE <[sylvain.brisset@pasteur.fr](mailto:sylvain.brisset@pasteur.fr)>

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## Portugal Oligochaete Taxonomy Apr22-25

6th IOTM

Dear Friends and Colleagues,

For its 6th edition, the IOTM goes to \*Palmeira de Faro\* in the north of Portugal! Located at 4 km from Esposende, in the parish of Palmeira de Faro, Quinta da Seara is a privileged space of interaction with the region. On one side, the sea and the magnificent beaches of Esposende. On the other, the rural landscape indented by river Cavado, rich in stories and traditions.

Oligochaeta (few-bristled worms) is an extremely important taxonomic group in aquatic and terrestrial ecosystems. In spite of the importance of oligochaetes, there are presently some serious deficiencies in the knowledge about their taxonomy, distribution, biology and ecology, in comparison with mammals, birds, lizards and other organismal groups. One way to bridge this gap is to bring together scientists working on the subject with the aim to speed up information about the progress in their work, exchange ideas and encourage them to cooperate. This is the basic idea behind the or-

ganization of the International Oligochaeta Taxonomy Meetings (IOTM). So far, five successful meetings took place. Traditionally, the meetings concentrate mainly on Oligochaete taxonomy and phylogeny, but also discuss different aspects from other scientific fields, e.g. earthworm ecology, faunistics and phylogeography as well as new methods of their study. The 6th International Oligochaete Taxonomy Meeting will continue in the best tradition of the previous four meetings and will take place in Palmeira de Faro in Portugal, from April 22th to April 25th, 2013. An optional field excursion will be organised on April 26th.

We are quite convinced that you will like the venue of the Quinta da Seara in Palmeira de Faro, in the North of Portugal. It is located in a wonderful region, calm and beautiful.

On our web site < <http://6thiotm.tomas-pavlicek-biologie.net/> >, you will find a lot of information concerning the conference and its venue. And of course, you can already register !

Promote the conference among your colleagues and if you have some addresses that we could add to our mailing list, please let us know.

Cordially yours,

Dr Tomas Pavlicek (Convenor of the 6th IOTM)

Patricia Cardet (Secretary and webmaster)

[6thiotm.tomas-pavlicek-biologie.net](http://6thiotm.tomas-pavlicek-biologie.net) [contact@patricia-cardet.net](mailto:contact@patricia-cardet.net) [contact@tomas-pavlicek-biologie.net](mailto:contact@tomas-pavlicek-biologie.net) Skype: [patriciacardet](https://www.skype.com/partners/patricia-cardet)

“[contact@patricia-cardet.net](mailto:contact@patricia-cardet.net)”

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## Roscoff France Evolution Cancer Nov2-6

\*Jacques Monod Conference: \*\*“Ecological and evolutionary perspectives in cancer” to be held in Roscoff (Brittany), France, November 2-6, 2013\*

The conference is organized by Michael Hochberg (Montpellier, France) and Paul Ewald (Louisville, USA). Jacques Monod Conference website: [http://www.cnrs.fr/insb/cjm/cjmprog\\_e.html](http://www.cnrs.fr/insb/cjm/cjmprog_e.html) Cancer is a disease of opportunity, associated with clonal evolution, expansion and competition within the body. Specifically, somatic cellular selection and evolution are the fundamental processes leading to malignancy, metas-

tasis and resistance to therapies. The Jacques Monod Conference “\*Ecological and Evolutionary Perspectives in Cancer” \*aims to promote this emerging discipline by addressing some of the most important questions about cancerogenesis. The conference will cover 3 themes:

- Interspecific patterns and processes - Progression - Therapies

The first theme will address the observation that infectious agents can cause cancers. Persistent infections may promote cancer because long-term host defensive responses induce inflammation that subsequently increases mutation rates. Why human defensive mechanisms have not evolved to more efficiently control or eliminate invasive cell lineages, and why do some species with more somatic tissue show less than expected incidences of cancer? The second theme will evaluate the role of the tumor environment and natural selection in explaining cancer progression. To what extent are different cancers predictable and what are the key contributing variables? The third theme will tackle the daunting challenge of employing evolutionary theories to improve cancer therapies. It will seek how preventative, curative and management therapies can be improved and even optimized to slow or stop the emergence of resistance to chemotherapies.

\*Invited speakers\* and provisional titles

\*AKTIPIIS Athena \*(San Francisco, USA): Challenges and opportunities for evolutionary and ecological approaches to cancer

\*BEERENWINKEL Nico\* (Basel, Switzerland): Using next-generation sequencing to estimate genetic tumor diversity and to inform mathematical models of tumor evolution

\*CICCARELLI Francesca\* (Milano, Italy): Genome instability and the evolution of cancer

\*CLAIRAMBAULT Jean\* (Paris, France)\*: \*Mathematical assessment of drug resistance in cancer cell populations: Genetic or epigenetic phenomenon?

\*CRESPI Bernard\* (Burnaby, Canada): Genomic imprinting in the evolution and development of cancer

\*DELHOMMEAU François \*(Paris, France): Clonal architecture in myeloid malignancies

\*EWALD Paul \*(Louisville, USA): Toward a unified theory of cancer

\*FRIDMAN Hervé\* (Paris, France): Impact of patient’s immunity and inflammation on progression, metastasis and clinical outcome of cancers

\*GATENBY Robert\* (Tampa, USA)\*: \*Evolutionary dynamics in cancer therapy

\*HAREL-BELLAN Annick\* (Gif-sur-Yvette, France): Non-coding RNAs and cancer

\*HENG Henry \*(Detroit, USA): Genome chaos and cancer evolution

\*HIBNER Urszula \*(Montpellier, France): Host-pathogen interactions: hijacking of cellular functions by the Hepatitis C virus sensitizes the host cell to oncogenic transformation

\*HOCHBERG Michael \*(Montpellier, France): Optimizing preventative therapies

\*KELLER Laurent \*(Lausanne, Switzerland): Darwinian selection in cancer cells

\*MAINI Philip \*(Oxford, United Kingdom): Mathematical and computational modeling of cancer growth and dynamics

\*MALEY Carlo \*(San Francisco, USA): Why we get cancer and why it has been so hard to cure?

\*OLIVIERI Isabelle \*(Montpellier, France): What can we learn from evolutionary thinking-based pesticide management for optimizing chemotherapy protocols?

\*PACHECO Jorge \*(Braga, Portugal): Somatic evolution of cancer in hematopoiesis

\*PEPPER John \*(Bethesda, USA): Evolutionary insights into acquired resistance to cancer therapy, and how to avoid it

\*QUINTANA-MURCI Lluís \*(Paris, France): From evolutionary and population genetics to human disease

\*RADMAN Miroslav \*(Paris, France): Keynote address: Biological clock in carcinogenesis

\*SAVAGE Philip \*(London, United Kingdom): Why are only some cancers curable with chemotherapy?

\*SOLÀ Ricard \*(Barcelona, Spain): The evolution of unstable cancer cell populations

\*SPROUFFSKE Kathleen \*(Zurich, Switzerland): Reconstructing the order of somatic mutations in cancer progression

\*STRATTON Michael \*(Cambridge, United Kingdom): Sequencing the cancer genome

\*THOMAS Frédéric \*(Montpellier, France): Evolution of cancer vulnerability among species: Peto’s paradox revisited

\*TLSTY Thea \*(San Francisco, USA): Identification of factors that control the rate of malignant evolution

\*TOMLINSON Ian \*(Oxford, United Kingdom): Signatures and consequences of selection in colorectal cancer genes

\*WEITZMAN Jonathan\* (Paris, France): What can intracellular parasites teach us about tumorigenesis?

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To read the entire message look it up at <http://life.biology-mcmaster.ca/~brian/evoldir.html>

## Strasbourg France EcolBehaviour Apr23-26

Anne-Mathilde Thierry, for the organizing committee of the 9th Ecology & Behaviour conference in France.\*

Following its success in Chiz (2005), Strasbourg (2006), Montpellier (2007) and Toulouse (2008), Lyon (2009), Tours (2010), Rennes (2011), Chiz (2012), Strasbourg has the great honour to welcome the 9th edition of the Ecology & Behaviour± Meeting from the 23th to the 26th April 2013.\*

If you are a postgraduate student or a postdoctoral researcher, and if your research is centered on Ecology and Behaviour, this meeting is for you. Come and present your results in a friendly atmosphere in front of an international audience of young researchers. No need to worry about organization, we'll take care of everything: you only need to plan and pay for your travel ticket to Strasbourg, \*provided that you present a communication during the conference.\* Post-doctorates, and participants who will not present a communication during the conference, will have to pay registration fees.

Whether you are a student, a researcher or just curious, here is an opportunity to attend to an international congress, hear about the latest discoveries in Ecology and Behaviour and enjoy stimulating discussions with young researchers and guest speakers.

To contact us: [serl2013.strasbourg@gmail.com](mailto:serl2013.strasbourg@gmail.com)

Abstract submission deadline: January 7th 2013.

More information on the conference website : <http://serl2013.sciencesconf.org/> Anne-Mathilde Thierry <[amthierry@gmail.com](mailto:amthierry@gmail.com)>

## UColorado Denver ProteinEvolution Feb7-9

SMBE Satellite Meeting on Mechanisms of Protein Evolution II

We are pleased to announce the SMBE Satellite Meeting on Mechanisms of Protein Evolution II: Thermodynamics, Phylogenetics, and Structure (MPEII 2013), to take place at the University of Colorado Denver's Anschutz Medical Campus, February 7-9, 2013.

The meeting aims to broadly cover the interface of protein evolutionary mechanisms, models of amino acid substitution, genomics/systems biology and phylogenetics. Topics also include adaptation, coevolution, convergence, neutral processes including mutation, prediction of folding, prediction of mutational effects, the influence of protein-protein interactions on protein evolution, and the interaction of next-gen sequencing and model development. This is a small meeting, with plenty of opportunity for interaction. Talks by students as well as more senior scientists are encouraged, and there will be a poster session this year in addition to talks. This meeting is also partially sponsored by BMC Evolutionary Biology and the UC Denver Department of Biochemistry & Molecular Genetics, Program in Computational Bioscience, and Consortium for Comparative Genomics.

Confirmed invited speakers include: Belinda Chang, University of Toronto Andy Clark, Cornell University Richard Goldstein, National Institute of Medical Research (UK) Nicolas Lartillot, University of Montreal David Liberles, University of Wyoming Michael Lynch, Indiana University James McInerney, National University of Ireland-Maynooth Mary O'Connell, Dublin City University David Pollock, University of Colorado School of Medicine Jeff Thorne, North Carolina State University Naomi Ward, University of Wyoming

More information and registration can be found at <http://www.proteinevolution.org>. The early registration deadline is December 15, 2012. A ski trip at Copper Mountain (CO) is being planned for attendees in the day(s) that follow the meeting. We hope you can join us in Denver for this event.

David Pollock, James McInerney, and David Liberles

David Liberles <[liberles@uwyo.edu](mailto:liberles@uwyo.edu)>

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**ULiverpool HumanPopGenetics**  
**Jun23-25**

Dear All,

The 10th Conference on Hunter and Gatherer Societies (CHaGS) will be held at the University of Liverpool (UK) on 23-25 June 2013. All information about organization and sessions can be found at: <http://www.liv.ac.uk/sace/CHaGS/> I am organizing a Population Genetics session entitled: The Genetics of Hunter and Gatherer Populations: Diversity, Origins, Demography, and Evolution.

We have extended the deadline for abstract submission for this session and this conference until Monday 26th November 2012 at midnight.

Abstracts should be submitted directly to me at [verdu@mnhn.fr](mailto:verdu@mnhn.fr) Abstracts should include: Title, Author names and affiliations, max 350 words abstract and 5 keywords.

Although mainly aimed at ethnographers and cultural anthropologists, this conference also provides a unique interdisciplinary framework for biological anthropologists and population geneticists with, in particular, two sessions of specific interest for our community : -Human Biological Adaptation and Evolution: Mechanics and energetics of hunting, gathering and processing food; Organizer: Nathaniel J Dominy (Dartmouth College, USA), - my Human Population Genetics session.

I hope some of you will find this conference of interest and join us next year in UK.

All the Best,

Paul Verdu

- Paul Verdu PhD. CNRS, Chargé de Recherche/CNRS Researcher MNHN, UMR 7206 Eco-Anthropologie et Ethnobiologie 47 rue Cuvier 75005 Paris CP 129 France [verdu@mnhn.fr](mailto:verdu@mnhn.fr) Tel. +33 1 40 79 81 54 Fax. +33 1 40 79 32 31

[verdu@mnhn.fr](mailto:verdu@mnhn.fr)

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**Yosemite Symbiosis evolution**  
**May25-26**

Dear Colleagues, The third annual Yosemite Symbiosis Institute will take place on May 25-26, 2013 at the Sierra Nevada Research Institute, Yosemite National Park.

This is an integrative meeting of biologists focusing on symbiosis research Co-organized by Mónica Medina (UC Merced) and Joel Sachs (UC Riverside)

May 25-26, 2013. DEADLINES: EARLY BIRD REGISTRATION: JANUARY 15TH POSTER/TALK SUBMISSIONS: MARCH 15TH KEYNOTE SPEAKER: John N. Thompson Title: "Relentless Coevolutionary Dynamics" Abstract: We now know that coevolution is not a slow and stately process. It is often fast and relentless at every temporal and spatial scale. We have evidence of rapid coevolutionary change in environments ranging from relatively simple microcosms to complex communities in nature. The process generates ever-shifting mosaics of adaptation and counter-adaptation across ecosystems. Most coevolutionary changes do not lead to sustained directional change in species, but they are ecologically important and evolutionarily crucial as the means by which populations persist. It is likely that we are still underestimating the rates and importance of ongoing coevolution among interacting species.

Key information for our 3rd annual meeting:

Why: We again had a very successful event last year! This inspired us to keep the momentum going. Our goal is continue these meetings every year at Yosemite to better integrate scientists that focus on symbiosis research. The last couple of years, the event was funded by the University of California (Office of the President and UC Merced Office of Research) enabling us to bring people from all over the state and the Western US. We would like to attract participants from the rest of the country for what promises to become an important regional meeting for our discipline. This year we are still trying to keep costs down, so please be prepared to share quaint but rustic facilities at a field station.

Who: We plan this meeting to be small by design (<50) and seek to gather scientists interested in cooperation and symbiosis. Last year the workshop covered a range of symbiosis topics from ecology and evolution to



molecular mechanisms. We have made reservations for approximately 45 attendees (though more options are available for anyone who would like to stay nearby). We would like to make room for a diverse group of people so we will initially accept up to 3 lab members per group (including the PI) on a first come first served basis.

When: The meeting will be held May 25th-26th, though we hope that attendees will arrive on Friday to enjoy the park. We will schedule talks for part of each day so that there is plenty of time to enjoy the beautiful Yosemite Valley and environs. Since time at the conference is limited, we will ask attendees to submit an abstract and a preference (talk versus poster). We will hope to give everyone their first preference, but some of the attendees might be asked to submit posters if there is a limitation in talk slots. Abstract and early bird registration are due on February 1st.

Where: The talks and all meals will take place at the community center in Wawona, California which just within the South Entrance of Yosemite National Park and part of the Sierra Nevada Research Institute (SNRI). SNRI has a set of cabins throughout Wawona and all within a short walk of the community center.

Costs: Grad students \$180, Postdocs \$200, PIs \$220 by January 15. grad students \$220, postdocs \$240, PIs \$260 after January 15. This fee will cover both lodging and food. Last year the food was excellent so we hope to maintain a high level of quality this year too!

Please register at <https://intelforms.ucmerced.edu/Form/Symbiosis> You can look at the program for 2011 and for 2012 at the below sites.

[http://medinalab.org/portal/images/files/Symbiosis\\_program\\_2011.pdf](http://medinalab.org/portal/images/files/Symbiosis_program_2011.pdf) <http://medinalab.org/portal/images/files/symbioconf2012.pdf> Please direct any questions to Mónica Medina at [mmedina@ucmerced.edu](mailto:mmedina@ucmerced.edu) or Joel Sachs at [joels@ucr.edu](mailto:joels@ucr.edu)

Joel L. Sachs Assistant Professor Department of Biology University of California #310 Science Labs I Riverside, CA 92521 [joels@ucr.edu](mailto:joels@ucr.edu) Office (951) 827-6357 Fax (951) 827-4286

Mailing Address: Sachs Lab UC Riverside 3401 Watkins Dr 1229 Spieth Hall Riverside, Ca 92521

<http://www.sachslab.com> <http://www.biology.ucr.edu/people/faculty/Sachs.html>  
[joels@ucr.edu](mailto:joels@ucr.edu)

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## BIOLS Beijing Bioinformatics

PhD students in Metagenomics and Bioinformatics at Beijing Institutes of Life Science, Chinese Academy of Sciences, Beijing, China

The Zhao Lab (<http://159.226.116.227/-About.Us.html>) at the Computational Biology Center of Beijing Institutes of Life Science, Chinese Academy of Sciences, is seeking highly motivated and ambitious Postdoctoral fellows and PhD students in the areas of bioinformatics and metagenomics. Metagenomics based on random sequencing of microbial community DNA offers the opportunity to understand the phylotypic diversity and the functional potential present in microbial communities. We aim to develop sophisticated metagenomic algorithms and softwares, and to combine the power of genomics, bioinformatics and systems biology to understand various environmental communities.

Applicants must have the ability to work in a team, have good communication skills and should be highly motivated and committed to pursuing interdisciplinary research. Programming skills in Perl, Python, Java or C/C++, and/or a knowledge of statistical bioinformatics (R) would be highly regarded.

Please submit a cover letter (including a brief statement of interest), CV and contact information for two references to Prof. Fangqing Zhao at [zhfq@mail.biols.ac.cn](mailto:zhfq@mail.biols.ac.cn).

Fangqing Zhao Principal Investigator, Computational

Genomics Lab, Beijing Institutes of Life Science, Chinese Academy of Sciences (BIOLS) Tel: 86-10-64869325 Fax: 86-10-64880586 Email: [zhfq@mail.biols.ac.cn](mailto:zhfq@mail.biols.ac.cn)

biols <[zhfq@mail.biols.ac.cn](mailto:zhfq@mail.biols.ac.cn)>

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## BrownU MBL NGS EvolutionaryBiol

Dear Colleagues,

Brown University and the Marine Biological Labs in Woods Hole are accepting applications for the Ph.D. program in Reverse Ecology, the application of next-generation sequencing technologies to questions in ecology, evolution and environmental sciences.

This program is supported by an NSF IGERT award and will give special consideration to applicants interested in integrating genomics, ecology and evolutionary biology, and computational biology as the foundation of their doctoral training. Highlights of the program are a core course in reverse ecology that applies high throughput sequencing tools, neutral models of ecological and evolutionary variation, and computational analyses of large data sets to test specific ecological or evolutionary questions at NSF LTER sites. Training in field ecology, Illumina library preparation, and computational and statistical analyses are achieved through hands-on, group projects that culminate in joint-authored manuscripts for publication.

Research themes include 1) microbial and comparative

genomics, 2) adaptation to environmental gradients, and 3) computational challenges of community genomic assembly. Additional rotation projects and fellowships at IBM and the J. Craig Venter Institute are available as well.

Details can be found at: <http://brown.edu/Research/IGERT-reverse-ecology/> Applications should be submitted online through the

Brown Graduate School web site:

<http://www.brown.edu/gradschool/> Feel free to contact David Rand at Brown (David\_Rand@brown.edu) or Zoe Cardon at MBL (zcardon@mbi.edu) with questions.

The deadline for applications is January 2, 2012

David M. Rand Professor of Biology Department of Ecology and Evolutionary Biology Box G-W, 80 Waterman Street Brown University Providence, RI 02912 Voice: (401) 863-2890 (Office - Walter Hall 202) (401) 863-1063 (Lab - BioMed Center 516-518) Fax: (401) 863-2166 email: David\_Rand@brown.edu web pages: <http://research.brown.edu/research/profile.php?id=1100924991&r=1> <http://www.brown.edu/Departments/EEB/rand/index.htm> <http://brown.edu/Research/IGERT-reverse-ecology/> David Rand <David\_Rand@brown.edu>

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## CityUNewYork Conservation

A position for a PhD student at the Graduate Center, City University of New York is available through the Conservation Biology laboratory of Dr. Eugenia Naro-Maciel, College of Staten Island, starting Fall 2013. The position includes full tuition, benefits, and a full salary stipend. Compatible candidates should be interested in one of two areas: 1) investigating genetic relationships among and within species in order to understand patterns and processes of molecular evolution, and to inform conservation strategies; 2) restoration ecology. There are several current research projects ranging from ecological and genetic research at Freshkills Park, formerly one of the world's largest landfills, to conservation genetics or genomics (please see below). Students are also welcome to develop their own original projects related to the Freshkills Park ecosystem, or to develop new ideas in conservation genetics, genomics, or bioinformatics. To fill this position the student must be accepted to the CUNY Graduate

Center (<http://www.gc.cuny.edu/Prospective-Current-Students/Prospective-Students>). The application is due in December. Interested students are requested to email a cv and cover letter, including research interests, GRE scores, and grades to Eugenia.NaroMaciel@csi.cuny.edu

**POPULATION GENETIC STRUCTURE** Protected areas form the cornerstone for conservation planning worldwide; however, protecting an area does not automatically achieve conservation outcomes. Sea turtles and other highly migratory organisms protected in one area may face threats when moving to other localities. Understanding the linkages between groups in protected areas and outside them is key to effective conservation. We are therefore investigating the population distribution of highly migratory sea turtles throughout the world's oceans (Naro-Maciel and Fomia 2006; Naro-Maciel et al. 2007; Caraccio et al. 2008; Monzon-Arguello et al. 2010). Identifying migratory connections is particularly challenging in the case of highly migratory organisms such as sea turtles, which spend much of their lives hidden from view moving throughout the oceans. We are using genetic analysis to understand the connections between sea turtle populations. By determining the unknown linkages between feeding grounds and other regional breeding or feeding sites, we will better understand the range of these turtles, identify regional management partners, and determine conservation priorities.

**DNA BARCODING** DNA barcoding is a global initiative that provides a standardized and efficient tool to catalogue and inventory biodiversity, with significant conservation applications (<http://www.barcoding.si.edu/whatis.html>). To obtain DNA barcodes of marine turtles, we sequenced a segment of the cytochrome c oxidase subunit I (COI) gene from eighty turtles of all seven species in the Atlantic and Pacific Ocean basins. To further investigate genetic variation, we sequenced green turtles (*Chelonia mydas*) from nine additional Atlantic/Mediterranean nesting areas and from the Eastern Pacific. We established character-based DNA barcodes for each species using unique combinations of character states. DNA barcoding of marine turtles is a powerful tool for species identification and wildlife forensics, which also provides complementary data for conservation genetic research (Naro-Maciel et al. 2010). The project has been expanded to include DNA barcodes for other threatened turtles listed on the IUCN Red List of threatened species (Reid et al. 2011), and spiny lobsters (Naro-Maciel et al. 2011). Future efforts will focus on urban barcoding including at Freshkills Park.

**EVOLUTIONARY RELATIONSHIPS** Marine cheloni-

ans have inhabited the earth for over 100 million years (Hirayama, 1998). To address the lingering controversies and to recover a definitive marine turtle phylogeny, we sequenced five nuclear DNA markers and two mitochondrial genes in the seven widely recognized marine turtle species, the taxonomically ambiguous Eastern Pacific green turtle, and four outgroups. Using this approach we tested hypotheses about the evolutionary relationships of marine turtles, including the placement of the geographically restricted flatback turtle, and the origin of the rare spongivorous dietary habit of hawksbill turtles. Our phylogenetic results differ from those recovered in previous molecular studies by strongly supporting a sister-taxon relationship between the flatback (*Natator depressus*) and green turtles (*Chelonia mydas*). This phylogenetic study provides a foundation for more detailed research in evolutionary biology, clarifies systematic issues of these highly threatened species, and significantly contributes to the resolution of the “turtle tree of life” (Naro-Maciel et al. 2008). Our next project focuses on the

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## ColoradoStateU EvolutionaryEcology

### MS ASSISTANTSHIP IN EVOLUTIONARY ECOLOGY COLORADO STATE UNIVERSITY

We seek a motivated M.S. student to conduct research on the evolution of male coloration in the Trinidadian guppy. The student will be co-advised by Drs. Lisa Angeloni and Chris Funk at Colorado State University beginning fall 2013 and will be supported by teaching assistantships during the academic year and a research assistantship during the summer. The bright color patterns of male Trinidadian guppies are used to attract females, but can also increase the risk of predation. This project will address how male coloration changes in a guppy population with low predation risk when there is gene flow from a population that has evolved with high predation risk. We welcome applications from prospective students with a record of academic excellence and a strong interest in evolution. We also particularly encourage applicants from

groups historically underrepresented in the sciences (African American, Hispanic, Native Hawaiian and Pacific Islander, and those enrolled in Native American tribes), as scholarship awards are available to competitive applicants from those groups (for more information: <http://www.agep.colostate.edu/diversity/agep/>). The successful applicant must meet the entrance requirements for Masters candidates at CSUs Department of Biology (<http://www.biology.colostate.edu/graduate-programs>) or CSUs Graduate Degree Program in Ecology (<http://www.ecology.colostate.edu/prospective.aspx>). To apply, please email a one-page statement of your research interests and your CV (including your GPA, GRE scores, and names, phone numbers, and email addresses of three references) to [angeloni@colostate.edu](mailto:angeloni@colostate.edu). We anticipate selecting a candidate by February 2013.

W. Chris Funk, Assistant Professor Department of Biology Colorado State University Fort Collins, CO 80523-1878 Tel: 970-491-3289 Fax: 970-491-0649 E-mail: [Chris.Funk@colostate.edu](mailto:Chris.Funk@colostate.edu) URL: <http://rydberg.biology.colostate.edu/funklab/> “Funk,Chris” <[Chris.Funk@colostate.edu](mailto:Chris.Funk@colostate.edu)>

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## ColroadoStateU AvianEvolution

### PHD ASSISTANTSHIP IN AVIAN EVOLUTIONARY ECOLOGY COLORADO STATE UNIVERSITY

We seek a self-motivated and creative doctoral student to conduct research on the evolutionary ecology of Song Sparrows on the California Channel Islands. Fieldwork will start in late spring 2013 and the student will enroll at Colorado State University (CSU) in the 2013 fall semester. This dissertation research will be part of multi-investigator project involving CSU, the Smithsonian Institution, the U.S. National Park Service, and The Nature Conservancy. The student will be co-advised by Dr. Chris Funk and Dr. Cameron Ghalambor at CSU, and be supported by both teaching and research assistantships.

A key project objective is to understand how population structure and local adaptation can inform conservation management of the sparrow in Channel Islands National Park. The student will have freedom to develop a thesis topic, so long as the dissertation overlaps sufficiently with this objective. We welcome applications from prospective students with a record of academic excellence, a strong interest in evolution and

avian ecology, and extensive training in the observation, capture, and handling of wild birds. Ideal candidates will have a Masters degree, molecular lab experience, at least one publication, and graduate coursework in statistics and genetics. The successful applicant will need to meet the entrance requirements for doctoral candidates at CSUs Department of Biology (<http://www.biology.colostate.edu/graduate-programs>).

To apply, email your CV (including names, phone numbers, and email addresses of three references) and a one-page statement of research interests to [Chris.Funk@colostate.edu](mailto:Chris.Funk@colostate.edu). We anticipate selecting a Ph.D. candidate by February 2013.

W. Chris Funk, Assistant Professor Department of Biology Colorado State University Fort Collins, CO 80523-1878 Tel: 970-491-3289 Fax: 970-491-0649 E-mail: [Chris.Funk@colostate.edu](mailto:Chris.Funk@colostate.edu) URL: <http://rydberg.biology.colostate.edu/funklab/> "Funk,Chris" <[Chris.Funk@colostate.edu](mailto:Chris.Funk@colostate.edu)>

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## DalhousieU FishConservationGenetics

### PHD POSITION IN CONSERVATION GENETICS OF NORTHERN FISHES

Support is available for a PhD and an MSc position in the laboratory of Daniel Ruzzante at Dalhousie University (Halifax, Nova Scotia, Canada) for research in landscape and conservation genetics of fish in Labrador. Both candidates should have a strong interest in conservation and landscape genetics/genomics. The candidate for the PhD position should have experience with molecular techniques. The project will involve fieldwork in Labrador. The position is expected to start in the 2013/2014 academic year.

If interested please e-mail a statement of research interests, your CV and the names and e-mail addresses of two people willing to act as academic references to Daniel Ruzzante, Professor, Department of Biology, Dalhousie University, Halifax, Nova Scotia, Canada, B3H 4J1.(email: [daniel.ruzzante@dal.ca](mailto:daniel.ruzzante@dal.ca), <http://myweb.dal.ca/~ruzzante>)

Daniel Ruzzante, Professor Department of Biology, Dalhousie University, Halifax, Nova Scotia, Canada, B3H 4J1 phone: (902) 494-1688 fax: (902) 494-3736 e-mail: [daniel.ruzzante@dal.ca](mailto:daniel.ruzzante@dal.ca)

<http://myweb.dal.ca/ruzzante>

<http://>

[patagonia.byu.edu](http://patagonia.byu.edu) Canada Research Chairs <http://www.chairs.gc.ca> [Daniel.Ruzzante@Dal.Ca](mailto:Daniel.Ruzzante@Dal.Ca)

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## DanishTechU SalmonidPopulationGenetics

PhD Scholarship in Population genetics A PhD Scholarship in Population Genetics is available at the National Institute of Aquatic Resources (DTU Aqua) with starting date 1st February or 1st March 2013.

The project will primarily be carried out in the Section for Marine Living Resources' Population Genetics group in Silkeborg, Denmark. The PhD project is a part of a European Union joint research project assessing genetic effects of aquaculture on wild fish populations. The project is coordinated by DTU Aqua and started November 2012. The PhD project will have an independent profile but will be carried out in collaboration with international research partners. The successful applicant will be expected to take part in experimental work during regular shorter stays in Norway.

The purpose of DTU Aqua is to provide research, advice and education at the highest international level within the sustainable exploitation of living marine and freshwater resources, the biology of aquatic organisms and the development of ecosystems as well as their integration in ecosystem-based management. The institute has an international research staff comprising approx. 120 academic employees.

Project description Knowledge of local adaptation and adaptive potential of natural populations is becoming increasingly relevant due to anthropogenic changes to the environment. Humans have cultured and released fish into wild populations for hundreds of years. However, it was not until the development of the aquaculture industry, together with increase in numbers of escapees observed in wild populations, that genetic interactions between domesticated and wild conspecifics started to become a major global concern. The project addresses local adaptation in brown trout, *Salmo trutta*, and will investigate how interbreeding between individuals of wild and hatchery origin affects life history and fitness in wild populations. The project will combine information from novel genetic markers with experimental assessment of heritable fitness components and differences in life-history traits. Linkage mapping and admixture mapping will be applied

to link quantitative traits with specific gene regions and for establishing the genetic architecture of introgression. The project will take advantage of the fact that interbreeding between wild and farmed fish provides a unique opportunity to study functional adaptations from a general evolutionary perspective, and the project is planned to have a strong evolutionary ecology profile. The results of the project will form the basis for providing advice on management of farmed and wild trout populations to national authorities and the European Commission.

**Qualifications** We are looking for a candidate who has: Master of Science (M.Sc.) degree, or equivalent. Previous experience in population or breeding genetics and preferentially also ecological research. Good mathematical skills, and potentially experience with QTL modeling. Proficiency in written and spoken English. Keen interest in research and for working within the field of molecular and evolutionary ecology.

#### Approval and Enrolment

Scholarships for a PhD degree are subject to academic approval, and the successful candidate will be enrolled in one of the general degree programmes at DTU. For information about the general requirements for enrolment and the general planning of the scholarship studies, please see the DTU PhD Guide <[http://www.dtu.dk/English/education/Phd\\_Education/PhD\\_guide.aspx](http://www.dtu.dk/English/education/Phd_Education/PhD_guide.aspx)>.

**Salary and appointment terms** Salary and appointment terms are consistent with the current rules for PhD degree students at DTU. The period of employment is 3 years.

**Further information** For further information about the project, please contact Senior Scientist Dorte Bekkevold; [db@aqua.dtu.dk](mailto:db@aqua.dtu.dk), or Professor Einar Eg Nielsen, [een@aqua.dtu.dk](mailto:een@aqua.dtu.dk) General information may be obtained from Nina Qvistgaard, [niq@aqua.dtu.dk](mailto:niq@aqua.dtu.dk) (+45) 3588 3090.

**Application:** Applications should be submitted online. Please open the link "apply for this job online", fill in the application form and attach all the following documents:

1. Curriculum vitae - including a list of publications
2. A letter motivating the application
3. Grade transcripts and BSc/MSc diploma
4. Conversion of grade averages to Danish grades (see guidelines for the conversion here <[http://www.dtu.dk/upload/administrationen%20-%20101/afi/phd/grades\\_uk.xls](http://www.dtu.dk/upload/administrationen%20-%20101/afi/phd/grades_uk.xls)>)
5. Brief research proposal (1-2 pages) presenting ideas on how to address the research topics given in the short description of the

PhD project above.

Deadline for application:

Applications should be received no later than 17th December 2012.

All interested candidates irrespective of age, gender, race, religion

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

## DrexelU EvolutionOfSymbiosis

Subject Header: Graduate Position: DrexelUniversity.EvolutionOfSymbiosis

The Russell lab at Drexel University seeks driven and enthusiastic Ph.D candidates to join them in the Department of Biology for the Fall of 2013. The best applicants will have background experience in molecular ecology, microbiology, microscopy, or entomology. Students would work on one of two NSF-funded grants focused on symbiosis in aphids and ants.

The central theme in the Russell lab is the evolution of symbiosis, and we are addressing different types of questions in the aphid and ant systems.

First, what features correlate with the composition of symbiotic communities across the ants? And what do such correlations tell us about the likely causes and consequences of symbiosis in this group? We are specifically interested in the question of whether microbes have facilitated the origins of herbivory across the ants, and are using experimental and metagenomic approaches to address this possibility.

Second, what forces favor the maintenance of diverse, heritable symbiont communities in the pea aphid? There are at least seven species of "secondary" symbionts infecting aphids from this species. Five of these are known to defend against natural enemies, and all are found at intermediate levels within pea aphid populations. But it has recently been shown that several of these species exhibit strain diversity, with up to four different strains of one symbiont existing within a single population. Given the existence of multiple symbiont infections, the number of cytoplasmic genotypes harbored by pea aphids is quite large. How can such



diversity be maintained in aphid populations? And do defensive symbionts mediate antagonistic coevolution between aphids and their natural enemies?

The lab is currently made up of three graduate students and one postdoc. All students have advanced to Ph.D candidacy and will serve as experienced mentors for incoming students. Students will be trained in the realms of molecular biology, bioinformatics (and possibly metagenomics), experimental biology, and field research. Current field sites include Southeastern Pennsylvania and the Florida Keys. Through Jake Russell's joint appointment with Drexel's new Biodiversity, Earth, and Environmental Sciences, students will interact with a broad range of faculty with interests in organismal biology, systematics, ecology, and evolution.

FOR MORE INFORMATION  $\hat{\text{A}}$  Russell lab website: <http://www.pages.drexel.edu/~jar337/index.html>  
Application website: <http://www.drexel.edu/grad/-programs/coas/biological-sciences/> Biology department website: <http://www.drexel.edu/biology/> BEES department website: <http://drexel.edu/bees/>  $\hat{\text{A}}$  Interested students SHOULD contact Jake Russell ([jar337@drexel.edu](mailto:jar337@drexel.edu)) to discuss their background, qualifications, and aspirations for Ph.D research.

$\hat{\text{A}}$  Dr. Jacob A. Russell Assistant Professor Department of Biology Drexel University Philadelphia, PA 19104 phone: 215-895-1643 e-mail: [jar337@drexel.edu](mailto:jar337@drexel.edu)

Jacob Russell <[jar337@drexel.edu](mailto:jar337@drexel.edu)>

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## Frankfurt FungalEvolution

Goethe-University Frankfurt, Department of Biological Sciences (Institute of Ecology, Evolution and Diversity) invites applications for the position of a

Scientific coworker / Ph.D. student

(TvH E13 1/2)

The position is available from 1st of January 2013 to 31st of December 2015.

We are seeking an individual whose research will be adding significantly to the LOEWE excellence cluster  $\$B!H(BIntegrative Fungal Research\$B!I(B. The cluster has recently been funded, and includes researchers in mycology at four universities in Germany and the Senckenberg Society. The aim of the cluster is to synergistically tie together the basic research areas of biodiversity research, molecular genetics, and genomics with$

translational research in biochemistry and biotechnology. Thus, the research cluster offers an ideal environment for scientific development and profiling.

Within the research cluster, the successful applicant will work on a project on deciphering the fatty acid metabolism of oomycetes with respect to the synthesis of long omega-3 fatty acids.

The applicant should hold an MSc degree (or equivalent) in biology or related fields. We expect good written and oral communication skills in English. Salary and benefits are according to TvH E13 1/2.

If interested, please contact Prof. Dr. Marco Thines ([marco.thines@senckenberg.de](mailto:marco.thines@senckenberg.de)) and submit your application including a cover letter, CV, certificates (MSc, BSc, or similar), and the names of two scientists who could provide references. Applications should be submitted as a single PDF file.

Review of applications will start on the 20th of November 2012.

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Katharina Nikolai Coordination Assistant Project Area C BiK-F Biodiversity and Climate Research Centre Siesmayerstr. 70 A 60323 Frankfurt Germany +49 (0)69 7542 1851

Katharina Nikolai <[Katharina.Nikolai@senckenberg.de](mailto:Katharina.Nikolai@senckenberg.de)>

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## GeorgeWashingtonU SaprotrophicFungalEvol

We are looking for a graduate student to join our plant evolutionary ecology research group, beginning fall semester 2013. Support is available for a student to participate in an NSF-funded project, which examines the influences of plant traits on wood decay.

We are exploring how plant traits relate to community structure and function of decomposing fungi, and the consequences of these interactions for the forest carbon cycle in the Central and Eastern USA and Eastern Australia as climate changes. The research assistant would focus on wood decay and fungal culturing and identification, using both traditional techniques (field collection and culturing) and molecular methods (targeted sequencing and next-generation based metagenomics). The student would have opportunities to spend time in collaborating labs that specialize on fungal identification, enzyme analysis and genomics. Motivated stu-



dents with interests or skills in mycology, molecular biology, and bioinformatics are especially encouraged to apply.

The student would join an interactive lab group (<http://www.phylodiversity.net/azanne/>) that broadly focuses on plant structure and function (anatomy and physiological ecology), community ecology, and evolutionary ecology, both in the temperate and tropical areas. 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 on the NSF project (or on other projects broadly related to the lab interests), 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 (<http://departments.columbian.gwu.edu/biology/>). The application deadline is 2 January 2013. I am also happy to answer any further questions you might have.

Dr. Amy Zanne Department of Biological Sciences 2023 G St. NW George Washington University Washington, DC 20052

Office: 352 Lisner Hall Office Phone: (202) 994-8751 Lab: 409 Bell Hall Lab Phone: (202) 994-9613 Fax: (202) 994-6100 Website: <http://www.phylodiversity.net/azanne/> [aezanne@gmail.com](mailto:aezanne@gmail.com)

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## LaurentianU FunctionalGenomicsMetabolomics

Graduate Student Positions: Functional Genomics and Metabolomics

Merritt Lab, Department of Chemistry & Biochemistry, Laurentian University

Graduate positions to study a variety of systems linked by common questions investigating the connection between genotype and phenotype are available in the Merritt Lab (<http://www3.laurentian.ca/merritt>). Both MSc and PhD positions are available to start May-

September 2013.

Current areas of investigation focus on network function, metabolomic complexity, and gene expression in flies and microbes. Successful applicants will be expected to develop research projects of their own that complement and build on these areas.

Network metabolomics

Much of my research program investigates interactions across simple metabolic networks as models of biological complexity. Often using *Drosophila melanogaster*, this research combines naturally occurring and laboratory engineered genetic variation with biochemical, physiological, and complex biological phenotypes to quantify the connection between genetic variation and biological complexity. Working with *D. melanogaster* allows us to combine cutting edge molecular genetics with natural population genetic diversity to investigate the function and evolution of network complexity. This work is expanding our understanding of interactions within networks and the importance of the overall genetic background. Our results have implications both in the application of model systems and in the importance of inter-individual genetic variation. Current directions in this research include expanding the search for network metabolites using broad-based liquid chromatography / mass spectrometry (LC/MS).

Microbial Diversity and Metabolomic Complexity

My lab is also using LC/MS for metabolomic profiling to quantify interactions within microbial communities. This research will use naturally occurring and lab cultured communities with increasing species richness to quantify interactions within these communities with a focus on the distinct microbial communities of Acid Mine Drainage (AMD) environments. AMD, highly acidic water draining from mine waste, is a global environmental issue that largely results from microbial metabolism of mining contaminates. As such, the microbial communities are of great environmental and economic interest. These communities are also strikingly simple, facilitating their study and reconstruction, making them an exciting system for understanding the fundamental science of community interactions and metabolomics. This research combines the publicly available genomic and metagenomic libraries for many of the dominant AMD microbes with developing LC/MS-based metabolomic profiling to establish the connections between species and genome diversity and metabolic complexity. This work will be co-supervised with Drs. Nadia Mykytczuk and Leo Leduc in the Department of Biology at Laurentian University.

Influence of Genomic Architecture and Diversity on

## Gene Expression

Conventional models of gene regulation focus on cis-regulation, the control of transcription by regulatory elements on the chromosome being transcribed. Recent research has highlighted the importance of trans-regulation, the influence of one chromosome on the expression of the other, essentially crosstalk between chromosomes and a form of epigenetic regulation. Trans-regulation is much more poorly understood than cis-, but is a fast developing field with implications in both “normal” and disease state gene expression; trans-regulation appears to be the norm in flies, but has been implicated in dysregulation of gene expression in some human cancers. My lab has been developing a model system in *D. melanogaster* that is extremely sensitive and experimentally tractable. Current research is investigating the role of both local and global factors in driving these trans-interactions.

The Merritt Lab is funded by grants from the Canadian Foundation for Innovation (CFI) and the Natural Sciences and Engineering Research Council (NSERC), including a Tier 2 Canada Research Chair. Laurentian University is a bilingual institution offering courses in both French and English.

Applicants should be independently motivated, have a good academic record, and have demonstrated both an interest in and aptitude for research. Please send an application with unofficial transcripts, a brief CV including contact information for two references, to:

Thomas Merritt (tmerritt@laurentian.ca),

Tier 2 Canada Research Chair in Genomics and Bioinformatics

Associate Professor Department of Chemistry & Biochemistry Laurentian University 935 Ramsey Lake Road Sudbury, ON, P3E 2C6, Canada.

Thomas Merritt <tmerritt@laurentian.ca>

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## LouisianaStateU Biodiversity

### Ph.D. Students Wanted in Biodiversity Science

I will be starting up my lab at Louisiana State University in the Fall of 2013 and I am looking for graduate students. Most of my research focuses on diversification processes in SE Asian and African small mammals. In general, I am interested in questions related to the geography and ecology of speciation and community

assembly, systematics and species delimitation, and geographic patterns of biodiversity, especially in islands and island-like systems. I use molecular genetics, field research, morphology, and bioinformatic techniques to address questions in these areas. Students with experience in DNA sequencing, phylogenetics, biodiversity inventories, or bioinformatics will be ideally suited, but enthusiasm for research is also important. Students will be encouraged to develop their own research interests and projects, but numerous collaborative opportunities are available for existing projects.

Financial support will be available in the form of Curatorial Assistantships from the Museum of Natural Science, Teaching Assistantships through the Department of Biology, and Research Assistantships for NSF-funded projects. Fellowships from the Board of Regents offer a flexible source of funds for the most qualified applicants.

My research is described in more detail here: [http://www.biology.mcmaster.ca/faculty/evans/-jake\\_esselstyn/](http://www.biology.mcmaster.ca/faculty/evans/-jake_esselstyn/) Information on the graduate program at LSU is available here: <http://biology.lsu.edu/cos/-biosci/GraduateProgram/Program/item38092.html> If you are potentially interested, please contact me:

Jake Esselstyn Biology Department McMaster University Hamilton, ON L8S 4K1 Canada

jessel@mcmaster.ca

Jake Esselstyn <jessel@mcmaster.ca>

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## LundU

### HermaphroditeSexualAntagonism

A PhD student position is now available in Dr. Jessica Abbott's lab to work on sexual antagonism in hermaphrodites.

More information about the position and how to apply can be found at <http://www.lu.se/lediga-tjanster-0/?Dnr=504597&Type=S> (Swedish) and <http://www4.lu.se/o.o.i.s?id=22598&Dnr=504597&Type=EN> (English).

Last day to apply is November 28th 2012.

Applications must be sent via the University's central application system, but informal inquiries can be addressed to [jessica.abbott@biol.lu.se](mailto:jessica.abbott@biol.lu.se).

Project description: What maintains variation in natu-

ral populations? This seemingly simple question represents one of the major unsolved problems in evolutionary biology. Selection in natural populations is often strong, and most traits are heritable, which in the long run should lead to depletion of standing genetic variation. Yet this is not what we see. Although several mechanisms for the maintenance of genetic variation have been suggested, such as mutation-selection balance and fluctuating selection, this issue is far from resolved. Recently, a new appreciation of the potential role of sexual antagonism in shaping patterns of standing genetic variation has developed. Sexual antagonism occurs when the same allele has opposite fitness effects in males and females, and as such may constrain the evolution of sexual dimorphism. Sexual antagonism has often been considered a relatively transient phenomenon which will eventually be resolved by the evolution of sex-specific modifiers, but recent research suggests that sexual antagonism can in fact be a chronic phenomenon, and may therefore be an important component of the standing genetic variation in sexual organisms.

Although there are theoretical reasons why such phenomena could be important even in hermaphrodites, there is currently little empirical data. However mutation-selection balance, spatial and temporal variation in sex-specific fitness optima, assortative mating for fitness, negative frequency-dependence, and asymmetric fitness and dominance effects are all phenomena that could contribute to maintaining sexually antagonistic genetic variation within hermaphroditic populations. The student will further explore this area using a three-pronged approach which combines quantitative genetics, experimental evolution, and simulation modeling. The amount of standing sexually antagonistic genetic variation for fitness in the hermaphroditic flatworm *M. lignano* can be measured using a standard quantitative genetics breeding design. An experimental protocol has already been developed and is currently in the pilot stage, which will allow the creation of a synthetic sex chromosome to measure the response to sex-limited experimental evolution in *M. lignano*. Finally, the student will use simulation modeling to determine under which conditions each of the phenomena listed above may contribute to intralocus sexual conflict in hermaphrodites.

About Lund: Lund University is one of the world's top 50 universities within the life sciences, and research at the Biology Department covers a wide range of topics, including Molecular Biology, Biodiversity research, and Evolutionary Ecology. Lund has good communications with Malmö (15 min. by train) and Copenhagen (40 min by train), and has been voted the best place to live

in Sweden.

– Dr. Jessica K. Abbott Department of Biology Section for Evolutionary Ecology Lund University Sölvegatan 37 223 62 Lund, Sweden Phone: 046 222 9304 Website: <http://jessicakabbott.com> “It is those who know little, and not those who know much, who so positively assert that this or that problem will never be solved by science.” –Charles Darwin, Descent of Man

Jessica Abbott <jessica.abbott@biol.lu.se>

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## MasseyU NZ Speciation

Speciation in marine molluscs.

Two PhD scholarships are available in the Phoenix Lab ([evolves.massey.ac.nz](http://evolves.massey.ac.nz)) to study the link between morphological change and speciation, using extant and extinct snails. The PhD students will be based at Massey University, Palmerston North, New Zealand and will collaborate with scientists in Wellington, NZ (GNS Science; <http://www.gns.cri.nz/>). The scholarships will cover tuition fees and provide a monthly stipend (for 3 years). These PhD scholarships are open to all nationalities.

The projects will use New Zealand's fantastic fossil record of marine snails and their living descendents. By combining DNA evidence from extant species with shell analysis of their fossil relatives, the putative link between speciation and punctuated evolution will be examined. The two projects will use the following tools, division dependent on the skills and interests of the candidates: (1) Model-based tests of evolutionary mode of shell shape change using outline-based Fourier shape analysis and/or landmark-based geometric morphometric analysis. (2) Delimit species boundaries using morphometrics, population genetics and coalescence theory. (3) Molecular clock analysis to estimate time of cladogenesis and test for concordance with fossil record origination dates.

A BSc Hons or MSc degree in some area of evolutionary biology is required (e.g. population genetics; palaeontology; genomics; computational biology; zoology; statistics; molecular ecology; molecular genetics). Applicants should send a covering letter describing their research interests, a CV including academic transcript, and contact information for two referees to Sharon Wright ([s.r.wright@massey.ac.nz](mailto:s.r.wright@massey.ac.nz)) before 20 February 2013. Interested students should contact A/Prof Mary

Morgan-Richards for further information (m.morgan-richards@massey.ac.nz) <http://evolves.massey.ac.nz> .  
M.Morgan-Richards@massey.ac.nz

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## Massey University Human Computational Genomics

### PhD Scholarship in Human Computational Genomics

I am looking for a motivated and productive PhD student to study meta-population dynamics and their role in maintaining human genetic diversity. There is scope to accommodate existing research interests, but broadly speaking the successful candidate will develop, implement and test new approaches in theoretical population genetics, statistical genetics and simulation modeling. These methods will be applied to genetic and cultural anthropology datasets from the Indo-Pacific region.

This theoretical and computational position requires solid quantitative skills, preferably including some knowledge of mathematics and/or statistics, as well as a basic understanding of scripting and/or programming. Training in biology and anthropology can be provided as needed, and candidates with non-standard quantitative research backgrounds are strongly encouraged to apply. Candidates must already hold a Masters or Bachelors degree with Honors.

Payment of tuition fees and a generous tax-free stipend are guaranteed for three years, with a probation period of one year prior to full confirmation.

The PhD position will be based in the Computational Biology Research Group at Massey University, New Zealand. My research team has a strong high-impact publication culture, and is firmly embedded in the international scientific community, with extensive collaborative links to the United States, France, Australia and Indonesia. Nevertheless, this position also offers a rare opportunity to experience New Zealand's unique natural and cultural environment. Palmerston North, a university town with a large international community, offers a full range of social and cultural amenities. The city is located close to mountains and the sea, and presents regular opportunities for hiking, skiing, surfing, and adventure sports.

Information about the Institute of Molecular BioSciences (<http://imbs.massey.ac.nz/>) and the Computational Biology Research Group (<http://massey.genomicus.com/>) is available online.

To apply for this position, send the following documents (in PDF format) to Murray Cox (email [m.p.cox@massey.ac.nz](mailto:m.p.cox@massey.ac.nz)):

1. A brief statement of research interests, qualifications and experience.
2. A curriculum vitae, including a list of scientific publications (if relevant).
3. The names and contact details of three referees willing to provide a confidential letter of recommendation upon request.

Informal enquiries are welcome. Formal applications are due by Friday 30 November 2012.

Associate Professor Murray P. Cox Institute of Molecular BioSciences Massey University Private Bag 11 222 Palmerston North 4442 NEW ZEALAND

<http://massey.genomicus.com/> [m.p.cox@massey.ac.nz](mailto:m.p.cox@massey.ac.nz)

“Cox, Murray” <M.P.Cox@massey.ac.nz>

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## MaxPlanck Evolution Social Behaviors

The Schroeder lab at the Max Planck Institute for Ornithology, Germany, member of the International Max Planck Research School (IMPRS) for Organismal Biology, is offering the fully-funded three-year PhD position Evolution of social behaviors

Project abstract Natural selection is expected to lead to 'good' genes taking over a population, and thereby to deplete genetic variation in natural populations. Nevertheless, even traits closely correlated to fitness often show considerable genotypic and phenotypic variation. Social behavior like dominance behavior and parental care behavior can vary widely between individuals, and incur fitness consequences. There must therefore be mechanisms operating that result in genetic variation in social behavioral traits being preserved. Different social environments may select for different social traits. A PhD position is available to examine this hypothesis and the evolutionary consequences. We will analyze 12 years of data from a pedigreed, wild island population of house sparrows. We use focused experiments on captive sparrows in Germany to test our hypotheses generated from observations on the wild population. This project takes place in cooperation with the University of Sheffield. The fieldwork on scenic and remote Lundy Island (UK) will take place 4 months each summer, requiring an independent and committed individual. Applicants should have an interest in evolutionary



biology.

The successful applicant will participate in the International Max Planck Research School (IMPRS) for Organismal Biology, the PhD program of the Max Planck Institute for Ornithology in Seewiesen and Radolfzell and the University of Konstanz. All IMPRS students are supported by stipends or contracts. The program offers a dedicated teaching program, high quality research experience, and outstanding research facilities in an inspiring research and living environment. The working language is English. Each PhD student receives individual supervision and mentoring and is guided in her/his research work by a PhD advisory committee.

**Qualification** Applicants should hold a MSc or equivalent degree in biology or a related discipline at the point of enrollment. Queries should be mailed to the IMPRS program office: IMPRS@uni-konstanz.de

**Deadline** for the application is January 15, 2013. Interviews are scheduled for Mid-March. The successful candidate is expected to start latest September 2013. The Max Planck Society is an equal opportunity employer.

**Application** For the online application process visit [www.orn.mpg.de/IMPRS](http://www.orn.mpg.de/IMPRS) More information at [www.orn.mpg.de/IMPRS](http://www.orn.mpg.de/IMPRS) and [www.facebook.com/OrganismalBiology](http://www.facebook.com/OrganismalBiology) Daniel Piechowski <dpiechowski@orn.mpg.de>

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## MaxPlanck EvolutionaryEcologyDispersal

The Dingemanse lab at the Max Planck Institute for Ornithology, Germany, member of the International Max Planck Research School (IMPRS) for Organismal Biology, is offering the fully-funded three-year PhD position

Evolutionary ecology of dispersal

**Project abstract** Our main research focuses on the proximate underpinning and ecological and evolutionary repercussions of between-individual in behavior and other labile traits. We apply research paradigms that focus on the integration of behavioral ecology, quantitative genetics, and evolutionary biology. We study suites of key behavioral (exploratory tendency, anti-predator boldness, aggressiveness) and life-history traits in each of 12 nest box populations of great tits, and use ex-

perimental approaches to ask i) whether natural selection can help maintain individual variation and ii) whether variation itself has ecological and evolutionary repercussions. This year, we encourage applicants with interest in the evolutionary ecology of dispersal to apply, since we are planning to quantify experimentally parental, environmental, and genetic sources of variation in natal dispersal behavior, and its links with perceived predation risk and parental personality (collaborative project with Bart Kempenaers).

The successful applicant will participate in the International Max Planck Research School (IMPRS) for Organismal Biology, the PhD program of the Max Planck Institute for Ornithology in Seewiesen and Radolfzell and the University of Konstanz. All IMPRS students are supported by stipends or contracts. The program offers a dedicated teaching program, high quality research experience, and outstanding research facilities in an inspiring research and living environment. The working language is English. Each PhD student receives individual supervision and mentoring and is guided in her/his research work by a PhD advisory committee.

**Qualification** Applicants should hold a MSc or equivalent degree in biology or a related discipline at the point of enrollment. Queries should be mailed to the IMPRS program office: IMPRS@uni-konstanz.de

**Deadline** for the application is January 15, 2013. Interviews are scheduled for Mid-March. The successful candidate is expected to start latest September 2013. The Max Planck Society is an equal opportunity employer.

**Application** For the online application process visit [www.orn.mpg.de/IMPRS](http://www.orn.mpg.de/IMPRS) More information at [www.orn.mpg.de/IMPRS](http://www.orn.mpg.de/IMPRS) and [www.facebook.com/OrganismalBiology](http://www.facebook.com/OrganismalBiology) Daniel Piechowski <dpiechowski@orn.mpg.de>

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## MaxPlanckInst Ravens

(1) Practical training at the Max Planck Institute for Ornithology, hand-raising of ravens (*Corvus corax*)

We are looking for enthusiastic people who help to hand raise ravens (*Corvus corax*) from 15.04. - 15.06.2013 and 05.06. - 05.08.2013 at the Max Planck Institute for Ornithology, Seewiesen, Germany.

We seek highly motivated, organized and reliable indi-

viduals who are interested in corvid behaviour and their development, like to interact with birds and are able to monitor their behavior.

We offer free accommodation at our guesthouse for the whole period and the opportunity to work at one of Europe's leading institutes for bird research.

For further information please contact:

Dr. Simone Pika Max-Planck-Institute for Ornithologie Humboldt Research Group <sup>3</sup>Comparative Gestural Signalling<sup>2</sup> Eberhard-Gwinner-Str. Geesehouse 82319 Seewiesen, Germany E-mail: [spika@orn.mpg.de](mailto:spika@orn.mpg.de) Webpage: [www.orn.mpg.de/cgs](http://www.orn.mpg.de/cgs) (2) Master thesis: Social bonding and communicative success in ravens (*Corvus corax*)

We are looking for an enthusiastic student who is interested in investigating whether strength of pair bond influences the success of communicative interactions in ravens (*Corvus corax*). Ravens communicate by using vocal and gestural signals, however their influence and usage has never been investigated in raven pairs in much detail. The present study aims to fill this gap by observing the behavior and communicative exchanges of 8 adult raven couples in different zoological gardens in Germany and Austria. The starting date is negotiable, a car and driver's license crucial.

We seek a highly motivated person with organizational skills, able and willing to work independently. You will learn to set up the observation schedule, film the behavior and communicative exchanges, design and develop a coding scheme and analyze the behavioral interactions.

We offer the opportunity to work at one of the leading institutes for bird research in Germany and Europe and to learn methods in comparative research and behavioral biology.

For further information please contact: Dr. Simone Pika Max-Planck-Institute for Ornithologie Humboldt Research Group <sup>3</sup>Comparative Gestural Signalling<sup>2</sup> Eberhard-Gwinner-Str. Geesehouse 82319 Seewiesen, Germany E-mail: [spika@orn.mpg.de](mailto:spika@orn.mpg.de) Webpage: [www.orn.mpg.de/cgs](http://www.orn.mpg.de/cgs) "Pika, Simone" <[spika@orn.mpg.de](mailto:spika@orn.mpg.de)>

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**MaxPlanck Berlin  
ComputationalBiol**

There are fully funded PhD positions in bioinformat-

ics available at the International Max Planck Research School for Computational Biology and Scientific Computing (IMPRS-CBSC) in Berlin, Germany, starting September 2013.

We invite applications for a 3-year PhD program aimed at students holding a master's or comparable degree in bioinformatics, mathematics, physics, computer science, or biology. Students with a degree in mathematics, computer science and physics are expected to have some knowledge of the biological background, whereas students with a degree in biology should be able to demonstrate profound knowledge in mathematics and computer science. The degree should be awarded before August 2013.

Areas of research include mathematical modelling, evolutionary genomics, computational systems biology, proteomics. For further details visit our website [www.imprs-cbsc.mpg.de](http://www.imprs-cbsc.mpg.de) or email [kelleher@molgen.mpg.de](mailto:kelleher@molgen.mpg.de). Please apply online before February 24th, 2013. The IMPRS-CBSC is a joint program between the Max Planck Institute for Molecular Genetics, the Freie Universität Berlin and the CAS-MPG Partner Institute for Computational Biology, Shanghai. The program language is English. International applicants and women are especially encouraged to apply.

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Kirsten Kelleher IMPRS-CBSC Coordinator Max Planck Institute for Molecular Genetics Ihnestrasse 73 14195 Berlin

Tel: +49 30 8413-1154 Fax: +49 30 8413-1152 Email: [kelleher@molgen.mpg.de](mailto:kelleher@molgen.mpg.de) [www.imprs-cbsc.mpg.de](http://www.imprs-cbsc.mpg.de) [kelleher@molgen.mpg.de](mailto:kelleher@molgen.mpg.de)

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## Netherlands VertebrateSystematics

PhD project: Vertebrate palaeontology and systematics of early chondrichthyans We seek to attract a PhD student who will be working on the project described below. You are a highly motivated candidate, ideally with a background in either the life or earth sciences, particularly in palaeontology, systematics, and/or anatomy. You are eager to join our new institute and to study the Naturalis natural history collections.

Project description: Chondrichthyans feature prominently in debates on the origin of jawed vertebrates, but remarkably little is known about the acquisition



of their distinctive anatomical traits. The early fossil record of chondrichthyans is comprised mainly of isolated scales, teeth, and spines, while articulated skeletons are comparatively rare. The current project examines the morphology and phylogenetic relationships of three articulated chondrichthyan and chondrichthyan-like fossil fishes from the Devonian and Carboniferous periods. The candidate will address several key questions regarding the characters of early chondrichthyans, how chondrichthyans are identified in the fossil record, and the implications for the timing and morphological evolution of both chondrichthyans and early jawed vertebrate fossils.

This project will provide training in phylogenetic techniques, as well as comparative morphological expertise, microscopic and histologic techniques, as well as potential for learning computed tomography techniques and possible fieldwork. Applications from candidates who submit their own project ideas in a related area are encouraged and will be considered.

**General requirements and skills** The successful candidate should have a Master's or Honour's bachelorate (or equivalent) degree in biology, geology, or palaeontology with experience in systematics/phylogenetics and preferably knowledge of anatomical or organismal biology. Previous experience in palaeontology preferred but not necessary. Excellent command of the English language (written and verbal) is required. He/she has a scientific and critical attitude, excellent time management and organizational skills, and the ability to work independently. The ideal candidate will be highly motivated with a demonstrated capacity for multidisciplinary research.

We offer A contract (36 hours per week) for a period of , for a period of one year, to be extended with three years after succesful first year evaluation. A salary of circa 33.000 per year. The candidate will also be affiliated with Leiden University. The appointment must lead to the completion of a PhD thesis. During your appointment you will be supervised Martin Brazeau. Feel free to contact Dr. Martin Brazeau with questions about the position, martin.brazeau@naturalis.nl

**Procedure** Interested applicants should submit the following documents, written in English: a CV, including a list of publications if any, a 1-2 page statement of academic and research interests, and at least two letters of recommendation from individuals who have had close academic contact with the applicant (e.g. previous supervisors or advisors) before 31 December 2012 by email to sollicitaties@naturalis.nl

Dr. Martin D. Brazeau NCB Research Fellow

“Brazeau, M.D.” <Martin.Brazeau@naturalis.nl>

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## NewZealand AvianBehaviouralEvolution

PhD project in avian behavioural and ecological genetics (commencing early 2013)

We seek a highly-motivated student for a PhD project, in New Zealand, examining the genetics and epigenetics of individual migration schedules in a long-distance avian migrant - the bar-tailed godwit. The project will principally involve investigations of circadian rhythm associated genes in individual birds whose migration departure times have been determined through observations and remote-tracking. The student will be enrolled through Massey University ([www.massey.ac.nz](http://www.massey.ac.nz)) but would largely be based at the Cawthron Institute, Nelson, N.Z. ([www.cawthron.org.nz](http://www.cawthron.org.nz)).

The successful applicant will have a sound background in both molecular and population genetics along with a good grasp of bioinformatics theory. The student must be comfortable with learning new software for bioinformatic and statistical analyses. Whilst some opportunities for field work around New Zealand's coast do exist (e.g. colour-banding and geolocator tracking), applicants should be aware that this is essentially a lab / computer based bioinformatics / population genetics project. Nevertheless, an interest in birds and / or animal migration is essential.

International (i.e. non-N.Z. resident) students are welcome and encouraged to apply.

For more details contact: Dr. Andrew Fidler (molecular genetic aspects): [andrew.fidler@cawthron.org.nz](mailto:andrew.fidler@cawthron.org.nz)  
Dr. Phil Battley (ecological / behavioural aspects): [p.battley@massey.ac.nz](mailto:p.battley@massey.ac.nz)

Andrew Fidler <Andrew.Fidler@cawthron.org.nz>

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## NorthernMichigan AvianConsGenetics

Graduate Position (Masters) in Avian Conservation Genetics/Genomics

The Lindsay Lab at Northern Michigan University is seeking to recruit a M.S. student to participate in ongoing research in avian conservation genetics and genomics. The successful applicant will have the opportunity to develop an independent project within the scope of the core research interests of the lab. We use molecular tools to address evolutionary, behavioral and ecological questions that can impact avian conservation. Our work has largely focused on the common loon, and graduate student theses that focus on this species will benefit from a large established tissue archive and growing genomic database. Northern Michigan University sits on the shores of Lake Superior in Michigan's beautiful Upper Peninsula, providing ample opportunities for avian field work that compliments current research activities underway in the lab.

Applicants should possess a strong understanding of basic principles of genetics and evolutionary biology (developed through coursework and/or research experience), an interest in using genetic data to answer conservation questions, and the ability to work productively both independently and as part of a team. Additional desirable qualities include an aptitude for genomic analyses, strong communication and analytical skills, enthusiasm for research in both the field and the lab, evidence of an ability to think creatively, and a good academic record. Successful applicant must meet the NMU Biology graduate program requirements (<http://www.nmu.edu/biology/node/80>). Teaching assistantships (tuition/fee waiver and annual stipend) are available to qualified applicants.

Interested persons should contact Dr. Alec Lindsay by email ([alindsay@nmu.edu](mailto:alindsay@nmu.edu)) including a brief statement of research interests, a CV, and contact information for 3 references. Review of applications will begin immediately and continue until the position is filled.

Alec R. Lindsay, Ph. D. Associate Professor Department of Biology Northern Michigan University 1401 Presque Isle Avenue Marquette, MI 49855 906.227.1834 (voice) <http://www-instruct.nmu.edu/~alindsay/> Alec Lindsay <[alindsay@nmu.edu](mailto:alindsay@nmu.edu)>

The Galbreath Lab at Northern Michigan University is seeking to recruit a M.S. student to participate in investigations on the diversity and historical biogeography of northern mammals and their parasites. The successful applicant will have the opportunity to develop an independent project within the scope of the core research interests of the lab. We use molecular tools to address questions regarding the history of colonization, diversification, and host-switching in small mammals (mostly rodents and lagomorphs) and their endoparasites (mostly cestodes and nematodes), with geographic areas of interest in the Beringian region (spanning eastern Siberia and Alaska), North America's Intermountain West, and the Great Lakes Region. Our specimen-based research program is closely linked to NMU's natural history museum collections, and offers opportunities for field work through collecting expeditions in Michigan's beautiful Upper Peninsula and elsewhere in the Great Lakes Region.

Applicants should possess a strong understanding of basic principles of evolutionary biology (developed through coursework and/or research experience), an interest in studying patterns of mammal/parasite diversity and the historical processes that shaped them, and the ability to work productively both independently and as part of a team. Additional desirable qualities include strong communication and analytical skills, enthusiasm for research in both the field and the lab, evidence of an ability to think creatively, and a good academic record.

Interested persons should contact Dr. Kurt Galbreath by email ([kgalbrea@nmu.edu](mailto:kgalbrea@nmu.edu)), including a brief statement of research interests, a CV, and contact information for 3 references. Review of applications will begin immediately and continue until the position is filled.

Kurt Galbreath | Assistant Professor | [kgalbrea@nmu.edu](mailto:kgalbrea@nmu.edu) Department of Biology | Northern Michigan University | 1401 Presque Isle Ave | Marquette, MI 49855 Phone: 906-227-1586 | Fax: 906-227-1063 <http://www.kurtgalbreath.com> [kurt.galbreath@gmail.com](mailto:kurt.galbreath@gmail.com)

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### NorthernMichigan MammalParasiteEvol

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### PennState InsectEvolGeneticsMimicry

M.S. Graduate Assistantship available in Mammal/Parasite Comparative Phylogeography, Biogeography, and Systematics

The laboratory of Dr. Heather Hines at Penn State University is seeking Ph.D. students interested in understanding the genetics underlying adaptive diversity

in insects.

The lab focuses on determining the genetic basis of mimetic color pattern diversity in bumble bees and butterflies. The goal of these projects is to use replicate-rich, highly convergent systems to understand how genes and gene architecture drive adaptive diversification and developmental modification. Projects in the lab may involve a wide range of approaches, including pigment research, field ecology, systematics, and deciphering color pattern genetics using genomic, transcriptomic, and developmental methods. Projects may involve bee and butterfly rearing and field research in diverse parts of the globe. For more information on the lab visit: <http://www.personal.psu.edu/hmh19/>. Penn State is an exceptional environment for graduate research in these areas. In addition to Biology and Entomology departments, there are numerous cross-departmental centers, institutes, or programs for facilitating collaboration, including the Genomics Institute, Genetics Program, Ecology Program, the Institute of Molecular Evolutionary Genetics, and the Center for Pollinator Research. The Hines Lab works closely with the Deans Lab (<http://deanslab.org/>) to provide highly integrative training in the area of insect systematics and biodiversity. The Deans lab focuses on biodiversity informatics and the systematics of parasitic Hymenoptera. Graduate students in the Hines Lab can apply through the departments of Biology or Entomology or the program in Genetics.

Interested students should send a description of their research interests and career goals along with their CV to Dr. Hines. A formal Penn State application for graduate study also is needed. Details can be found at <http://bio.psu.edu/graduate-portal>. Application deadlines for fall admission to these programs are in mid-January with earlier applications encouraged.

Graduate appointments at Penn State require successful completion of a background check in accordance with University policies. Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

hmh19@psu.edu

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## PortlandStateU EvolGeneticsPlants

Graduate position: Landscape genetics of plants

The development of methods for the analysis of pop-

ulation genetic differentiation in the context of landscape features has provided insights into ecological processes such as dispersal. Plant species present unique opportunities and challenges for landscape genetic analyses, as the behavior of their associated biotic and abiotic dispersal vectors as well as the distribution of suitable habitat may affect patterns of genetic variation. Understanding how landscape features may facilitate or limit the dispersal of plants is particularly critical as climate change affects the distribution of suitable habitat. We are looking to recruit graduate students (Ms or PhD) interested in plant ecological genetics and willing to participate in the development of methods in landscape genetics for the analysis of dispersal among plant populations. Experience with laboratory assays and data analyses for genetic markers, GIS analyses, and field ecological methods would be beneficial but not necessary. If interested, please send a letter of introduction to [Cruzan@pdx.edu](mailto:Cruzan@pdx.edu) that includes a brief statement of your background and your academic record, including GPA and GRE scores if available. Please include an essay outlining your research interests and a recent copy of your CV.

Mitch Cruzan, Associate Professor of Biology, Portland State University, Portland, OR

[cruzan@pdx.edu](mailto:cruzan@pdx.edu)

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## RiceU EvolutionaryBiology

The Department of Ecology and Evolutionary Biology at Rice University (Houston, TX) invites applications for admission into our graduate program (MS and PhD). The department is home to a vibrant community of faculty, postdoctoral, graduate, and undergraduate scholars in ecology and evolution. Our program has particular strengths in population and community ecology, conservation biology, evolutionary ecology, and evolutionary genetics and genomics.

The following faculty members are potentially accepting graduate students into their lab for Fall 2013:

Amy Dunham - I am currently searching for students interested in the effects of altered functional diversity and habitat structure on species interactions and ecosystem processes. <http://www.owl.net.rice.edu/~aed4/-amydunham/>

Michael Kohn - Our lab employs molecular and bioinformatics tools to study the evolutionary dynamics of

genes and genomes in populations and species. Some of our research projects have implications for conservation biology or medicine. <http://www.ruf.rice.edu/~hmkohn/index.html>

Tom Miller - Demography, population dynamics, plant-animal interactions, symbiosis, invasion biology, theory-data interface. <http://www.owlnet.rice.edu/~tm9/> <  
<http://www.owlnet.rice.edu/%7Etm9/> >

Luay Nakhleh - Population genomics in bacteria; phylogenomics in eukaryotes; the role of neutral and adaptive forces in network evolution. Personal website: <http://www.cs.rice.edu/~nakhleh/>; Group website: <http://bioinfo.cs.rice.edu/> <  
<http://www.owlnet.rice.edu/%7Etm9/> >

Nik Putnam - Comparative genomics, genome rearrangement and structural variation, phylogenetics, population genomics, bioinformatics. [http://nputnam.web.rice.edu/Putnam\\_Lab\\_at\\_Rice/-Welcome.html](http://nputnam.web.rice.edu/Putnam_Lab_at_Rice/-Welcome.html)

Volker Rudolf - Community ecology, ecological networks, climate change, intraspecific variation, predator-prey interactions, cannibalism, host-pathogen dynamics. <http://www.owlnet.rice.edu/~volker.rudolf/>

Evan Siemann - Population and community ecology, forests, grasslands, plant ecology, insect ecology, plant/herbivore interactions, biodiversity, conservation. <http://www.ruf.rice.edu/~siemann/evan.html>

We offer highly competitive financial support and light teaching requirements for graduate students. We are located in Houston, Texas, an exciting, diverse, and affordable city with world-class opportunities for dining, arts, and entertainment and access to diverse terrestrial and aquatic environments. Rice is located beside one of the country's largest medical research centers, providing additional opportunities in bioinformatics and genomics.

Completed applications should be received by January 10 to ensure full consideration. There is no application fee for US citizens and permanent residents. Prospective applicants are strongly encouraged to contact potential faculty advisors before applying. Complete information about the graduate program, including application instructions, may be found at <http://eeb.rice.edu/graduate.html>.

Diane Hatton

Project Coordinator

Dept of Ecology and Evolutionary Biology

Rice University

rdh@rice.edu

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## StockholmU EvolutionSocialBehaviour

### PHD POSITION: "DOMESTICATION AND THE EVOLUTION OF SOCIAL BEHAVIOUR"

The position is available in Animal behaviour at the Department of Zoology, StockholmUniversity. Application Deadline: 20 November 2012.

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Project description: Domestication of animals involves behavioural changes such as increased tolerance and less aggressiveness. Such changes will influence an animal's social relationships. By studying domesticated animals and their wild ancestors, we can increase our knowledge of the evolution of social behaviour. Studies of wolves and feral dogs show differences in both the intensity of territorial defense and the degree of aggressiveness within a pack, but the knowledge of how social behaviour and aggression develop during ontogeny is small. This project aims to increase our knowledge of the effects of domestication by studying two related species, a non-domesticated species (the wolf) and a domesticated species (the dog), primarily in relation to the ontogeny of variables relevant to social life and especially social dominance. Social behaviours during ontogeny will be studied during the juvenile period, including behavioural tests at different ages and physiological parameters. The project can provide important insights into how evolutionary changes in social behaviour can occur.

Qualifications: MSc or similar degree in animal behaviour or related disciplines, including at least 80 weeks (120 Swedish higher education credits) of biology studies, with a degree project in animal behaviour of at least 20 weeks (30 credits at advanced level). Applicants who have acquired corresponding competence in Sweden or abroad are also qualified. Applicants will be assessed based on their documented knowledge in fields relevant to the research area, their creativity, independence and social competence, the quality of their degree project thesis and other publications, and the cover letter. Applicants with documented experience of behavioral studies will have an advantage in the selection process.

The position corresponds to four years fulltime work. A scholarship is available for the first year and a PhD

employment for the following three years.

The application should include a one-page presentation (cover letter) of yourself and why you want to undertake a PhD within this project. The application should also include your CV, a copy of the thesis of your degree project, a copy of your diploma or degree certificate, and names and contact details (phone and e-mail) of two references. Please submit your application (stating the Ref. Nr. 02/12 HT) by 20 November 2012 to: Stockholm University, Head of Department, Department of Zoology, SE-106 91 Stockholm, Sweden.\*\*

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For further information, contact Hans Temrin (e-mail: [temrin@zoologi.su.se](mailto:temrin@zoologi.su.se)) or Olof Leimar (e-mail: [olof.leimar@zoologi.su.se](mailto:olof.leimar@zoologi.su.se)), Department of Zoology, Stockholm University.

Hans Temrin, Associate Professor Department of Zoology Stockholm University SE-106 91 Stockholm Sweden

[hans.temrin@zoologi.su.se](mailto:hans.temrin@zoologi.su.se)

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## Switzerland Alpine Flora Adaptation

PhD position on climate change effects on high-alpine flora

The research team 'Mountain Ecosystems' at the WSL Institute for Snow and Avalanche Research SLF, Davos (Switzerland) is looking for a PhD student to explore patterns and mechanisms of local plant colonization and extinctions on alpine summits. You will design and conduct vegetation surveys and experiments on mountain summits, aided by a field assistant. Moreover, you will analyze long-term changes in high-alpine flora in relation to local climate change in different mountain regions of Europe, based on a largely existing dataset. You will publish your results in international peer-reviewed journals. The position is fully funded for the

duration of the PhD (3 years) and will start in spring 2013.

You have a masters degree in biology, ecology or botany, experience in experimental field work and statistical analyses (particularly in R) and are fluent in English. Field work is weather dependent and requires spatial and temporal flexibility during summer, physical fitness, ability to move securely in alpine terrain, and motivation for long field days. You are a team player,

possess good oral and written communication skills,

good organizational ability, and are capable of working efficiently. Previous plant identification and mountaineering experience are desirable,

and the willingness to rapidly learn the alpine flora an absolute must.

Please send your complete application (cover letter, CV with photo, addresses of potential references) using reference number 760 to Ms. Jasmine Zimmermann, Human Resources WSL/SLF. Dr. Sonja Wipf, Tel. +41 (0)81 4170276, [wipf@slf.ch](mailto:wipf@slf.ch) or Dr. Christian Rixen, Tel. +41 (0)81 4170214,

[rixen@slf.ch](mailto:rixen@slf.ch) will be happy to answer any questions or offer further information.

To apply online, follow the respective link at the end of the job ad at <http://internet1.refline.ch/273855/0233/-++publications++/1/index.html>. Moreover, we also offer possibilities for Master's Theses on alpine plant or vegetation ecology, for instance in the context of the above topic. Students from any country can apply, and will be co-supervised together with a responsible professor at their home university. Interested students

should get in touch with us by sending a short statement of their research

interests and CV to Sonja Wipf ([wipf@slf.ch](mailto:wipf@slf.ch)) or Christian Rixen ([rixen@slf.ch](mailto:rixen@slf.ch)).

Best regards,

Christian Rixen

Dr. Christian Rixen Community Ecology WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH- 7260 Davos tel ++41 81 417 02 14 fax ++41 81 417 01 10 e-mail: [rixen@slf.ch](mailto:rixen@slf.ch) [http://www.wsl.ch/personal\\_homepages/-rixen/](http://www.wsl.ch/personal_homepages/-rixen/) <http://www.slf.ch> Master's student opportunities: [http://www.wsl.ch/personal\\_homepages/rixen/-Masterthesis\\_EN](http://www.wsl.ch/personal_homepages/rixen/-Masterthesis_EN) [rixen@slf.ch](mailto:rixen@slf.ch)

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## Texas Tech U Plant Evolutionary Genetics

GRADUATE POSITIONS (PHD & MS) IN PLANT ECOLOGICAL GENETICS AT TEXAS TECH UNIVERSITY

Graduate student training positions supported by teaching and research assistantships are avail-



able to work in plant ecological genetics in the Olson lab at Texas Tech University (<http://www.faculty.biol.ttu.edu/olson/Welcome.html>).

Students interested in applying experimental or molecular approaches to questions in any aspect of plant ecological genetics are invited to apply. Our lab is currently focused on understanding the genetic basis and evolutionary mechanisms governing local adaptation, especially in relation to the evolution of plant breeding systems and traits likely important for adaptation to climate regimes including drought, cold, and latitude. Interested students should contact Matt Olson directly at <matt.olson@ttu.edu> to discuss mutual interests and instructions on how to apply. Students applying before the end of January will be assured full consideration.

“Olson, Matt” <matt.olson@ttu.edu>

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### TrentU InvasiveGenetics

PHD POSITION in molecular ecology and epigenetics in the Environmental and Life Sciences Graduate Program, Trent University, Canada.

**Project description:** The *Typha* species complex (cattails) is becoming increasingly invasive around the Great Lakes region. This is partly attributable to the success of *T. x glauca*, the hybrid of the native species *T. latifolia* and the introduced species *T. angustifolia*. Overall, the two parental species are genetically similar, and exhibit a surprising degree of genetic homogeneity across broad spatial scales. Hybrids and parental species seem tolerant a wide range of environmental variables.

Using a combination of field, laboratory, and experimental methods, the goals of this project are to use multi-locus markers (AFLPs) to (a) look for evidence of adaptation versus plasticity in response to particular environmental variables, and (b) in the absence of adaptation, quantify the extent to which epigenetic marks (both labile and heritable) can explain phenotypic plasticity.

**Qualifications:** MSc or similar degree in molecular ecology or related discipline. Previous experience in molecular genetics (including genotyping) is required.

**How to apply:** Application should include (1) a letter stating why the applicant should be considered a strong candidate for the position, (2) a CV, (3) names, with e-

mail address and telephone numbers, of two referees, and (4) any other documents that the applicant deems relevant. Please send enquiries or applications to joanna.freeland@trentu.ca.

Joanna Freeland Dept. of Biology Trent University  
 joanna.freeland@trentu.ca <http://people.trentu.ca/joanna.freeland/>  
 Joanna Freeland <joanna.freeland@trentu.ca>

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### TulaneU AvianSystematics

PhD student opportunity in avian systematics

Funding is available for a Ph.D. student to study the diversification of the pantropical radiation of suboscine birds (Aves: Tyranni) in the Derryberry lab (elizabethderryberry.tulane.edu) in the Department of Ecology and Evolutionary Biology at Tulane University. This position is part of an NSF funded, multi-institutional collaboration (LSU, AMNH, Smithsonian, KU, and MPEG), so the successful student will be joining a highly collaborative and productive research team.

Project aims include (1) generating a species-level phylogeny of the 1000+ suboscine species using genomic approaches and (2) subsequent analyses intended to improve understanding of diversification in large radiations. The Derryberry lab also has a strong interest in the tempo and mode of behavioral evolution. Students interested in exploring these types of questions in a phylogenetic context are strongly encouraged to apply.

The successful candidate will have a proven capacity for writing and communication, excellent interpersonal skills, and strong quantitative skills (e.g. computer programming, bioinformatics). Salary and benefits are competitive.

Interested applicants should send a cover letter, CV, GPA and GRE scores, and a statement of professional goals to Dr. Elizabeth Derryberry (ederrybe@tulane.edu) as well as apply to the degree program (<http://tulane.edu/sse/eebio/-academics/graduate/apply.cfm>). \*\*Applications are due January 15, 2013\*\*

Tulane University is an Affirmative Action/Equal Employment Opportunity Employer. Women and minorities are strongly encouraged to apply.

Elizabeth Derryberry, Ph.D. Assistant Professor Department of Ecology & Evolutionary Biology Tulane University New Orleans, LA 70118 504-862-8285 (office) 504-862-8706 (fax) elizabethderryberry.tulane.edu ederrybe@tulane.edu

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## UBerne BacterialGenomeEvolution

PhD position in bacterial genomic evolution

A PhD position will be available for 3 years at the University of Berne to investigate the effect of range expansions on the genomic diversity of bacteria.

Theoretical and simulation results suggest that spatially expanding populations should accumulate non-neutral mutations at a higher rate than stationary populations through the mechanism of gene surfing. The present research project aims at verifying these predictions in bacteria.

We are looking for a very motivated PhD student to perform and analyse the output of a series of experiments with bacteria, measure their fitness at various stages of their expansions, analyse the evolution of their genome by Next Generation Sequencing, and study the effects of the accumulated mutations. These analyses will be done in close collaboration with Prof. Martin Ackermann in ETH Zurich. The candidate is expected to have a strong background in microbiology and a good exposure to evolutionary concepts. Additional knowledge in population genetics, bioinformatics and statistics will be a plus.

The successful candidate will be able to further her/his education by following courses organized by Swiss inter-University doctoral programs in Population Genomics and Bioinformatics. The gross starting salary is about 3,000 CHF per month (plus an additional 13th month) and will follow the Swiss NSF progression scale. The CMPG lab offers an international and very stimulating research environment and it is affiliated to the Swiss Institute of Bioinformatics. Berne is ideally located in the middle of Switzerland and Europe, and provides rich cultural and outdoor activities.

Please send before December 1 2012, an application letter stating your motivation for the position, a CV, and contact information of two references to laurent.excoffier@iee.unibe.ch. Position start is expected to be February 2013. People who have already applied to a previous version of this announcement are discour-

aged to re-apply

Prof. Laurent Excoffier

– Laurent Excoffier

Computational and Molecular Population Genetics (CMPG) Institute of Ecology and Evolution, University of Bern 6, Baltzerstrasse, CH-3012 Bern, Switzerland Tel: +41 31 631 30 31 Fax: +41 31 631 48 88 Email:laurent.excoffier@iee.unibe.ch <http://cmpg.iee.unibe.ch> Computational Population Genetics Swiss Institute of Bioinformatics (SIB) <http://www.isb-sib.ch/groups/-Computational.Population.Genetics.htm> Laurent Excoffier <laurent.excoffier@iee.unibe.ch>

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## UBerne HumanGenomics

PhD positions in human genomics

A PhD positions will be available for 3 years at the University of Berne to investigate the effect of range expansions on human non-neutral genomic diversity.

Theoretical and simulation results suggest that spatially expanding populations should accumulate non-neutral mutations at a higher rate than stationary populations through the mechanism of gene surfing. The present research project aims at verifying these predictions in humans.

We are looking for a motivated PhD student to be involved in the analysis of full exomes of human individuals from a region of Québec known to have been recently colonized and where gene surfing has been evidenced (see <http://www.sciencemag.org/content/334/-6059/1148.abstract>). He/she should be also involved in the modeling and simulation of genomic regions under selection, and thus have a good background in population genomics or bioinformatics, and in statistics. Programming abilities (e.g. R, C++) will be a plus for this position.

The successful candidate will be able to further her/his education by following courses organized by Swiss inter-University doctoral programs in Population Genomics and Bioinformatics. The gross starting salary is about 3,000 CHF per month (plus an additional 13th month) and will follow the Swiss NSF progression scale. The CMPG lab offers an international and very stimulating research environment and it is affiliated to the Swiss Institute of Bioinformatics. Berne is ideally located in the middle of Switzerland and Europe, and provides

rich cultural and outdoor activities.

Please send before December 1 2012, an application letter stating your motivation for the position, a CV, and contact information of two references to laurent.excoffier@iee.unibe.ch. Position is expected to start in February 2013. People who have already applied for this position are discouraged to re-apply.

Prof. Laurent Excoffier

– Laurent Excoffier

Computational and Molecular Population Genetics (CMPG) Institute of Ecology and Evolution, University of Bern 6, Baltzerstrasse, CH-3012 Bern, Switzerland Tel: +41 31 631 30 31 Fax: +41 31 631 48 88 Email:laurent.excoffier@iee.unibe.ch <http://cmpg.iew.unibe.ch> Computational Population Genetics Swiss Institute of Bioinformatics (SIB) [http://www.isb-sib.ch/groups/Computational\\_Population\\_Genetics.htm](http://www.isb-sib.ch/groups/Computational_Population_Genetics.htm) Laurent Excoffier <laurent.excoffier@iee.unibe.ch>

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## UCalgary VertebrateEvolution

The Rolian lab at the University of Calgary is looking to recruit graduate students (MSc and PhD) who are broadly interested in vertebrate evolutionary biology.

Current research in the lab focuses on evolutionary, developmental and functional aspects of the limb skeleton. The core of our research program is an artificial selection experiment targeting increases in limb bone length in mice. This resource is being developed to study evolutionary quantitative genetics, developmental genetics (including transcriptomics) and functional morphology of the mammal limb skeleton. Individuals with a background and interest in vertebrate evolutionary biology, evo-devo or bioinformatics are encouraged to apply.

The University of Calgary offers a great diversity of faculty focusing on evolutionary, developmental and skeletal biology, housed across multiple faculties and departments. Funding is available through the lab, although it is expected that students will also apply for eligible external grants to support their studies and research (e.g. NSERC). Calgary is a world-class city near the Canadian Rockies, with excellent amenities and year-round opportunities for recreation and culture.

More information on the Rolian lab can be obtained at: <http://homepages.ucalgary.ca/~cprolian> Infor-

mation on admission requirements to pursue graduate studies at the U of C can be obtained at: <http://www.grad.ucalgary.ca/prospective/howtoapply> Interested candidates should email Dr. Rolian (cprolian@ucalgary.ca) with a brief description of their research interests and current studies/work. Please note that the deadline for Fall admissions varies by program, with the earliest application due around February 1st of the same year.

Campbell Rolian Assistant Professor Dept. of Comparative Biology and Experimental Medicine Faculty of Veterinary Medicine, University of Calgary 3330 Hospital Drive NW, Calgary AB, T2N4N1 cprolian@ucalgary.ca (403) 210-3888 <http://homepages.ucalgary.ca/~cprolian> Campbell Rolian <cprolian@ucalgary.ca>

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## UCalifornia Berkeley EvolutionaryEcol

### GRADUATE POSITIONS AT UC BERKELEY

PhD positions are available at UC Berkeley over the next few years as part of a newly funded project that seeks to merge two disparate areas of research to understand patterns of biodiversity, (1) a broad ecological approach which provides insights into how species assemble and interact in a community; (2) a lineage based approach which focuses on how species adapt, diversity, or decline over time. We will integrate these two approaches by using a system of age-structured biological communities on the youngest of the Hawaiian Islands (Hawaii), and comparing these to communities on the next older island of Maui. Within Hawaii Island, lineages of organisms are actively diversifying, while the community and food web contexts in which they are embedded are changing with the development of their habitats. The system is relatively simple ecologically, but importantly it represents an environmental chronosequence, allowing for a “space-for-time” substitution. The project (part of NSF’s “Dimensions in Biodiversity” [http://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=125495&org=BIO&from=news](http://www.nsf.gov/news/news_summ.jsp?cntn_id=125495&org=BIO&from=news) ) will look at priority, sequence, and associated interaction strengths among members of a community as it develops, and hence how biodiversity is generated, assembled, and lost.

Students interested in any one of the following are encouraged to apply: (1) macroecological metrics of di-

iversity and abundance of species and how these might change over time; (2) dynamics of predator-prey or other interactions between species; (3) evolutionary adaptation and speciation. Data to be analyzed will include molecular, morphological, ecological, and/or behavioral characters, and will involve macroecological, macroevolutionary, and population genetic and phylogenetic analyses. A single student will focus on one aspect of the project, though interest in the integration between ecological and evolutionary approaches is encouraged.

Project PIs at UC Berkeley are: Rosemary Gillespie <gillespie@berkeley.edu>, John Harte <jharte@berkeley.edu>, Neo Martinez <neo@PEaCElab.net>, and Patrick O'Grady <ograde@drosophilaevolution.com> in the Department of Environmental Science, Policy, and Management (ESPM); and Rasmus Nielsen <rasmus\_nielsen@berkeley.edu> in the Department of Integrative Biology (IB).

Other PIs are Dan Gruner (U. Maryland, dsgruner@umd.edu), Don Price (U. Hawaii Hilo, donaldp@hawaii.edu), and Kerry Shaw (Cornell, KLS4@cornell.edu).

Students interested in these positions are encouraged to email one of the PIs for more information. Applications to UC Berkeley for Fall 2013 must be received by Dec 1, 2012. For details see: <http://ourenvironment.berkeley.edu/graduate-programs/application-information/> for applications to ESPM; and <http://ib.berkeley.edu/grad-admissions/index.php> for applications to IB. For grad programs at the other institutions, please contact the appropriate PI.

– Rosemary G. Gillespie, University of California Berkeley, <http://nature.berkeley.edu/~gillespie/>

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## UCalifornia Riverside SymbioticEvolution

Graduate Positions: Evolution of symbioses

The Sachs lab at the University of California in Riverside is looking to recruit multiple Ph.D. students interested in plant-bacterial symbioses.

Our research seeks to understand the emergence and spread of exploitative traits in symbiont populations,

especially the plant symbiont *Bradyrhizobium japonicum*.

Bradyrhizobia are bacteria that induce beneficial infections in legume plants: the bacteria form nodules on host roots and fix atmospheric nitrogen in exchange for carbon from their plant hosts. Potential projects include collecting *Bradyrhizobium* from wild legume populations, culturing and sequencing DNA of bacterial isolates and using computational and experimental methods to test hypotheses about the evolution of symbiosis and pathogenesis. Other common techniques include experimental evolution, microcosm experiments, greenhouse inoculations and molecular analysis at the level of genes to genomes. At a broader level our lab also studies the macroevolution of symbiosis across bacteria using computational techniques that gather and analyze data from published sources.

The University of California at Riverside is home to a very strong collection of faculty researching ecology and evolution. The Department of Biology hosts an excellent graduate program in Ecology, Evolution and Organismal Biology (<http://eob.ucr.edu/>). Moreover, the Sachs Lab welcomes students from the Genetics, Genomics and Bioinformatics graduate program (<http://ggb.ucr.edu/>), the Microbiology graduate program (<http://microbiology.ucr.edu/>) and the Botany and Plant Sciences program ([www.plantbiology.ucr.edu/](http://www.plantbiology.ucr.edu/)).

Riverside is a great town with excellent weather, access to beaches, mountains and desert and is in close proximity to Los Angeles, Palm Springs and San Diego.

For more details see our website: [www.sachslab.com](http://www.sachslab.com). Interested students are encouraged to email Dr. Sachs (Joels@ucr.edu). Please include a brief description of your research interests and a CV in your email. Note that applications for Fall 2013 admission must be submitted by January 1st.

– Joel L. Sachs Assistant Professor Department of Biology University of California #310 Science Labs I Riverside, CA 92521 joels@ucr.edu Office (951) 827-6357 Fax (951) 827-4286

Mailing Address: Sachs Lab UC Riverside 3401 Watkins Dr 1229 Spieth Hall Riverside, Ca 92521

<http://www.sachslab.com> <http://www.biology.ucr.edu/people/faculty/Sachs.html>  
joels@ucr.edu

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## UCincinnati Evolutionary Genetics

The Center for Conservation and Research of Endangered Wildlife (CREW) at the Cincinnati Zoo & Botanical Garden in collaboration with the Department of Biological Sciences at the University of Cincinnati is offering a unique opportunity for a qualified, energetic Ph.D. student with a strong interest in plant conservation and molecular biology. The student will be part of a project supported by a Federal grant from the Institute of Museum and Library Services involving the evaluation of samples that have been cryopreserved for up to 24 years in CREW's CryoBioBank.

The specific focus for the student will be to analyze the genetic components of this project and work with others in the team, investigating those results in relation to the survival of seed and tissue samples. The first aspect of this will include genetic analysis of samples removed from storage in comparison with samples that have been in active culture over the same amount of time. Comparison will be made with genetic data from before the time of banking. The goal will be to determine whether genetic changes have occurred in the samples over time, during *in vitro* culture or cryostorage. Other DNA analytical methods, such as microsatellites, will also be employed in other parts of this study. Genetic analysis will also be conducted on a subset of samples that will be re-banked during the course of this project. The second aspect will involve the analysis of 300 samples for DNA/RNA degradation. This will involve travel to the National Center for Plant Genetic Resources labs of the USDA in Ft. Collins, CO, for one week in each of three years, to learn the use of the Agilent Bioanalyzer, prepare samples, and run them for analysis. The Ph.D. student will work under the direction of Dr. Theresa Culley, from the Department of Biological Sciences, University of Cincinnati, in collaboration with Dr. Valerie Pence, the PI of the project, located at the Cincinnati Zoo and Botanical Garden. The University and Zoo are within a mile of each other.

Candidates for this position should have a B.S. or an M.S., with a strong background in plant genetic analysis and molecular techniques, as well as in statistical analysis. A strong interest in plant conservation is also required. A familiarity with *in vitro* and/or cryopreservation methods is desirable.

This position provides an annual stipend of \$22,000 in

addition to a graduate scholarship which covers most tuition costs. The position will start no later than September, 2013, but an earlier start date can be considered.

To apply for this position, go online: <http://grad.uc.edu/admissions.html>. More information on the application process for the UC Biological Sciences program is at: <http://www.artsci.uc.edu/collegedepts/biology/grad/application.info.aspx>. Review of applications will begin on Jan. 1, 2013, and will continue until a suitable candidate is found. For further information on the project, contact Dr. Theresa Culley, Department of Biological Sciences, University of Cincinnati, 614 Rieveschl Hall, Cincinnati, OH 45221-0006, [theresa.culley@uc.edu](mailto:theresa.culley@uc.edu); or Dr. Valerie Pence, Center for Conservation and Research of Endangered Wildlife, Cincinnati Zoo & Botanical Garden, 3400 Vine Street, Cincinnati, OH, 45220: [valerie.pence@cincinnati-zoo.org](mailto:valerie.pence@cincinnati-zoo.org)

[culleyt@ucmail.uc.edu](mailto:culleyt@ucmail.uc.edu)

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## UCollegeDublin 2 Mammalian Evolution

Two PhD positions in Mammalian Evolutionary Biology and Comparative Genomics funded by the European Research Council

Ageing is the gradual and irreversible breakdown of living systems associated with the advancement of time, which leads to an increase in vulnerability and eventual mortality. It is considered as one of the most familiar but least well-understood processes in biology, with hundreds of theories developed about why and how we age. Despite recent advances in ageing research, the intrinsic complexity of the ageing process has prevented a full understanding of this process, therefore, ageing remains a grand challenge in contemporary biology. The new ERC funded research team that Dr. Teeling is gathering will tackle this challenge by uncovering the molecular mechanisms of halted ageing in a unique model system, the bats. We will couple state of the art-field biology with cutting-edge next generation comparative genomic and transcriptomic studies to address this challenge.

Two four-year fully funded PhD positions are currently available in the Teeling lab:

(1) PhD 1: The successful candidate will explore age



related MtDNA diversity & telomeric variation across mammals using modern molecular biology techniques. This project will consist of wet laboratory data generation, comparative genomic and phylogenetic evolutionary analyses. The student will be expected to participate in field sessions to gather the required samples. Therefore, we require an individual that has successful experience in generating molecular data using modern laboratory techniques and is willing to optimise and develop novel molecular protocols. Preference will be given for candidates that also have experience in phylogenetic and comparative genomic analyses. An understanding of mammalian evolutionary history and bat biology would be desirable. This student must have an honours B.Sc. in Biology or equivalent and preferably an M.Sc. or equivalent in Evolutionary Biology. The position is fully funded for four years, including fees, student stipend, travel to conferences and workshops. Start date January 1st 2013.

(2)PhD 2: The successful candidate will explore the age related population level changes in the transcriptome gathered from a wild population of bats. Their primary role will be to collect, extract, sequence and analyse the transcriptome data from samples that he/she will acquire through the field sessions. This project will consist primarily of wet laboratory data generation, de novo transcriptome assembly and comparative analyses. Therefore, we require an individual with primarily bioinformatic experience in assembling and analyzing next generation sequence data. The individual should also have experience/understanding of the wet laboratory generation of these data and a willingness to develop these skills if necessary. Preference will be given to candidates that have both the bioinformatic and the wet laboratory experience in the generation and analyses of next generation transcriptome data. An understanding of mammalian evolutionary history and bat biology would be desirable. This student must have an honours B.Sc. or equivalent and preferably an M.Sc. or equivalent. The position is fully funded for four years, including fees, student stipend, travel to conferences and workshops. Start date January 1st- June 2013.

Both PhD students will become part of a larger ERC funded multidisciplinary team.

To apply, please send a full C.V. detailing your experience and contact details of three referees. Also include a cover letter that indicates: (1) which PhD you would like to apply for; (2) why you are interested in this research; (3) how your past experience makes you the ideal candidate; and (4), your goals for the future.

Applications must be emailed as a pdf by 18 November 2012 to be eligible to:

emma.teeling@ucd.ie

Dr. Emma Teeling Science Centre West School of Biology and Environmental Science University College Dublin Belfield, Dublin 4, Ireland  
Email: emma.teeling@ucd.ie Phone: +1 353 1 716 2263 <http://batlab.ucd.ie/> Emma Teeling <Emma.Teeling@ucd.ie>

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## UEdinburgh DiseaseEvolution

PhD STUDENTSHIP IN DISEASE ECOLOGY Centre for Immunity, Infection and Evolution, University of Edinburgh

The dynamics of coinfection: understanding the immune- and resource-mediated mechanisms that drive within-host parasite interactions

Supervisors: Dr Amy Pedersen (Institute of Evolutionary Biology, University of Edinburgh) Prof. Judi Allen (Institute of Immunology and Infection Research, University of Edinburgh) Dr Andy Fenton (Institute of Integrative Biology, University of Liverpool) Interested individuals must follow the instructions at this link on how to apply <http://www.ed.ac.uk/schools-departments/biology/postgraduate/pgr/how-to-apply> If you would like us to consider you for one of our scholarships you must apply by 18th January 2013 at the latest.

Individuals are typically hosts to a variety of parasite species, representing vast taxonomic diversity, and exploiting a wide range of host tissues and resources. This diversity creates a dynamic and complex parasite community within individuals, which may be structured by interspecific interactions, either bottom-up' (via resource competition) or top-down' (via the host's immune system). Within-host interactions between co-infecting parasites can be critical to the fitness and dynamics of both the parasites and the host. A growing literature emphasises the potential importance of such interactions to population and community ecology and various longitudinal field studies have demonstrated the ubiquity of co-infection in the wild. However, evidence of interactions between co-infecting parasites in natural populations remains equivocal, and the mechanisms that drive these interactions have been poorly studied. Therefore many key questions remain unanswered, particularly relating to the type of mechanisms that shape within-host parasite communities, which is vital for the design of effective long-term disease control strategies.

The aim of this interdisciplinary project is to investigate the mechanisms determining within-host parasite interactions, in order to better understand the consequences of coinfection for host health, and importantly, provide insight into treatment strategies for coinfecting populations. This project will focus on the microparasite (viruses, bacteria, & protozoans) and macroparasite (nematodes, cestodes) communities of wild wood mice (*Apodemus sylvaticus*) populations in the UK, where coinfection is the norm (>70%). The aims of the project are (1) to develop immunological assays for wood mice in order to measure the immune phenotypes of wild mice, (2) to test whether resource competition or immune-mediated interactions structure within-host parasite communities, using data from experimental treatment studies in wild mice populations, and (3) to test the direction and strength of these mechanisms using controlled laboratory studies. Training will be provided in relevant immunological and parasitological techniques and the successful applicant will work with researchers with a breadth of expertise in ecology, immunology, evolutionary biology and host-pathogen interactions.

The successful applicant will have a biological sciences degree, either a 1st or 2i, and possibly an MSc in ecology, immunology, or infectious disease/parasitology. Please send any informal enquiries about the project to Amy Pedersen [amy.pedersen@ed.ac.uk](mailto:amy.pedersen@ed.ac.uk)

For publications and a broader perspective on the research, please see supervisors' websites: Amy Pedersen, <http://www.biology.ed.ac.uk/research/groups/apedersen/index.html> Judi Allen, <http://www.nematodes.org/allenlab/> Andy Fenton, <http://www.liv.ac.uk/integrative-biology/staff/andrew-fenton/> References: Pedersen, A.B. & Babayan, S. 2011. Wild immunology. *Molecular Ecology* 20, 872-880. Jenkins, S.J., Ruckerl, D., Cook, P.C., Jones, L.H., Finkelman, F.D., van Rooiken, N., MacDonald, A.S. and J.A. Allen. 2011. Local macrophage proliferation, rather than recruitment from the blood, is a signature of Th2 inflammation. *Science* 332, 1284. Pedersen, A.B. & Fenton, A. 2007. Emphasizing the ecology in parasite community ecology. *Trends in Ecology and Evolution* 22:133-139.

Amy B. Pedersen, Advanced Fellow Centre for Immunity, Infection and Evolution

Institutes of Evolutionary Biology, Immunology & Infection Research School of Biological Sciences University of Edinburgh Kings Buildings Ashworth Labs, West Mains Road Edinburgh EH9 3JT, UK

[amy.pedersen@ed.ac.uk](mailto:amy.pedersen@ed.ac.uk) +44(0) 131 650 8674

Ashworth 2 - 4.07 <http://www.biology.ed.ac.uk/research/groups/apedersen/>  
amy.pedersen@ED.AC.UK

## UEdinburgh EvolutionOfAgeing

PhD opportunity at the Institute of Evolutionary Biology, University of Edinburgh

Title: The within individual and cross-generational effects of dietary restriction on rates of ageing. Supervisors: Craig Walling (Edinburgh), Neil Metcalfe (Glasgow), Dan Nussey (Edinburgh).

Description: Rates of ageing, or senescence, show remarkable diversity, even between individuals within a population. A greater understanding of the causes and consequences of this variation in rates of ageing is important not only in the context of evolutionary biology but also in our attempts to promote healthy ageing in humans. Dietary restriction has been shown to increase longevity across a diverse range of species. However, life history theory predicts there are likely to be trade-offs between survival and reproduction. Thus although dietary restriction may result in apparent alleviation of ageing in traits related to survival, it may be associated with costs to reproductive traits, potentially including a faster rate of reproductive senescence. Additionally, the nutritional state of an individual at the time of breeding may have long lasting effects on the performance of its offspring. In particular, a mismatch between parental and offspring nutritional environment has been associated with an increase in the offspring's susceptibility to diseases such as coronary heart disease and type 2 diabetes in humans. However, few studies have addressed the question of how the interaction between parental and offspring nutritional environment might influence the relative investment of offspring into different life history traits such as growth, reproduction and survival at different ages and how this might influence subsequent rates of ageing in these traits. The aim of this PhD project will be to address these current gaps in our knowledge of the causes of variation in ageing rates using an experimental stickleback population (*Gasterosteus aculeatus*).

The results of these experiments will allow a rare investigation of the effects of dietary restriction on the rates of ageing in traits associated with growth, physical performance and reproduction and will provide some of the first data on the effect of parental nutritional environ-

ment on rates of ageing in different offspring traits.

Candidates should possess at least a 2.1 honours degree or its equivalent in a relevant subject such as Biology, Zoology and Evolution and have a strong interest in evolutionary and behavioural ecology. Ideally candidates would be able to demonstrate experience in research in a relevant field and show strong evidence of independent thinking. Interested candidates should contact Craig Walling ([craig.walling@ed.ac.uk](mailto:craig.walling@ed.ac.uk)) including a one-page description of their research interests and a CV. Details on the application procedure can be found at ([www.ed.ac.uk/schools-departments/biology/postgraduate/pgr/how-to-apply](http://www.ed.ac.uk/schools-departments/biology/postgraduate/pgr/how-to-apply)). Applicants must be UK citizens or, for EU citizens, have been resident in the UK for at least three years prior to starting the studentship. Application deadline: 18 January 2013

Sample references Bateson, P., D. et al. 2004. Developmental plasticity and human health. *Nature* 430: 419. Inness, C. L. W. and N. B. Metcalfe. 2008. The impact of dietary restriction, intermittent feeding and compensatory growth on reproductive investment and lifespan in a short-lived fish. *Proceedings of the Royal Society B: Biological Sciences* 275: 1703. Monaghan, P., et al. 2008. The evolutionary ecology of senescence. *Functional Ecology* 22: 371.

Craig Walling <[craig.walling@ed.ac.uk](mailto:craig.walling@ed.ac.uk)>

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## UEdinburgh EvolutionOfFemaleMateChoice

PhD opportunity at the Institute of Evolutionary Biology, University of Edinburgh

Project Title: Understanding female mating preferences in three-spined sticklebacks Supervisors: Dr Craig Walling, Dr Per Smiseth

Description: The evolution of female mating preferences for extravagant male traits is one of the most enigmatic questions in evolutionary biology. Despite intensive theoretical and empirical study over the last 30 years, there is still considerable debate about how female preferences arose. The aim of this PhD project is to investigate female mating preferences in the stickleback (*Gasterosteus aculeatus*). The first part of the project will look at the quantitative genetic basis of female mating preferences and their genetic correlation with other traits such as male secondary sexual traits, taking advantage of well-known in vitro ferti-

sation techniques to set-up controlled breeding designs. In addition, the potential for non-genetic inheritance of female preferences through imprinting on the father's phenotype and its implications for the evolution of female preferences and male traits will be investigated. The second part of the project will then focus on addressing the question of the costs to females of expressing mating preferences by experimentally manipulating choosiness between females and analysing the consequences for fecundity.

This project will be based in the newly established stickleback laboratory of Dr Craig Walling (<http://wildevolution.biology.ed.ac.uk/lkruuk/CraigWalling.html>). IEB is one of the world's leading Evolutionary Biology departments and has considerable expertise in both quantitative genetics and behavioural ecology.

Candidates should possess at least a 2.1 honours degree or its equivalent in a relevant subject such as Biology, Zoology or Evolution and have a strong interest in evolutionary and behavioural ecology. Ideally candidates would be able to demonstrate experience in research in a relevant field and show strong evidence of independent thinking. Interested candidates should contact Craig Walling ([craig.walling@ed.ac.uk](mailto:craig.walling@ed.ac.uk)) including a one-page description of their research interests and a CV. Details on the application procedure can be found at ([www.ed.ac.uk/schools-departments/biology/postgraduate/pgr/how-to-apply](http://www.ed.ac.uk/schools-departments/biology/postgraduate/pgr/how-to-apply)). Applicants must be UK citizens or, for EU citizens, have been resident in the UK for at least three years prior to starting the studentship. Application deadline: 18 January 2013

Sample references: Barber, I. and S. A. Arnott (2000). "Split-clutch IVF: A technique to examine indirect fitness consequences of mate preferences in sticklebacks." *Behaviour* 137: 1129-1140. Kirkpatrick, M. and N. H. Barton (1997). "The strength of indirect selection on female mating preferences." *Proceedings of the National Academy of Sciences, USA* 94(4): 1282-1286. Kokko, H., M. D. Jennions, et al. (2006). "Unifying and Testing Models of Sexual Selection." *Annual Review of Ecology, Evolution, and Systematics* 37(1): 43-66.

Craig Walling <[craig.walling@ed.ac.uk](mailto:craig.walling@ed.ac.uk)>

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## UEdinburgh TreeEvolution

Title: Quantifying the potential for adaptation of na-

tive tree populations to climate change

Rapid climate change is perceived to be a significant threat to the long term persistence of our native tree populations. It has been argued by some authors that tree populations will fail to adapt because the rate of climate change is too great compared to tree longevity, because tree populations maintain insufficient adaptive variation and because the contemporary landscape is impermeable to dispersal, preventing range shifts. Other authors have contended that most tree species have high phenotypic plasticity, maintain high levels of within-population genetic variation and have very effective gene dispersal capability, all characteristics which should enable effective adaptive responses to take place. The aim of this PhD is to investigate these questions by collecting data on the extent of phenotypic plasticity, the level of adaptive genetic variation and the extent of gene flow among populations of native tree species, including silver birch (*Betula pendula*) and rowan (*Sorbus aucuparia*). Together the data will be used to assess the potential for adaptation to climate change for birch and rowan in the UK. The PhD will make use of established multisite provenance trials to measure phenotypic plasticity and genetic variation for a range of traits important in adaptation to climate. This will involve application of fast phenotyping techniques to quantify physiological variation among and within populations. Genetic markers will also be employed to estimate the extent of gene flow occurring among native populations. Results from the PhD will be of great relevance in the development of mitigation strategies for native forests in the face of climate change.

The project is part of an ongoing collaboration between CEH, Forest Research and the University of Edinburgh and will be funded by Forestry Commission GB. The successful candidate would be registered with the University of Edinburgh, but should expect to spend significant amounts of time at each of the collaborating Institutions, all in or around Edinburgh. The successful candidate will have a strong motivation for the subject, with a clear background in evolutionary biology. Capability for extended periods of fieldwork is necessary and good statistical skills would be an advantage.

Funding Notes:

To apply for this project please send a CV and covering letter with details of two referees to the contact supervisor: Dr S Cavers [scav@ceh.ac.uk](mailto:scav@ceh.ac.uk). CEH are committed to a high quality graduate training programme to ensure that the successful candidate has access to opportunities to develop their career skills and experience. A stipend and fees will be provided at the RCUK rate. Please refer to the CEH website at [www.ceh.ac.uk](http://www.ceh.ac.uk)

for details of our scientific research and to the NERC website at <http://www.nerc.ac.uk/funding/available/-postgrad/> for details of funding eligibility.

References:

Davis et al. (2001) Range shift and adaptive responses to quaternary climate change. *Science* 292, 673-679.  
 Gomulkiewicz & Holt (1995) When does evolution by natural selection prevent extinction? *Evolution*, 49, 201-207.  
 Parmesan (2006) Ecological and evolutionary responses to recent climate change *Ann Rev EcolEvol-Syst* 37: 637-669.  
 Salmela et al. (2011). Seasonal patterns of photochemical capacity and spring phenology reveal genetic differentiation among native Scots pine (*Pinus sylvestris* L.) populations in Scotland. *Forest Ecology and Management* 262: 1020-1029.

[scav@ceh.ac.uk](mailto:scav@ceh.ac.uk)

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## UExeter BumblebeeTransmissionNetworks

BBSRC SWDTP studentship: Pass the bug: phylogenetic inference of disease transmission networks in natural pollinator populations

Supervised by Dr. Lena Wilfert & Dr. Juliet Osborne  
 University of Exeter, Cornwall Campus

We are inviting applications for this BBSRC funded PhD studentship to commence October 2012. For eligible students the award will cover UK/EU tuition fees and an annual stipend. This is part of a competition-funded BBSRC doctoral training centre, more information can be found at <http://www.bris.ac.uk/swdtp/>. The project is one of a number that are in competition for funding. Studentships will be awarded on the basis of merit. Successful applicants will benefit from working within a lively research environment within the Centre for Ecology and Conservation, Biosciences, Cornwall Campus, near Falmouth at the College of Life and Environmental Sciences, University of Exeter.

Bumblebees are key pollinators of crops and wild flowering plants. Horizontally transmitted parasites pose a large risk to these pollinating insects, as many of these species have overlapping niches with ample opportunities for pathogens to infect novel host species. In this project, you will use genomic tools to investigate transmission networks in natural populations of bumblebees, asking which ecological factors promote disease transmission. This project will run in parallel to a large BB-



SRC project studying and modelling the population dynamics and behaviour of bumblebee communities. Local populations will be comprehensively sampled, allowing you to study how pathogens are transmitted between bumblebee colonies and species and how this may impact on population-wide fitness. By studying sequence evolution in rapidly evolving viral diseases, you will be able to apply powerful genomic modeling approaches developed for emerging diseases, such as HIV, to infer transmission pathways. These can be used to identify potential transmission hotspots, such as particular host species, food plants or landscape features. These field results can then be experimentally tested using lab or field experiments. The work will have practical relevance for understanding and managing the health of vital pollinator populations.

The project will be co-supervised by Dr. Lena Wilfert and Dr. Juliet Osborne, with field work being carried out in collaboration with Dr. Alison Haughton (Rothamsted) and Prof. Dave Goulson (University of Stirling/University of Sussex). The student will also be closely involved with the disease group at University of Exeter in Cornwall, including Prof. Mike Boots, Prof. Angus Buckling and Dr. Britt Koskella. It will combine fieldwork in the UK with molecular infection assays in the lab. The work will heavily rely on molecular techniques, such as quantitative PCR and sequencing, for quantifying infections and for studying viral sequence evolution. The student will be trained in these methods. Ideally, the candidate has a strong interest in genetics and bioinformatics. Please contact Dr. Lena Wilfert (lena.wilfert@ed.ac.uk) for informal enquiries.

#### Funding Notes:

Applicants for these studentships must have obtained, or be about to obtain, a First or Upper Second Class UK Honours degree, or the equivalent qualifications gained outside the UK, in an appropriate area of science or technology. In addition, due to the strong mathematical component of the taught course in the first year, a minimum of B in A-level Maths or an equivalent qualification or experience is required.

For students who meet the residency requirements outlined by the BBSRC (see [http://www.bbsrc.ac.uk/web/FILES/Guidelines/studentship\\_eligibility.pdf](http://www.bbsrc.ac.uk/web/FILES/Guidelines/studentship_eligibility.pdf)) the studentship will provide a stipend at the standard Research Council rate plus fees and project costs.

v1lbwilf@staffmail.ed.ac.uk

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## UGlasgow Biodiversity Adaptation Genomics

NERC-funded PhD Studentship in Adaptation Genomics at the University of Glasgow

“How the salamander got his spots: the genetics of colour, shape, and local adaptation in European salamanders”

Supervisory team: Kathryn Elmer & Barbara Mable (Institute of Biodiversity, Animal Health & Comparative Medicine)

Research project: Adaptive and stochastic forces are at play in the evolution of the great diversity of size, shape and colour phenotypes we see in nature. While it has long been difficult to distinguish the relative roles of these different forces in evolution, recent advances make it possible to test hypotheses in an environmental context. Through an integrative analysis of body shape, colour and patterning, and genomics on wild populations of salamanders (genus *Salamandra*), this studentship will examine the role of local adaptation and the evolution of colouration. More details on the project at <http://www.findaphd.com/search/ProjectDetails.aspx?PJID=41359&LID=559> The successful student will join an active and dynamic research group in Molecular Ecology and Evolutionary Analysis, where we are applying cutting-edge genomic techniques and modern phenotyping methods to study biodiversity in nature. The project will involve field work, research on museum collections of amphibians, and genome-wide analyses with next-generation sequencing. Information on the Research Institute and the supervisors can be found at: <http://www.gla.ac.uk/researchinstitutes/bahcm/> Funding Details: NERC standard stipend (£13,590 pa + full fees) for 3 years (+6 months possible under some circumstances)

Who is eligible? The candidate must have been resident in the UK throughout the 3-year period preceding the date of application for an award, not wholly or mainly for the purposes of full time education (see <http://www.nerc.ac.uk/site/guides/students.asp>)

How to apply? Please provide a full CV + contact details of at least 2 referees, along with a cover letter indicating motives and qualifications for undertaking the proposed program. Please send applications as a single PDF to lorna.kennedy@glasgow.ac.uk by 1 December 1



2012. Interviews will be conducted in December.

For more information on the project or general inquiries, please contact Kathryn.Elmer@glasgow.ac.uk.

Kathryn Elmer <Kathryn.Elmer@glasgow.ac.uk>

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## UGlasgow SticklebackAdaptation

Graduate position

Support is available for a NERC funded PhD position under the supervision of Kevin Parsons, Neil Metcalfe, and Pat Monaghan at the University of Glasgow for research on the effects of climate change and temperature on morphological, behavioural, and genetic traits in threespine sticklebacks (*Gasterosteus aculeatus*). Candidates should have a strong interest in ecology, genetics, or developmental biology. Experience with general statistics and molecular techniques by the candidate would be desirable but not necessary. The project will involve fieldwork in Iceland. The position is expected to start in October 2013 or possibly earlier.

If interested please e-mail a statement of research interests, your CV and the names and e-mail addresses of two people willing to act as academic references to Kevin Parsons, (email: Kevin.Parsons@glasgow.ac.uk)

Training Opportunities: The questions addressed in this project are at the interface between ecology, evolution, development, and genetics, which will provide the student with exciting opportunities to integrate approaches.

Deadline: December 1, 2012 (for initial shortlisting); applications to remain open until the positions are filled.

The candidate must have been ordinarily resident in the UK throughout the 3-year period preceding the date of application for an award, not wholly or mainly for the purposes of full time education (but see exceptions for EU citizens who have studied in the UK). More details described here: <http://www.nerc.ac.uk/site/guides/students.asp?cookieConsent=A>  
Kevin.Parsons@glasgow.ac.uk

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## UGlasgow SticklebackEvolution

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## UIllinois AquaticFungiGenetics

The Dalling and Heath labs at the University of Illinois at Urbana-Champaign seek applicants for a graduate research position through either the Program in Ecology, Evolution and Conservation (<http://sib.illinois.edu/peec/>) or the Department of Plant Biology grad program (<http://www.life.illinois.edu/plantbio/graduateAdmissions.htm>). Students interested in ecology, genetics, and evolution of microbial communities are encouraged to apply! In a new project entitled, "Community assembly and decomposer function of aquatic fungi along a salinity gradient", which was recently funded by the National Science Foundation, we will study the pro-

cesses that determine the assembly of wood decomposer communities in freshwater-estuarine river systems in Coiba Island National Park on the Pacific coast of Panama. This project will provide unique, cross-disciplinary training in tropical ecology, metagenomics, bioinformatics, microbiology, and fungal taxonomy. Students will also have the opportunity to apply to a recently-funded NSF IGERT (graduate training grant: <http://sib.illinois.edu/igert/index.php>), which is focused on integrating genomic data with organismal biology. Interested applicants should contact one of the PIs: Astrid Ferrer ([aferrer@life.illinois.edu](mailto:aferrer@life.illinois.edu)), Jim Dalling ([dallingj@life.illinois.edu](mailto:dallingj@life.illinois.edu)), or Katy Heath ([kheath@life.illinois.edu](mailto:kheath@life.illinois.edu)) for more information.

[kheath@life.illinois.edu](mailto:kheath@life.illinois.edu)

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## UJyvaskyla Finland SocialEvolution

PhD opportunity in Social Evolution Theory at the University of Jyväskylä, Finland

Eusocial organisms such as bees and ants pose a challenge for evolutionary theory because they exhibit altruistic traits that contradict the Darwinian principle of individual fitness maximization. Although a large body of theory exists on the evolution of altruistic traits, few studies have explicitly modelled the transition from a solitary lifestyle to eusociality, including feedbacks between gene frequencies, colony dynamics and population ecology that are a necessary part of this process. We aim to fill this gap by building models based on recent theoretical advances. Applicants should have a degree in a relevant area (e.g. behavioural ecology, evolutionary biology, economics with focus on game theory, physics, mathematics, computer science), with some mathematical and computing skills and a keen interest in evolutionary biology. The project will be supervised by Lutz Fromhage at the University of Jyväskylä, in collaboration with Hanna Kokko at Australian National University, Canberra. Funding is provided by the Department of Biological and Environmental Science to fill positions in two out of four competing projects, of which the above project is one. The department seeks to recruit new students into its PhD programme, starting 1 January 2013. The goal of the department is that the student completes the PhD degree in four years. Initially, the successful candidates will receive a one year employment contract, which can be extended up to four years after positive progress evaluation. The application deadline is

on 23 November 2012, 4:15 pm. Applications should be submitted exclusively through [www.jyu.fi/science/en/applicationformphdstudents](http://www.jyu.fi/science/en/applicationformphdstudents), and should include a CV, and a research and study plan. Before submitting the application, the applicant is advised to contact Dr. Lutz Fromhage: [lutz.fromhage@jyu.fi](mailto:lutz.fromhage@jyu.fi)

Dr. Lutz Fromhage University of Jyväskylä PO Box 35, 40014 Finland tel: +358 404834256

Lutz Fromhage <[lfromhage@gmail.com](mailto:lfromhage@gmail.com)>

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## UKonstanz ParallelEvolutionCichlids

The Meyer lab at the University of Konstanz, Germany, member of the International Max Planck Research School (IMPRS) for Organismal Biology, is offering two fully-funded three-year PhD positions

Ecology and genomics of parallel speciation of cichlid fishes in Nicaraguan crater lakes

Project abstract The crater lakes in Nicaragua each contain small adaptive radiations of endemic cichlid fish. The species in these lakes often look astonishingly similar (Elmer and Meyer 2011). These cases of parallel evolution are the focus of research in the Meyer lab and we are studying this phenomenon at different levels of biological organization. We are looking for two PhD students to join our team who are interested in this from a (1) genetic (e.g., QTL-analyses) and genomic (e.g., comparative transcriptomics) perspective, and (2) an ecological/experimental viewpoint. The ecological genomics work aims to discover the genetic basis of (parallel) adaptations and next the functional characterization of candidate genes. This approach involves next-generation DNA sequencing technologies (Illumina and Roche FLX platforms) in the Genomics Center Konstanz and evo-devo work using transgenic model fish (e.g., zebrafish and medaka). We also plan to conduct mark-recapture studies and other ecological work in crater lakes in Nicaragua and are looking for a Spanish-speaking student who would work for longer periods of time in Nicaragua.

The successful applicants will participate in the International Max Planck Research School (IMPRS) for Organismal Biology, the PhD program of the Max Planck Institute for Ornithology in Seewiesen and Radolfzell and the University of Konstanz. All IMPRS students are supported by stipends or contracts. The pro-

gram offers a dedicated teaching program, high quality research experience, and outstanding research facilities in an inspiring research and living environment. The working language is English. Each PhD student receives individual supervision and mentoring and is guided in her/his research work by a PhD advisory committee.

**Qualification** Applicants should hold a MSc or equivalent degree in biology or a related discipline at the point of enrollment. Queries should be mailed to the IMPRS program office: [IMPRS@uni-konstanz.de](mailto:IMPRS@uni-konstanz.de)

**Deadline** for the application is January 15, 2013. Interviews are scheduled for Mid-March. The successful candidates are expected to start latest September 2013. The University of Konstanz is an equal opportunity employer.

**Application** For the online application process visit [www.orn.mpg.de/IMPRS](http://www.orn.mpg.de/IMPRS) More information at [www.orn.mpg.de/IMPRS](http://www.orn.mpg.de/IMPRS) and [www.facebook.com/OrganismalBiology](http://www.facebook.com/OrganismalBiology) Daniel Piechowski <[dpiechowski@orn.mpg.de](mailto:dpiechowski@orn.mpg.de)>

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## ULausanne ComputationMolBiol

PhD positions in Computational Molecular Biology and Phylogenetics

**\*Job description\*** The two PhD positions are part of a collaborative project, funded by the Swiss National Science Foundation, between the groups of Nicolas Salamin (Computational Biology and Phylogenetics, Department of Ecology and Evolution) and Marc Robinson-Rechavi (Bioinformatics, Department of Ecology and Evolution) at the University of Lausanne, and the group of Bastien Chopard (Computer Science Department) at the University of Geneva; all three groups are members of the Swiss Institute of Bioinformatics.

The overall aim of the project is to develop and improve the algorithms used to estimate the selective pressure acting on DNA sequences by combining biological realism and computational efficiency. More specifically, the project is divided in two parts: - The first one aims at proposing novel algorithms to enable efficient parallelisation of the likelihood calculations of codon models. The goal is to develop a true high-performance computer approach to the optimisation of maximum likelihood to study molecular evolution within a phy-

logenetic context. - The second one aims at developing a Bayesian approach to estimate positive selection. The goal is to propose novel approaches to facilitate the identification of specific sites and lineages under different types of selective pressure.

Both parts of the project will be enhanced by using high performance computing facilities (e.g. IBM Blue Gene/Q) available within the CADMOS center.

**\*Profile requirements\*** We are looking for autonomous and ambitious students with enthusiasm for interdisciplinary work. The students will need to interact productively with evolutionary biologists, genome biologists and computer scientists, and read the corresponding range of scientific literature. Candidates must have completed their Master's degree or equivalent in a relevant field.

The requirements for each part of the project include a strong mathematical or statistical and computer science background and deep interest in theoretical aspects of evolutionary biology and bioinformatics. Previous experience with evolutionary biology and/or parallel computing is a plus but not a requirement.

The successful candidates will be part of the Department of Ecology and Evolution of the University of Lausanne, the Department of Computer Science of the University of Geneva, as well as the Swiss Institute of Bioinformatics. Our research groups offer a supportive and stimulating environment, with access to excellent computer and academic facilities.

**\*Contact details\*** To apply, please send by email - a letter describing your research motivation and experience - a detailed CV - contact details of three referees

Nicolas Salamin ([nicolas.salamin@unil.ch](mailto:nicolas.salamin@unil.ch)) <http://www.unil.ch/phylo> <http://www.isb-sib.ch/groups/lausanne/cpg-salamin.html> See also <http://bioinfo.unil.ch/> <http://cui.unige.ch/~chopard/home.html> <http://www.cadmos.org> <http://selectome.unil.ch/> <http://www.hp2c.ch/projects/selectome/> [nicolas.salamin@unil.ch](mailto:nicolas.salamin@unil.ch)

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## ULiverpool HostParasiteInteractions

PhD studentship available:

“Modelling the community context of host-parasite interactions”

University of Liverpool, UK Supervisors: Dr Andy

Fenton (Dept of Evolution, Ecology & Behaviour) Dr  
Kieran Sharkey (Dept of Mathematical Sciences)

There is great interest in the community context of host-parasite associations - hosts and parasites are not isolated, but are embedded within wider ecological communities. This leads to various important questions: How do alternative hosts affect parasite dynamics? How do parasites alter the stability of the wider community? To help address these questions we need a general theory of the community context of host-parasite interactions.

This studentship will develop such a theoretical framework. First, motivated by a recently-obtained NERC grant, in which we manipulate natural multihost-parasite communities, the student will develop simple community sub-models to explore how differential host susceptibility and parasite transmission mode interact to shape multihost-parasite dynamics. Second, motivated by on-going large-scale community-wide surveys, the student will use network theory to explore how parasites spread through, and alter the stability of, ecological communities. This general framework will greatly aid data interpretation, and provide insight into the potential impact of parasites on ecological communities.

The student will work closely with ecologists working on natural host-parasite communities, and mathematicians with expertise in network theory, and so will receive training in both theoretical and empirical host-parasite ecology. Furthermore, they will be part of a diverse and active research environment, both within Liverpool University and collaborating institutions (Universities of Edinburgh and Zurich). The project would particularly suit a student with strengths in mathematical or computational biology, and network and/or ecological theory.

This studentship is fully funded for UK residents, but fees only for EU citizens. For informal enquiries please contact Dr Andy Fenton ([a.fenton@liverpool.ac.uk](mailto:a.fenton@liverpool.ac.uk)). Applicants should send a CV, cover letter and contact details of two academic referees to Mrs Linda Marsh ([biolres@liverpool.ac.uk](mailto:biolres@liverpool.ac.uk)).

Dr Andy Fenton Institute of Integrative Biology Biosciences Building Crown Street University of Liverpool Liverpool L69 7ZB Tel: 0151 795 4473 Fax: 0151 795 4408 <http://www.liv.ac.uk/integrative-biology/staff/-andrew-fenton/> [A.Fenton@liverpool.ac.uk](mailto:A.Fenton@liverpool.ac.uk)

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## UManchester ModellingEvolution

PhD available at the University of Manchester

Darwinian evolution is often assumed to be inherently competitive, frequently characterized by the adage the survival of the fittest. However, individuals do not always operate as adversaries and cooperation is widespread in many animals. Humans show innate predispositions to be moral and prosocial, and these tendencies give rise to complex societies organized by social and political institutions. Group living animals can also be highly prosocial, as evidenced by cooperative breeding, coalitionary support, consolation following conflict, social grooming and even policing of conflict. Explaining the evolution cooperation remains one of the great problems for evolutionary biology, as it does not fit with the notion of selfish individuals and genes.

In evolutionary game theory, population structuring has been shown to have strong impacts on the stability of cooperation. However, such models have historically used theoretical population structure rather than variation in group structure derived from observed networks of interactions in animals. We have shown that group structure in primates is highly conserved over evolutionary time, which raises the question of whether these group structures are important promoters of stable cooperation.

This project will use agent-based models to explore how variation in animal social networks impact on the stability of cooperation. These models will simulate individual decisions about whether to cooperate, or not, with others based both on the benefits of cooperation and patterns of interactions across different group structures. These models will also explicitly incorporate individual characteristics such as dominance, learning strategies, and enforcement behavior (i.e. punishment and policing).

If interested, please send an enquiry with a c.v. to [susanne.shultz@manchester.ac.uk](mailto:susanne.shultz@manchester.ac.uk) Funding Notes: For full information on how to apply for this project, please visit [www.manchester.ac.uk/dtpstudentships](http://www.manchester.ac.uk/dtpstudentships) Applications are invited from UK/EU students only. Applicants must have obtained, or be about to obtain, at least an upper second class honours degree in a relevant subject.

Related webpages:

<http://www.ls.manchester.ac.uk/-research/researchgroups/-computationalandevolutionarybiology/people/?alias==shultz> <http://www.theory.physics.manchester.ac.uk/~galla/> Susanne Shultz Senior Research Fellow/Royal Society Dorothy Hodgkin Fellow Michael Smith Building Faculty of Life Sciences The University of Manchester Oxford Road, Manchester M13 9PT UK Tel: 44 (0)161 275 3903

Susanne Shultz <susanne.shultz@manchester.ac.uk>

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## UMontana Evolutionary Genetics Genomics

### GRADUATE POSITIONS IN EVOLUTIONARY GENETICS AND GENOMICS AT THE UNIVERSITY OF MONTANA

The Division of Biological Sciences (DBS) at the University of Montana (UM) invites applications from highly motivated students interested in evolution to apply to join our PhD programs in the Fall of 2013. The Evolutionary Genetics and Genomics group at UM is a diverse set of faculty using genetic and genomic approaches to investigate evolutionary processes in plants, animals, and microbes. The group spans the Organismal Biology & Ecology (OBE) and Integrated Microbiology and Biochemistry (IMB) graduate programs, but is integrated through shared research space and student training.

Core Labs in the Evolutionary Genetics and Genomics group include:

Doug Emlen - Sexual selection and Insect developmental evolution (OBE) Lila Fishman - Plant adaptation, speciation, and selfish evolution (OBE) Jeff Good - Mammalian speciation and adaptation (OBE) John McCutcheon - Symbiosis and genome evolution (OBE, IMB) Scott Miller - Cyanobacterial evolutionary genetics (IMB) Frank Rosenzweig - Yeast experimental evolution (IMB)

The EGG group maintains strong connections with ecologists and physiologists within the OBE program, molecular biologists and biochemists in IMB, conservation geneticists in the Systems Ecology and Wildlife Biology programs, and bioinformaticians in Computer Science, as well as national and international collaborators. Our location in the Rocky Mountain West provides an ideal environment for integrating field and lab

approaches to understand the evolutionary processes and genetic/genomic mechanisms that shape natural variation. Missoula, where UM is located, was picked as a top 10 “Best Town” by Outside magazine in 2011 and is a great place to live and work.

For full consideration, complete applications should be received by January 10, 2013. We strongly encourage prospective applicants to contact individual faculty members as soon as possible to discuss their research interests. Financial support for graduate students comes from a variety of sources, including both teaching and research assistantships.

For more information on the graduate programs and faculty, please see the DBS website at <http://dbs.umt.edu/default.php>. Application information may be found at <http://www.umt.edu/grad/Apply/-Applying%20for%20Admission.php#Apply> . – Lila Fishman, Ph.D. Associate Professor Division of Biological Sciences University of Montana Missoula, MT 59812

office: 406 243-5166 cell: 406 274-4996 fax: 406 243-4184

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

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## UMuenster Sexual Conflict

PhD advert:

\*PhD position: Sexual conflict and male-female coevolution\*

I invite applications for a PhD position in the Junior 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 February 2013 (or as soon as possible thereafter) until January 2016.

I am interested in the study of traits shaped by sexual antagonistic coevolution driven by sexual conflict between the sexes. Sexual conflict is prevalent between the sexes and has been shown to occur in a broad range of taxa. In my research I work with the fruit fly *Drosophila melanogaster*, which is a widely used model organism and also sexual conflict has been widely studied in this species. Within the project the successful candidate will study how ecological factors might alter sexual antagonistic trait expression and the conse-



quences for male-female coevolution. This will be done by combining molecular work with behavioural experimental work to measure trait expression at the molecular level combined with phenotypic tests and fitness estimates.

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. 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 *Drosophila* work, good molecular skills, preferably experience with qPCR, a good understanding of statistics. Applicants should have excellent communication skills. The working language of the institute and the lab is English.

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 7<sup>th</sup> of December 2012.

The salary will be for 36 months (TV-L E13/50%) 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 Junior Research Leader

University of Muenster Institute for Evolution and Biodiversity Hüfferstr. 1 48 149 Muenster, Germany

Tel. ++49(0)251-83 21042 e-mail: Claudia.Fricke@uni-muenster.de

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

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## UNotreDame Evolutionary Dynamics

### GRADUATE OPPORTUNITIES IN EVOLUTIONARY GENOMICS

The Graduate Program in the Department of Biological Sciences at the University of Notre Dame is recruiting doctoral students for Fall 2013 in research areas ranging from evolutionary dynamics in natural populations, climate change, speciation, and infectious diseases systems biology. Our Ph.D. program tailors training to the student's biology-centered research program and emphasizes ties to our expanding strengths in computational biology, network science, and applied math. Numerous opportunities for interdisciplinary interactions among research areas are available, including our GLOBES training program <http://globes.nd.edu/>. The following faculty are seeking graduate students in Evolutionary Genomics:

Jeff Feder: <http://biology.nd.edu/people/faculty/-feder/> Mike Ferdig: <http://biology.nd.edu/people/faculty/ferdig/> Hope Hollocher: <http://biology.nd.edu/people/faculty/hollocher/> Stuart Jones: <http://biology.nd.edu/people/faculty/jones/> Mike Pfrender: <http://biology.nd.edu/people/faculty/pfrender/> Jeanne Romero-Severson: <http://biology.nd.edu/people/faculty/romero-severson/>

Research and teaching assistantships and a variety of fellowship opportunities are open to students. For more information regarding the Biological Sciences Graduate Program and other graduate opportunities see <http://biology.nd.edu/>. The deadline for receipt of all application materials for the Ph.D. program is January 5, 2013, although earlier submission is encouraged to ensure full consideration for available fellowships. For additional assistance, e-mail our Graduate Recruiting Coordinator, Mike Ferdig, [ferdig.1@nd.edu](mailto:ferdig.1@nd.edu), or phone the department: 574-631-6552.

Laurie Fisher <Laurie.Fisher.102@nd.edu>

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## USheffield PufferfishEvoDevo

## \*Graduate Position at the University of Sheffield\*

The Department of Animal and Plant Sciences, University of Sheffield is currently accepting applications for a PhD in the Laboratory of Gareth Fraser commencing October 2013 on the following evo/devo project:

\*Developing innovation from regeneration: evolution and development of the pufferfish beak\*

\* \*

Pufferfishes are a recent and relatively simple genomic model and are characterized by a bizarre modified and reduced dentition, resembling a parrot-like beak composed of just four teeth. This simple dental form is attractive for further study and genetic manipulation to understand the process of lifelong de novo tooth replacement and the development of novel form. The pufferfish dental condition provides an unrivalled and simple system to dissect the gene interactions responsible for both continuous tooth production and morphological modification to form a beak-like jaw. Specifically this project seeks to identify the key genes that regulate the process of continuous tooth replacement via a mechanism that breaks down in mammals typically after only one replacement phase. This project will involve the development of gene expression techniques (including insitu hybridisation) to expand our knowledge of genes responsible for tooth replacement and evolutionary modification of these tissues. The successful candidate will use genetic manipulation techniques (constructing oligo-morpholinos) to knock down and block specific gene function during pufferfish craniofacial development, resulting in the predicted disturbance of continued replacement tooth development that forms the beaked dentition. Essentially, this research will target known regulators of stem-like cells (i.e., Wnt and Notch genes) responsible for continued regulation, maintenance and initiation of life-long tooth replacement.

The Department of Animal and Plant Sciences currently has around 100 PhD students. These students are funded mainly by the UK Research Councils, University Scholarships, Industry and from overseas. We are currently seeking applications for studentships in all areas of the department's research interests < <http://www.sheffield.ac.uk/aps/prospectivepg/-research-topics> >.

PLEASE NOTE: Research Council and University Studentships are only available to UK/EC students. Non-EU overseas students should go to the Research topics < <http://cms.shef.ac.uk/aps/-prospectivepg/research-topics.html> > page and use the topic areas on that page as a starting point to identify

suitable supervisors and project areas, then contact us directly to discuss possible projects.

\*To apply: \*To apply for any of the projects listed below please complete an on-line application form, which can be found at <http://www.shef.ac.uk/postgraduate/-research/apply/applying> . \*The closing date is 15 January 2013\*

For Informal enquiries and to request further information please email Gareth Fraser [g.fraser@sheffield.ac.uk](mailto:g.fraser@sheffield.ac.uk)

<https://sites.google.com/a/sheffield.ac.uk/fraser-lab/-home-1> –

Gareth J. Fraser, Ph.D Lecturer in Zoology Department of Animal and Plant Sciences Alfred Denny Building University of Sheffield Western Bank Sheffield S10 2TN UK Phone: +44(0)1142224317 Email: [g.fraser@sheffield.ac.uk](mailto:g.fraser@sheffield.ac.uk) Website: Fraser Lab < <https://sites.google.com/a/sheffield.ac.uk/fraser-lab/home-1> >

Gareth Fraser <[g.fraser@sheffield.ac.uk](mailto:g.fraser@sheffield.ac.uk)>

## USouthFlorida EvolutionaryBiol

The Department of Integrative Biology is accepting applications for students to enter their integrative graduate education program in Ecology and Evolution, Environmental and Ecological Microbiology or Physiology and Morphology (deadline Jan 1 2013, see <http://biology.usf.edu/ib/grad/admission/>). Our department is committed to train the next generation of graduate students to prepare them for professional success in the fields of biological sciences that mirror our faculty's expertise, which emphasizes organismal interactions and adaptations to the environment at all scales, from microorganisms to complex plants and animals. Our program of graduate study is designed to foster the development of technical and analytical skills used in existing and emerging fields of discovery. Increasingly, students are given opportunities to include an international experience in their research projects and also be involved in outreach activities. The research and training ongoing in the Department of Integrative Biology contributes to advancements in both basic science and applications to real world problems.

Application files must be complete and received by the Biology Graduate Office before January 1, 2013 to be considered for Fall 2013 Teaching Positions or the University Graduate Fellowship.

Students can pursue a M.S. or Ph.D degree in Biology. Each of the degrees requires a student to identify an area of concentration. The program offers: - M.S. in Biology, Concentration in Ecology and Evolution (EEV) - M.S. in Biology, Concentration in Environmental and Ecological Microbiology (EVM) - M.S. in Biology, Concentration in Physiology and Morphology (PMY) - Ph.D. in Biology, Concentration in Ecology and Evolution (EEV) - Ph.D. in Biology, Concentration in Environmental and Ecological Microbiology (EVM) - Ph.D. in Biology, Concentration in Physiology and Morphology (PMY)

Faculty research interests include: biomechanics and functional morphology; ecology (marine and freshwater, conservation, restoration, population, community and ecosystem); ecological genetics and epigenetics; ecophysiology; ecotoxicology; environmental microbiology; evolution; gene transfer; genomics; microbial physiology; research synthesis; and response to climate change.

Faculty who are currently accepting students into their laboratories (more information at <http://biology.usf.edu/ib/faculty/>):

\* Bell, Susan- Marine Ecology \* Crisman, Thomas- Freshwater Ecology \* Deban, Stephen- Physiology, Biomechanics, and Evolution \* Fox, Gordon- Plant Ecology, Conservation Biology, and Population Biology \* Harwood, Valerie- Microbial Water Quality \* Lajeunesse, Marc- Ecology, Evolutionary Biology and Research Synthesis \* Lewis, David- Ecosystem & Landscape Ecology, Biogeochemistry \* Martin, Lynn- Ecological Physiology and Immunology \* McCoy, Earl- Conservation Ecology \* Motta, Philip- Functional Morphology \* Mushinsky, Henry- Conservation Ecology \* Pierce, Sidney- Cellular Physiology and Biochemistry \* Richards, Christina- Plant Ecological Genomics and Epigenetics \* Rohr, Jason- Ecology \* Scott, Kathleen- Microbial Physiology and Biogeochemistry \* Stiling, Peter- Ecology

clr@usf.edu

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## USouthernCalifornia IslandFoxEvolution

We seek to recruit a highly motivated doctoral student to pursue dissertation research on the evolutionary history of the island fox, *Urocyon littoralis*. The island fox is smaller than its progenitor, the mainland gray fox, and includes six subspecies, each restricted to a dif-

ferent island in Southern California's Channel Islands due to their unique migratory history during the Ice Age and thereafter. Extreme population crashes have occurred on several of the islands, leading to federal protection for a subset of the subspecies. The work will take advantage of fossils and historical samples from museum collections, taken before the population crashes, as well as recent samples.

The research will be part of a multidisciplinary project (molecular, morphological and paleontological) involving collaboration between the Natural History Museum of Los Angeles County, the Wrigley Institute for Environmental Studies and the University of Southern California. This is a funded project and the Ph.D. student will have five years of support (including tuition remission) through a combination of RAships, TAships and fellowships.

Analyses of genetic and morphological changes can be used to address a number of important questions. When did the fox arrive at each island and how much migration has there been amongst islands? Were humans (Paleo-Indians) involved in the colonization of each island? What is the genetic basis for the evolution of dwarfism? How much genetic variation has been lost due to population bottlenecks on the different islands?

Potential applicants are encouraged to contact either Xiaoming Wang ( [xwang@nhm.org](mailto:xwang@nhm.org)) or Suzanne Edmands ( [sedmands@usc.edu](mailto:sedmands@usc.edu)) for more information. Applications should be submitted to the Integrative and Evolutionary Biology Graduate Program at the University of Southern California ( <http://dornsife.usc.edu/-bisc/heb/graduate/admissions.cfm>). To receive full consideration for university fellowships, applications should be submitted by December 1, 2012. However, later applications will also be considered.

Suzanne Edmands Associate Professor Department of Biological Sciences 3616 Trousdale Parkway, AHF 316 University of Southern California Los Angeles, CA 90089 (213)740-5548 <http://college.usc.edu/labs/-edmands/home/index.cfm> [edmandss@gmail.com](mailto:edmandss@gmail.com)

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## UWashington AvianEvolution

GRADUATE POSITIONS: U of Washington, Avian evolution I am seeking 1-2 graduate students to develop research (dissertation) projects that use modern molecular methods combined with field work, to study the

evolution of birds. Students will have the opportunity to work as part of a team studying the comparative biogeography of select avian taxa. Individual research topics may differ in focus but must involve a systematic framework. Spanish-speaking ability and experience with neotropical birds are preferred. A solid work ethic and an interest in specimen-based (museum) ornithology are required.

The Biology Department at the University of Washington offers up to five years of support (teaching or research positions) and a tuition reduction. Additional support for research is available through both the Biology Department and the Burke Museum. Interested persons should view the UW Graduate Admissions Website [ <http://www.biology.washington.edu/prospective/graduate-students>] for more details. Please note that the Grad School application deadline for Fall (2013) admission is 1 December. Successful applicants will begin in September 2013 (or sooner). Interested persons should also send GRE scores, transcripts, a CV, names and phone numbers of three personal references, and a letter of interest to: John Klicka, The Burke Museum, University of Washington, Box 353010, Seattle WA, 98195-3010. E-mail: [klicka@uw.edu](mailto:klicka@uw.edu), Office phone: (206) 685-7201.

John Klicka <[klicka@uw.edu](mailto:klicka@uw.edu)>

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## UppsalaU 2 SpeciationGenomics

Speciation genomics

2 PhD positions at the Evolutionary Biology Centre of Uppsala University, supervised by Prof Hans Ellegren (see end of message for web page)

Advances in large-scale genomics open new opportunities in speciation research. It allows us to address questions such as the genes underlying the process of speciation, the character of genomic divergence during speciation, and speciation-with-gene-flow. Flycatchers of the genus *Ficedula* offer an excellent model system for studies of these and related questions (see e.g. *Nature* 387:589-592, 411:45-50, *Science* 318:95-97). We have recently sequenced and de novo assembled the flycatcher genome (at 85x coverage and with a scaffold N50 of 7.3 Mb) and performed genome-wide re-sequencing of multiple individuals (each at 5x coverage) of the two closely related species collared flycatcher and pied flycatcher (*Nature*, in press; doi:10.1038/nature11584). By this we have identified a number of 'divergence is-

lands', many of which are associated with centromeres and telomeres, potentially indicating a role for meiotic drive in species divergence. We are now seeking new PhD students to join this project in which coming research will use data from whole-genome re-sequencing of multiple populations (sympatric as well as allopatric) and species, from a 50K SNP array (genotyping in pedigrees and population samples) and from the flycatcher transcriptome and methylome. Genomic parameters that will be analyzed include, for example, recombination rates, linkage disequilibrium, expression divergence, and epigenetic modification. The precise direction of studies will be decided together with the successful candidates.

The venue for these positions, the Evolutionary Biology Centre, is situated in recently-built localities in central Uppsala. The working atmosphere is international with a regular recruitment of PhD students and post-docs from abroad. The Centre constitutes an exciting arena for multidisciplinary research in evolutionary biology in a broad sense, housing some 300 scientists and graduate students, and with research programs in, for example, ecology, genetics, genomics and developmental biology. The scientific environment with numerous seminars, journal clubs and social activities offer excellent possibilities for contacts and collaborations, and represents an ideal training for students to become leading evolutionary biologists of the future. A graduate school in 'The Genomics of Phenotypic Diversity in Natural Populations' (<http://www.ebc.uu.se/education/postgrad/gradschool/>) provides a framework for courses and other activities for PhD students. Local platforms for next-generation sequencing (<http://www.scilifelab.uu.se>) and high-performance computational analyses (<http://www.uppmx.uu.se>) ensure immediate access to state-of-the-art technology. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful and easy accessible surroundings conveniently situated close to Stockholm.

The positions, which are funded by a European Research Council Advanced Investigator Grant, are affiliated with the Department of Evolutionary Biology - an overview of the research activities in the environment can be found at our web pages (<http://www.ebc.uu.se/Research/IEG/evbiol/>). Thanks to a number of competitive grants recently obtained, the environment has expanded significantly and houses 8 independent research groups and about 20 PhD students, 20 post-docs, and some bioinformaticians. A common theme is that we address key questions in evolutionary biology, like speciation, local adaptation, life history evolution, genome and molecular evolution, using genomic



approaches. Study organisms include natural bird and plant populations, *Neurospora*, *Drosophila*, zebra fish, domestic animals and humans. We have tight connections with several other research programs at the Evolutionary Biology Centre.

The fully-funded (salary, research and travel expenses) PhD positions are for four years.

Applicants must hold a Master degree, or are to obtain a degree this academic year, in evolutionary biology, genetics or bioinformatics, or in related disciplines. Successful candidates are expected to display enthusiasm, curiosity, creativity and dedication to the project. Informal inquiries and applications should be sent by email to [Hans.Ellegren@ebc.uu.se](mailto:Hans.Ellegren@ebc.uu.se). Applicants must provide a CV, a statement of research interests and the name and contact details of at least two references. The positions remain open until filled.

Professor Hans Ellegren Department of Evolutionary Biology Evolutionary Biology Centre Uppsala University Norbyvägen 18D SE-752 36 Uppsala Sweden

LAB WEB PAGE:

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

## UppsalaU **EvoEcolGenetics**

PhD position in evolutionary ecology and genetics (speciation)

A four-year PhD position IN EVOLUTIONARY ECOLOGY AND GENETICS is available at the Department of Ecology and Genetics, Evolutionary Biology Center, Uppsala University, Sweden, starting as soon as possible or as agreed upon.

In this project, you will study genome divergence and the evolution of reproductive isolation in a naturally hybridizing species pair of *Silene*. We have previously identified various reproductive barriers between the two species, including habitat adaptation and con-specific pollen precedence. You will use next-generation sequencing methods to identify genomic regions controlling reproductive barriers in order to study their evolution and their role in speciation. The exact work-plan of the thesis will be settled together with the

doctoral student.

The PhD student will be part of the group of Sophie Karrenberg ([http://www.ebc.uu.se/forskning/-IEG/Plant/People/Karrenberg\\_Sophie/](http://www.ebc.uu.se/forskning/-IEG/Plant/People/Karrenberg_Sophie/)) who will be their main supervisor.

The Evolutionary Biology Center (EBC) houses about 300 evolutionary biologists from various research fields including genetics, genomics and ecology providing for excellent possibilities of collaboration (<http://www.ebc.uu.se/>). Numerous seminars and journal clubs are held. International recruitment is common on all levels and the working language is English. PhD student education in evolutionary biology is furthered by graduate school in “The Genomics of Phenotypic Diversity in Natural Populations” (<http://www.ebc.uu.se/education/postgrad/gradschool/>). State-of-the-art local platforms for next-generation sequencing (<http://www.scilifelab.uu.se>) and high-performance computational analyses (<http://www.uppmax.uu.se>) are available.

We seek a highly motivated student (MSc degree or equivalent required) with thorough education and/or strong interest in evolution, genetics/genomics, and bioinformatics. Previous experience with next-generation sequencing methods, ecological experiments and statistical programming is advantageous. Candidates must be fluent in English both orally and written. We are looking for individuals who excel at working independently and, at the same time, have the interpersonal and communication skills to succeed at working in a team.

The postgraduate training comprises four years of full-time studies. The successful candidate will receive a postgraduate fellowship the first year (15500 SEK/month) and a postgraduate position year 2-4 (22400-25100 SEK/month). The position can be combined with up to 20% of teaching assistantship, which will then prolong the position accordingly.

Please feel free to contact Sophie Karrenberg ([sophie.karrenberg@ebc.uu.se](mailto:sophie.karrenberg@ebc.uu.se) [1], +46 18 471 2863) for more information. Union representatives are Anders Grundström, Saco-rådet, tel. +46 18 471 53 80 och Carin Söderhäll, TCO/ST, tel. +46 18 471 1996, Stefan Djurström, Seko, tel. +46 18 471 33 15. How to apply: Please prepare a letter of intent including descriptions of 1) your motivation for PhD studies in general and for this position in particular, 2) your research interests and 3) your education, especially in evolutionary biology, genetics/genomics/bioinformatics, ecology, and statistics. The application should further include a CV, an authorized copy of your MSc degree, and the names and contact information (address, email address, and



phonenumber) of at least two reference persons. Relevant publications (including BSc/MSc thesis) should be enclosed. The application should be sent by e-mail to: [registrator@uu.se](mailto:registrator@uu.se). In any correspondence please use the reference number UFV-PA 2012/2894. Please apply no later than January 9, 2013.

Sophie Karrenberg Associate Professor

Uppsala University Evolutionary Biology Center Dept. of Ecology and Genetics Plant Ecology and Evolution Norbyvägen 18 D 752 36 UPPSALA Sweden

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[sophie.karrenberg@ebc.uu.se](mailto:sophie.karrenberg@ebc.uu.se)

[http://www.ebc.uu.se/Research/IEG/-Plant+Ecology+and+Evolution/People/-Karrenberg\\_Sophie/?languageId=1](http://www.ebc.uu.se/Research/IEG/-Plant+Ecology+and+Evolution/People/-Karrenberg_Sophie/?languageId=1) Länkar:

[sophie.karrenberg@ebc.uu.se](mailto:sophie.karrenberg@ebc.uu.se)

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## UtahStateU BearPopulationDynamics

\*Title: \*QCNR PhD Fellowships: Black bear behavior, population dynamics and evolutionary responses to anthropogenic change.

I am seeking a PhD student to work on applied and fundamental questions in behavior, demography, population ecology, and life history evolution of black bears.

\* \*

\*Project: \*The aim of this project is to help guide black bear conservation by linking bear habitat selection processes to both individual-based demography and population dynamics using state-of-the-art statistical and modeling tools. The selected PhD student will work on 30+ years of high quality, individual-based black bear data (i.e., capture-recapture, GPS and telemetry locations, nuisance conflict calls, etc.) that were collected by the New Jersey Division of Fish and Wildlife NJDFW. This dataset offers enormous possibilities to address applied questions and management solutions directed at mitigating bear-human conflicts. It also provides opportunities to address basic research questions by relating individual performance and fitness to environmental and anthropogenic changes in New Jersey; the state with the highest density of black bears in the country. The combination of applied and basic research is the approach I favor in my lab. It

should be noted that even though the student will be working with an existing dataset, the student will also have opportunities to participate in field work each year with NJDFW (summer bear captures and winter den searches).

\* \*

\*Funding: \*All interested candidates must apply to both USUs School of Graduate Studies, and the S.J. & Jessie E. Quinney Doctoral Fellowships Program. These fellowships will cover 75% of all expenses (stipend, tuition, health insurance) over 4 years. Matching funds (remaining 25%) have already been secured, which is a sinequanon condition for a successful application.

\* \*

\*Requirements: \*Minimum requirements for a successful application are a cumulative 70th percentile (for both verbal and quantitative) on GRE and cumulative GPA of > 3.5. Note that although 70th percentile scores are not required for the Quinney fellowships, nominees without these scores will be at a distinct disadvantage. Paper(s) in peer-reviewed journals and manuscripts at advanced stages of preparation will considerably help your application.

\* \*

\*Advising: \*The Phd student will receive his/her degree through the department of Wildland Resources or the Ecology Center at Utah State University (Logan, Utah). The student will work in my lab (Dr Lise Aubry <http://www.cnr.usu.edu/html/facstaff/memberID=3551>) in collaboration with Dr Melissa Reynolds-Hogland (Executive Director of Bear Trust International, <http://beartrust.org/>) and the New Jersey Division of Fish and Wildlife ( <http://www.state.nj.us/dep/fgw/>).

\* \*

\*Location: \*USU is a wonderful place to work and play. The college of natural resources offers the perfect blend of basic and applied research, a collegial and friendly atmosphere, as well as a beautiful campus at the edge of the mountains, with wonderful views of the valley. The proximity to Yellowstone, Southern Utah National Parks (e.g., Canyonlands, Arches, Zion), and the direct access to the great outdoors offer some of the best opportunities for skiing, rock climbing, fishing, hunting, and hiking in the country.

\*Application and deadline: \*To apply, please email me a CV, copy of your transcripts, one-page statement of research interests, and contact information for two references at [lise.aubry@aggiemail.usu.edu](mailto:lise.aubry@aggiemail.usu.edu) by the 1st of

December 2012. Out of the pool of applicants, I will select the top two candidates to move forward with the fellowship application process which will need to be completed by the 25th of January 2013. Anticipated start date would be summer-fall 2013.

Lise Aubry <lise.aubry@aggiemail.usu.edu>

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## VirginiaTech Evolution

The newly established McGlothlin lab at Virginia Tech is looking for enthusiastic and motivated Ph.D. students to start in fall 2013. Research in the lab focuses on a wide variety of questions in evolutionary genetics and evolutionary ecology. We are broadly interested in the evolution of complex phenotypes. Ongoing research projects in the lab involve comparative quantitative genetics of Anolis lizards and molecular evolution of toxin resistance in garter snakes. Students in the McGlothlin lab will be strongly encouraged to develop their own ideas and projects, which may either build upon or depart from the lab's current research.

The McGlothlin lab is part of the growing Ecology, Evolution, and Behavior and Integrative Organismal Biology groups in Virginia Tech's Department of Biological Sciences. Outside the department, potential for collaboration and scientific interaction exist in a number of departments across campus, including Entomology, Fish and Wildlife Conservation, Forest Resources and Environmental Conservation, and the Virginia Bioinformatics Institute.

Interested students should contact Dr. Joel McGlothlin (joelmcg@vt.edu), providing a description of your research interests and experience and a CV or resume that includes GPA, GRE scores, and contact information for 3 references.

Funding is available through both teaching and research assistantships, and a number of competitive fellowships are offered by the university. For full consideration, applications to the department should be received by December 31, 2012.

Additional information: McGlothlin lab: <http://www.faculty.biol.vt.edu/mcglathlin> Graduate program: <http://www.biol.vt.edu/graduates/index.html> Graduate application: [http://www.biology.vt.edu/graduates/how\\_to\\_apply/grad\\_application\\_information.html](http://www.biology.vt.edu/graduates/how_to_apply/grad_application_information.html) Biological Sciences at VT: <http://www.biol.vt.edu/research/index.html> Ecology, Evolu-

tion, and Behavior at VT: <http://www.biol.vt.edu/-research/index.html>

Joel W. McGlothlin Virginia Tech, Dept. of Biological Sciences 2125 Derring Hall, Blacksburg, VA 24061 <http://www.faculty.biol.vt.edu/mcglathlin> Email: joelmcg@vt.edu

joelmcg@vt.edu

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## WageningenU FishEvolution

Evolution of reproductive strategies in livebearing fish

The Experimental Zoology Group at Wageningen University (the Netherlands) is looking to recruit a Ph.D. student interested in evolutionary biomechanics. Our research seeks to understand the evolution of reproductive strategies in the livebearing fish family Poeciliidae. This project is financially supported by the Dutch Earth and Life Sciences foundation (ALW).

Job description Viviparity (livebearing) is known to carry a locomotory cost to females during their reproductive phase, due to an increase in physical burden and change in morphology/physiology affecting the power output of females and their interaction with the immediate surroundings. In our lab we study the evolution of two reproductive strategies in the livebearing fish family Poeciliidae: placentation (post-fertilization maternal provisioning by means of a placenta) and superfetation (the ability to carry multiple litters at different developmental stages). We hypothesize that these strategies evolved because they reduce the locomotory costs of gestation without sacrificing a females reproductive output (each strategy notably achieving this in a fundamentally different way). If true, then these two strategies may impart a significant fitness advantage to females in high-performance demanding environments. Within the theme Evolution of reproductive strategies± the PhD student will carry out an interdisciplinary research project concentrating on the consequences of placentation and superfetation for the swimming performance of female fish during their pregnancy. The candidate is expected to design a comparative (biomechanic) study comparing placental vs non-placental and superfetation vs non-superfetation Poeciliid species, aimed at linking changes in morphology and physiology during gestation to changes in locomotory performance. The ultimate goal is to identify potential adaptive advantages of placentation and superfetation in livebearing organisms.

Requirements For this interdisciplinary project we look for an enthusiastic result-driven person with a MSc degree in biology, preferably with a specialization in (fish) physiology and/or biomechanics and a strong interest in evolutionary questions. Experience with Matlab programming and kinematics is considered an advantage. The candidate should have excellent research and communication skills, be creative and independent (yet at the same time a team player) and be proficient in English.

Conditions of employment Employment basis: Temporary (4 year) appointment, initially for the duration of 1.5 years with a possible extension of 2.5 years after a positive evaluation of performance. Gross salary per month  $\approx$  2042 in the first year rising to  $\approx$  2612 per month in the fourth year, based on a full time appointment (1.0 fte, 38 hrs/week).

Organisation The PhD will work in the Experimental Zoology Group (EZO), which is part of the Department of Animal Sciences at Wageningen University ([www.wageningenur.nl/ezo](http://www.wageningenur.nl/ezo)). The main research line of this group focuses on the biomechanics of the locomotory system of vertebrates in air, water and on land, using an interdisciplinary approach combining life history evolution, animal mechanics, molecular techniques, histology and state-of-the art modeling to study structural changes in the animal body plan on evolutionary time scales.

Application process Interested students are invited to contact Dr. Bart. J.A. Pollux (E-mail: [bart.pollux@wur.nl](mailto:bart.pollux@wur.nl), [b.pollux@gmail.com](mailto:b.pollux@gmail.com); Webpage: [www.bartpollux.nl](http://www.bartpollux.nl)) or Prof. dr. ir. Johan L. van Leeuwen (E-mail: [Johan.vanLeeuwen@wur.nl](mailto:Johan.vanLeeuwen@wur.nl); Webpage: [www.wageningenur.nl/ezo](http://www.wageningenur.nl/ezo)) for further details.

Applicants can apply for this position until 17:00 pm on Friday 11th January 2013. Applicants are invited to submit a letter containing their motivation for applying for this position, a description of previous relevant research experience, a full curriculum vitae and the contact details of three references. Interviews will be held in the second half of January 2013. The preferred starting date is 1 March 2013.

“Pollux, Bart” <[bart.pollux@wur.nl](mailto:bart.pollux@wur.nl)>

Graduate position: population genetics of invasive insects. The Social Biology Group at Western University (Canada) has an opening for an MSc or PhD student with an interest in invasive biology of social insects.

The project will focus on the Eastern subterranean termite, which is introduced to urban environments across southern Ontario. The student will generate and analyze population genetic data to estimate the number and origin of invasion events, relate termite social biology to their invasive success, and predict future patterns of gene flow across spatial and temporal scales. Moreover, it is anticipated that some fieldwork and liaising with homeowners and pest controllers will be an important part of sample collecting. The suitable candidate will have (or develop) an interest in invasive biology, social evolution and genetics. Some background information is available in a forthcoming paper: Scaduto D, Garner S, Leach E, Thompson GJ 2012. Genetic evidence for multiple invasions of the Eastern subterranean termite into Canada. *Environmental Entomology*. DOI: <http://dx.doi.org/10.1603/EN12158> . For more context and information about our general research theme, please see our lab web site: <http://tinyurl.com/ce87eo>. The Western University has a large and vibrant Department of Biology (<http://www.uwo.ca/biology/>), and has strong links to the London Regional Genomics Centre (LRGC) and SHARCNET super-computing facilities, as well as the nearby University of Guelph. Candidates must meet the entry requirements for Graduate Studies at Western: <http://www.uwo.ca/biology/graduate/graduate.htm>. To inquire email [graham.thompson@uwo.ca](mailto:graham.thompson@uwo.ca) - Graham Thompson Department of Biology, Western University, London Ontario Canada. The anticipated start date is May 2013 but September 2013 is acceptable.

Graham Thompson Assistant Professor Department of Biology Western University 1151 Richmond Street North London, Ontario N6A 5B7 CANADA

519 661 2111 (ext 86570) 519 615 6066 (iPhone)  
[graham.thompson@uwo.ca](mailto:graham.thompson@uwo.ca) <http://www.uwo.ca/biology/Faculty/thompson>  
 Graham Thompson  
 <[graham.thompson@uwo.ca](mailto:graham.thompson@uwo.ca)>

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### AcadNaturalSciDrexelU OrnithologyCurator

From: John G. Lundberg Chaplin Chair and Curator of Ichthyology Ornithology Search Committee Chair Academy of Natural Sciences/Drexel University Philadelphia, PA 19103

Job: AcadNaturalSciDrexelU.Ornithology JOINT CURATORSHIP AND TENURE-LINE FACULTY AP-

POINTMENT at The Academy of Natural Sciences and Drexel University, Philadelphia, PA

The Academy of Natural Sciences, Philadelphia (<http://www.ansp.org/research/<file://localhost/owa/redir.aspx>>) and Drexel University (Department of Biodiversity, Earth and Environmental Sciences (BEES); <http://www.drexel.edu/bees<file://localhost/owa/redir.aspx>>) invite applications for a joint curatorship and tenure-line faculty appointment. The rank of this appointment is open.

The Academy's ornithology collection has nearly 200,000 specimens collected from around the world over

the last 250 years, including some of the most important collections from South America. In addition to research, curators are expected to promote and insure the conservation, preparation, care, use, and security of biological collections. The successful candidate will have a commitment to expanding and using the Academy's ornithology collection in research, education, and outreach. Drexel has committed substantial resources for growth of the BEES Department. The successful candidate will have a commitment to teaching undergraduate and graduate students in BEES.

Candidates must have a PhD, a record of scientific achievement in research on the diversity, evolutionary biology and ecology of birds, and a strong interest in undergraduate and graduate teaching. Research expertise might include the areas of systematics, phylogenetics, comparative organismal biology, biogeography, biodiversity informatics, conservation or evolutionary and ecological dynamics.

Applicants with research programs that complement and enrich existing interests at the Academy and in the BEES department and bring opportunities for cross institutional collaboration will be given high priority. The successful candidate will maintain a dynamic, field and museum-based, extramurally funded research program and will contribute to instruction in the newly established Department of Biodiversity, Earth and Environmental Sciences at Drexel University

Submit application materials by November 30, 2012. Anticipated start date for the position is September 1, 2013.

To apply: Register and create application file at DrexelJobs <http://www.drexeljobs.com/applicants/Central?quickFind=3D76366><file://localhost/owa/-redir.aspx> 1. Upload files (PDF format) to DrexelJobs - Curriculum vitae - Statement of research interests & goals, - Statement on teaching philosophy & experience, - Contact information for three references.

2. Forward no more than five (5) most significant publications (PDF format) to Kristen Kepics (kepics@ansp.org).

For additional information about the BEES Department's hiring process, please contact the BEES Ornithology Search Committee, Department of Biodiversity, Earth, & Environmental Sciences, Academy of Natural Sciences of Drexel University, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103 (kepics@ansp.org).

lundberg@ansp.org

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## Albert Einstein College Medicine Computational Biol

The Albert Einstein College of Medicine, one of the leading medical schools in New York City, is seeking to fill multiple tenure track faculty positions in the newly formed Department of Systems and Computational Biology. Established in April 2008, the main goal of the new department is to advance our understanding of living systems by developing theoretical, computational and experimental approaches to study complex biological systems.

The College has 750 medical students, 325 graduate students and 360 post-doctoral fellows in training and boasts a strong research faculty covering broad areas of experimental biology, offering outstanding opportunities for collaborative interactions. The 200,000 square foot Center for Genetic and Translational Medicine at Einstein, which opened in late 2007, locates computational, systems and experimental scientists in physical proximity to foster interdisciplinary communication and collaboration. Highly competitive start-up packages are available. We seek outstanding scientists with broad experience and demonstrated collaborative interactions with experimental or clinical investigators. Candidates should have strength in a physical, mathematical or computational field at the Ph.D. or equivalent level. Experience applying these skills to a biological or biomedical area (demonstrated through publications or support) is also required. Areas of interest include, but are not limited to: Modeling cellular processes, such as signaling, transcriptional regulation and immune response; Pathway analysis; Genetic networks; Functional proteomics and genomics; Evolution of structure and function; Computational neuroscience; Mathematical and computational modeling of complex traits and diseases; QM and dynamic approaches to enzymatic catalysis and drug design. No online applications will be accepted. Please follow application instructions below.

Applicants should send a letter of interest, C.V., statement of research and teaching interests, and names of three referees, in electronic format to:

Systems and Computational Biology Search Committee  
Albert Einstein College of Medicine  
Jack and Pearl Resnick Campus  
1300 Morris Park Ave. Price Center,  
Rm. 153 Bronx, New York 10461  
E-mail Address: sys-



bio@einstein.yu.edu

Subject line should be: SCB Faculty Search

Yeshiva University is an equal opportunity employer committed to workforce diversity.

mmcder2010@hotmail.com

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## BrownU Herbarium CollectionsManager

Brown University seeks a full-time, non-tenure track research faculty position as collections manager of the Brown University Herbarium (BRU). Brown has recently renovated a new facility for its historic collections, providing enormous potential for new growth and a revitalization of botanical research at Brown. The successful applicant will work with the Herbarium Director to develop a new research focus for the Herbarium, and will be a contributing faculty member of the Department of Ecology and Evolutionary Biology. The successful applicant will develop an externally funded research program that directly utilizes and enhances the collections. There is no formal teaching requirement, but opportunities for collections-based teaching and supervision of undergraduate research are available.

### Official Duties:

1. Manage day-to-day activities associated with the maintenance of the collections, associated archives and supporting documentation, and collection facilities.
2. Responsible for all aspects of collection management including processing of incoming material and existing collections, care and conservation, documentation, and security.
3. Supervise databasing, digitizing, and cataloging of all specimens and associated data.
4. Manage international, federal and state compliance issues related to collecting, import/export, repatriation and transportation of collections.
5. Assign duties and supervise the work of herbarium staff, students and volunteers.
6. Administer budget and funds for collection improvements; manage grants and contracts.
7. Represent the Herbarium and the University to a local, national, and international community to promote the institution and its collection, including management of specimen loans, responding to inquiries, hosting

visitors and maximizing utilization of the collections.

8. Advise Director regarding collections growth, accessions, destructive sampling and rights and reproduction requests.
9. Promote knowledge of the collection through exhibitions and public education initiatives; interact with the public, and develop outreach programs.
10. Keep records of collections usage and growth and prepare reports of collection activities.
11. Carry out original research in systematic botany that uses or enhances the Brown collections, publish in peer-reviewed journals, and write grant proposals for external funding in support of research activities.
12. Write grant proposals directly related to collection improvement and development, and participate in other fundraising activities.
13. Organize and participate in fieldwork and expeditions to collect specimens.

Education and Experience: Ph.D. in the Biological Sciences and at least one year of experience working with collections.

### Skills & Abilities:

1. Thorough knowledge of systematic botany.
2. Effective interpersonal skills and ability to work independently and to write grant proposals, reports, and peer-reviewed scientific articles.
3. Experience in bioinformatics and database creation and management.

Please send curriculum vitae, a concise statement describing research interests and relevant managerial and collections experience, and the names and contact information for three references to erika\_edwards@brown.edu. Review of applications will begin immediately and continue until the position is filled. Anticipated start date is July 1 2013. Brown is an affirmative action/equal opportunity employer. Women and minorities are encouraged to apply.

Erika J. Edwards Department of Ecology and Evolutionary Biology Brown University 80 Waterman St Box G-W Providence, RI 02912

office: 401.863.2081 lab: 401.863.6275 fax: 401.863.2166

email: erika\_edwards@brown.edu

lab website: [http://www.brown.edu/Research/-Edwards\\_Lab/index.php](http://www.brown.edu/Research/-Edwards_Lab/index.php) erika\_edwards@brown.edu

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## ClemsonU EvolutionaryBiol

(Note: this position is deliberately casting what seems to be a broad net because we seek hiring a colleague that finds a natural fit amongst the areas of research and scholarship within our department. We want the best scientific colleague that would be happy in our department and at Clemson University, not a specific area of research. Cheers, Amy Lawton-Rauh)

The Department of Genetics and Biochemistry at Clemson University invites applications for a tenure-track ASSISTANT PROFESSOR position to be filled by an innovative researcher whose academic and research interests complement our current program strengths.

Applicants must have a Ph.D. in biochemistry, molecular biology, genetics, or a related discipline with a minimum of two years of postdoctoral training. The successful candidate is expected to develop an extramurally funded research program, participate in graduate student training programs and contribute to teaching of undergraduate and graduate courses. A competitive salary commensurate with background and experience, and a benefits package are included. Attractive start-up funds and state-of-the-art laboratory space in either the Biosystems Research Complex or the new Life Science Building will be provided.

The Department offers B.S. and Ph.D. degrees in Genetics and in Biochemistry & Molecular Biology. Current research foci address fundamental questions in life processes in microbial, plant and mammalian systems using molecular, biochemical, computational and genomics approaches. The Department provides a first-rate environment for engaging students and colleagues in collaborative research and teaching efforts spanning genetics and biochemistry. For more information about the department, visit <http://www.clemson.edu/genbiochem>. To apply, please submit an electronic application (submitted as a single PDF) that includes a letter of application, curriculum vitae, names and contact information for three references, and separate statements of research and teaching interests to GB-SEARCHCOMMITTEE@clemson.edu. To ensure full consideration, please arrange to have all materials submitted by February 1, 2013. Clemson University is an AA/EEO employer and does not discriminate against any individual or group of individuals on the basis of

age, color, disability, gender, national origin, race, religion, sexual orientation, veteran status or genetic information.

Amy Lawton-Rauh, Ph.D. Associate Professor Department Genetics and Biochemistry 210 Biosystems Research Complex 105 Collings Street Clemson University Clemson, SC 29634-0318

Tel. 864-656-1507 (office) Fax. 864-656-6879 (department) Email. amyjr@clemson.edu Skype. amy.lawton.rauh

Lab website: [www.clemson.edu/lawtonrauhlab](http://www.clemson.edu/lawtonrauhlab) Department website: <http://www.clemson.edu/genbiochem/> AMYLR@clemson.edu

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## ColoradoMesaU VertebrateEvolution

### ANNOUNCEMENT OF POSITION VACANCY

\*Assistant Professor of Biology- Vertebrate Biology\*

RESPONSIBILITIES: The Biological Sciences Department at Colorado Mesa University invites applications for a tenure-track faculty position in Vertebrate Biology beginning August, 2013. Teacher-scholars with expertise in vertebrate biology employing ecological or evolutionary approaches to the study of aquatic, wildlife or related systems are encouraged to apply. The successful applicant will join a dynamic department, including field, tropical, cellular, molecular and organismal biologists focused on excellence in undergraduate teaching and mentorship of undergraduate researchers. Responsibilities include teaching 12 credits/semester, advising students, offering research opportunities, participating in service to the department and university and other related duties as assigned. Teaching responsibilities will include lower-division majors and non-majors courses, as well as the development of upper-division courses within the candidates specialty. Upper division teaching opportunities may include courses in aquatic biology, ichthyology, or wildlife biology as they relate to the candidate's interest.

EDUCATION & EXPERIENCE: A Ph.D. in biology or a related field is required. Preference will be given to candidates with undergraduate teaching and postdoctoral experience. Colorado Mesa University is particularly interested in candidates who have experience working with students from diverse backgrounds and who have a demonstrated commitment to improving

the levels of access and success for underrepresented students within higher education. \* \*

TYPE OF APPOINTMENT: Full-time, tenure-track appointment beginning August 2013.

SALARY: Commensurate with education and experience. Excellent health and retirement benefits package.

APPLICATION DEADLINE: Open until filled. To ensure consideration, complete applications must be received by Dec. 7, 2012.

#### APPLICATION:

Submit a cover letter describing your qualifications and experience as they relate to the specific responsibilities, requirements, and preferences of this position, CV, unofficial transcripts for all degrees completed (official transcripts will be required upon hire), statement of teaching philosophy, statement of teaching interests and experience (including a list of courses you are qualified to teach), statement of research interests, three letters of recommendation, and the following completed forms:

Applicant Authorization to permit Search Committee members to review candidate transcript < <http://www.coloradomesa.edu/hr/documents/Form-Transcriptauthorization.pdf> >

Applicant Authorization and Release to Conduct Reference and Background Check form < <http://www.coloradomesa.edu/hr/documents/-ApplicantAuthorization.ReleasetoConductReference.BackgroundCheck.pdf> >

Background Investigation Disclosure and Authorization form < <http://www.coloradomesa.edu/hr/documents/-BACKGROUNDINVESTIGATIONDISCLOSUREANDAUTHORIZATION-CMU.pdf> >

Voluntary Affirmative Action form < <http://www.coloradomesa.edu/hr/documents/-AffirmativeActionInformation.12.11.pdf> >

Mail to:

Vertebrate Biologist Search Committee

Human Resources, LHH 237

Colorado Mesa University

1100 North Avenue

Grand Junction, Colorado 81501-3122

Phone: 970 248-1820

Colorado Mesa University is a growing institution located in beautiful western Colorado between the high desert plateau and the western slope of the Rockies. The surrounding region provides a diversity of natural

habitats for ecological study and supports an avid outdoor recreation community with a wide range of interests. The comfortable size of Grand Junction and Colorado Mesa University's focus on delivering personalized educational experiences to students through quality teaching and research opportunities make our region attractive to many students and faculty.

\*Colorado Mesa University is committed to providing a safe and productive learning and living community. To achieve that goal, we conduct background investigations for all final applicants being considered for employment. Background investigations include reference checks, a criminal history record check, and when appropriate, a financial and/or motor vehicle history. Applicant must be able to verify U.S. employment eligibility. Colorado Mesa University is an Affirmative Action/Equal Opportunity Employer, committed to a culturally diverse faculty, staff and student body. Women and minorities are encouraged to apply.\*

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

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### Denver Botanic Gardens Herbarium Database Assist

\*Position Title:\* Herbarium Database Assistant

\*Position Type: \*One year, Full-time

\*Job Summary:\* Assist with all digitization activities in the herbarium especially those associated with Digitization TCN: Collaborative: The Macrofungi Collection Consortium. Key tasks include specimen data entry, editing records, geo-referencing and digital imaging of fungal and plant specimens.

\*Starting date for this position will be January 2013.\*

\*Qualifications: \*Associate's degree (A. A.) or equivalent from two-year college or technical school (BA preferred); or six months to one year related experience and/or training; or equivalent combination of education and experience in relational database systems (Access, MySQL, symbiota or other relational database). Experience related to museum collections preferred. Knowledge of digital photography, digital

photo editing software and GIS software a plus. Must be able to work independently, possess excellent interpersonal skills, strong organizational abilities and be detail-oriented. Proficiency with standard office equipment - Microsoft Word, Microsoft Outlook, and data entry required. Basic knowledge of scientific nomenclature and museum collections including handling specimens preferred.

Send resume and/or application to \*Human Resources, Denver Botanic Gardens, 1007 York St., Denver CO 80206\*, or \*e-mail your resume to hr@botanicgardens.org\*. We are a nonprofit, EOE.

becky.h.kao@gmail.com

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## DukeU Evolution teaching

Information about the full-time teaching/prep position in the Biology 202L “Genetics and Evolution,” Duke University

Funding has been requested for a full time (40 hours/week) teaching assistant and laboratory prep assistant in the introductory biology program for the Spring 2013 semester. The position has two main components, teaching and behind-the-scenes laboratory preparation.

**Teaching component:** The primary teaching responsibility of the position is to lead laboratory sections of up to 16 students in the Biology Department’s new genetics and evolution Gateway course, Biology202L. Each Biology 202L section meets weekly for 2.5 hours for a combined hands-on laboratory/problem-based learning session. Additional teaching responsibilities include (a) attending and taking notes at all course lectures including the weekly large discussion section and viewing the online lectures, (b) grading weekly student written assignments and occasional oral presentations, (c) helping with the preparation and grading of mid-semester hourly and final exams, and (d) assisting students during office hours and otherwise mentoring students as beginning biologists. TAs also attend weekly prep sessions during the semester on Monday mornings.

Teaching assistants should plan to arrive in Durham, NC, on or before January 7, 2013.

**Prep component:** The second set of duties associated with the position is to assist in the prep. work for the teaching labs in Biology 201L and 202L, as determined by the Lab Administrator. Responsibilities in-

clude setting up and putting away equipment and specimens for laboratory exercises, maintaining supplies in lab rooms between sections, cleaning glassware, assisting with field collection of live specimens, and helping to care for a diverse collection of invertebrate animals in salt-water aquaria. The lab prep workload is likely to require evening (until 10 PM) and/or early morning (8 AM) work.

**Salary:** The projected salary for the position is \$9000, pending funding. Employment begins on January 9, 2013 and ends May 10, 2013, with most of the spring break off, with payment made in 5 equal amounts on the 25th of each month starting in January and ending in May. Full-time teaching/prep employees are eligible for health plans made available by the University.

**Qualifications:** Applicants should have a strong, varied background in biology, especially genetics and evolution, with a superior science GPA. A very important attribute is a high level of energy and an enthusiasm for teaching genetics and evolution. Prior enrollment in courses in genetics and/ or evolution is highly desirable; experience tending *Drosophila* is a plus. Teaching assistants in Biology 202L are expected to be actively engaged with their students in all aspects of the course and to serve as role models and mentors. Because they are a vital part of the introductory biology teaching team both in the classroom and behind the scenes, full-time assistants must be willing to commit themselves fully to the responsibilities of the position described above and as determined by the faculty members in charge of the Gateway course.

**Interviews and Application Process:** Formal interviews are planned to begin as soon as possible after confirmation of funding. Hiring decisions will be made on a rolling basis thereafter, continuing as necessary.

Interested applicants should provide (a) a cover letter, (b) a transcript, and (c) a resume with the names of two references to Julie Noor. These may be emailed to jkfnor@duke.edu, delivered to Julie Noor’s mailbox in the Department of Biology (BioSci 137), or mailed to her at the Department of Biology, Box 90338, Duke University, Durham, NC 27708-0338. To be assured of consideration, applications should be submitted by November 18, 2012.

For more information contact Julie Noor by phone at 919-613-8224 or e-mail at jkfnor@duke.edu.

noor@duke.edu

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## EmoryU UndergradLabs

The Emory University Department of Biology seeks a Director of Undergraduate Laboratories. The successful candidate will comprehensively engage in the development and delivery of our Introductory teaching laboratories. S/he will participate in an ongoing effort to enhance the inquiry/research content, critical thinking and writing skills of our students. The Director also will manage the budget, training of teaching assistants/staff and lab safety compliance. The Director will eventually teach in the Introductory Biology sequence (Biol 141/142). The successful applicant will have a Ph.D. in biology or a related field, at least 3 years of post-doctoral experience, and be required to contribute to departmental, College, and University life through service on academic committees. The Department of Biology currently consists of a cohesive group of 23 tenure-track and 9 lecture track faculty; please see <http://www.emory.edu/BIOLOGY/>. Appointment will be at either Lecturer or Senior Lecturer (for experienced Laboratory Directors) with a track for promotion through to Professor of Pedagogy; please see: <http://college.emory.edu/home/administration-policy/lecturer.html> for details about this established faculty track at Emory. Please send a cover letter, curriculum vitae and a detailed teaching statement that outlines your experience and philosophy as a single .pdf file to Lab-Director-Search@emory.edu. Three confidential letters of recommendation should also be sent to the above email address. Evaluation of candidates will begin on January 3, 2013 and will proceed until the position is filled. The position will start in August, 2013. Emory is an affirmative action/equal opportunity employer and applications from women and minorities are particularly welcome.

– Dr. Christopher Beck Department of Biology Emory University 1510 Clifton Rd. Atlanta, GA 30322

Email: [christopher.beck@emory.edu](mailto:christopher.beck@emory.edu) Phone: 404-712-9012 FAX: 404-727-2880

[cbeck@emory.edu](mailto:cbeck@emory.edu)

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## Frankfurt 2 FungalGenomics Bioinformatics

Job Advertisement Junior Group Leader - Ref. #01-12022

The Senckenberg Society has an international reputation in all fields of Natural History research. It runs six research institutes and two museums in Germany and is also custodian of the UNESCO World Heritage Site at Messel.

>From 1st of January 2013 we are looking for a

Junior Research Group Leader in Genetics and Genomics of Fungi

in the framework of a government funded LOEWE excellence cluster in "Integrative Fungal Research (IPF)" in Frankfurt am Main

We are looking for an individual whose research will be adding significantly to the research aims of the LOEWE excellence cluster "Integrative Fungal Research". The cluster includes researchers in mycology from Goethe-University Frankfurt a.M., Justus-Liebig-University Gießen, Philipps-University Marburg, University Kassel and the Senckenberg Society. The aim of the LOEWE excellence cluster will be to synergistically tie together the basic research areas of biodiversity research, molecular genetics, and genomics with translational research in biochemistry and biotechnology. Thus, the research cluster offers an ideal environment for scientific development and profiling.

Salary and benefits are according to a public service position in Germany (TV-H E14). The position is limited to three years, with the possibility of extension for two years in case of positive evaluation. Senckenberg advocates gender equality. Women and other under-represented groups are therefore strongly encouraged to apply. The possibility of academic development (Habilitation, equivalent to assistant/associate professor) will be given.

Apart from the salary of the group leader, a competitive core funding for instrumentation, running costs and personnel will be provided.

Research expertise in the areas of comparative genomics and transcriptomics, annotation of metabolic pathways and regulatory networks, or systems biology of fungi or oomycetes are particularly welcome. Applicants should



have an international track record and have demonstrated their ability to develop innovative ideas in their field of research. Previous experience with independent research is a plus but not mandatory. A record in third party funding acquisition is an advantage; willingness to acquire funding through research proposals is required.

Applicants are encouraged to submit their applications including a cover letter, CV, statement of research achievements, future research proposal (only one page, each), certificates (PhD, MSc, BSc, or similar) and the names of three scientists who could provide references. Applications should be submitted in a single PDF file by E-Mail to [recruiting@senckenberg.de](mailto:recruiting@senckenberg.de). Closing date for application is November, 18th 2012

Enquiries about the LOEWE excellence cluster Integrative Fungal Research and regarding the position please contact directly Prof. Dr. Marco Thines ([thines@bio.uni-frankfurt.de](mailto:thines@bio.uni-frankfurt.de)).

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Goethe-University Frankfurt, Department of Biological Sciences (Institute of Ecology, Evolution and Diversity) invites applications for the full-time position of a

“Bioinformatician”

(TvH E13)

The position is available from 1st of January 2013 to 31st of December 2015.

We are seeking an individual whose research will be adding significantly to the LOEWE excellence cluster “Integrative Fungal Research”. The cluster has recently been funded, and includes researchers in mycology at four universities in Germany and the Senckenberg Society. The aim of the cluster is to synergistically tie together the basic research areas of biodiversity research, molecular genetics, and genomics with translational research in biochemistry and biotechnology. Thus, the research cluster offers an ideal environment for scientific development and profiling.

The successful applicant will be responsible for transcriptome and genome analyses of fungi and oomycetes, and the establishment of a project database and genome browsers. Apart from contributing bioinformatics service for the LOEWE excellence cluster, the successful applicant will be given the opportunity to develop an own research program in the area of computational genetics and genomics.

The applicant should hold a Ph.D. in biology or bioinformatics (or have significant post-graduate work experience at research institutions or at companies), and have a strong background in transcriptome and genome

analyses. He or she is expected to interact closely with other researchers of the excellence cluster. We expect a solid publication record, good written and oral communication skills in English. The willingness to write research proposals is beneficial. Experiences in acquiring extramural funding are a plus. Salary and benefits are according to TvH E13.

If interested, please contact Prof. Dr. Helge Bode ([h.bode@bio.uni-frankfurt.de](mailto:h.bode@bio.uni-frankfurt.de)) and Prof. Dr. Marco Thines ([marco.thines@senckenberg.de](mailto:marco.thines@senckenberg.de)) and submit your application including a

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

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## GettysburgC Pennsylvania ComparativePhysiology

Comparative Animal Physiology and Animal Behavior

Gettysburg College invites applications for two visiting assistant professor positions in the Biology Department to begin Fall 2013. Ph.D. in the Biological Sciences, commitment to teaching and academic advising in the liberal arts tradition, and research that can involve undergraduates are essential; post-doctoral experience preferred. The successful candidate will share teaching duties in our core biology sequence and teach an upper division course in area of specialization - one line for comparative animal physiology and one line for animal behavior. Submit curriculum vitae and statement of teaching and research goals electronically to: for Comparative Animal Physiology position <http://gettysburg.peopleadmin.com/postings/465> or for Animal Behavior position <http://gettysburg.peopleadmin.com/postings/470>. Have three letters of reference (of which at least one can speak to the candidate's teaching effectiveness) sent to: [dkcooper@gettysburg.edu](mailto:dkcooper@gettysburg.edu). Please have references note “Comparative Animal Physiology” or “Animal Behavior” in the subject line. For full consideration application and letters must be received by January 15th, 2013.

Véronique A. Delesalle

Professor of Biology Chair of the Biology Department  
Box 392 Gettysburg College Gettysburg, PA 17325

Tel: 717-337-6153 fax: 717-337-6157

Veronique Delesalle <delesall@gettysburg.edu>

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## GoetheU Frankfurt Fungal Taxonomy

### Research Group Leader Biodiversity of Fungi

Goethe-University Frankfurt, Department of Biological Sciences (Institute of Ecology, Evolution and Diversity) invites applications for the position of a Junior Research Group Leader “Biodiversity and Cultivation of Fungi” (TvH E14).

The position is initially available from 1st of January 2013 to 31st of December 2015, with the possibility of a two-year extension after positive evaluation. Apart from the salary of the group leader, a competitive core funding for instrumentation, running costs and personnel will be provided.

We are seeking an individual whose research will be adding significantly to the LOEWE excellence cluster Integrative Fungal Research $\pm$ . The cluster has recently been funded, and includes researchers in mycology at four universities in Germany and the Senckenberg Society. The aim of the cluster is to synergistically tie together the basic research areas of biodiversity research, molecular genetics, and genomics with translational research in biochemistry and biotechnology. Thus, the research cluster offers an ideal environment for scientific development and profiling.

The successful applicant will develop a strong research program in the area of fungal biodiversity, including the development of new techniques in fungal isolation and cultivation, as well as fruiting body induction. He or she is expected to use morphological, molecular phylogenetic and physiological approaches. Within the excellence cluster the applicant will be responsible for cultivating freshly collected specimens from various ecosystems, and establishing new cultivation techniques for fruiting body induction and secondary metabolite production. The applicant should hold a Ph.D. in biology, and have a strong background in mycology and organismal research. Experiences in cultivation, identification, and sequencing of cultivable fungi are beneficial. He or she is expected to interact closely with other researchers of the excellence cluster. We expect a solid publication record, good written and oral communication skills in English, the willingness to write research

proposals, and to learn basic German. Experiences in acquiring extramural funding are a plus. Salary and benefits are according to a public service position in Germany (TV-H E 14).

If interested, please contact Prof. Dr. Helge Bode (h.bode@bio.uni-frankfurt.de) and Prof. Dr. Marco Thines (marco.thines@senckenberg.de) and submit your application including a cover letter, CV, statement of research achievements, future research plans (no more than one page each), certificates (PhD, MSc, BSc, or similar), and the names of three scientists who could provide references. Applications should be submitted as a single PDF file. Closing date is the 20th of November 2012.

### Curator of Fungi, Frankfurt

Goethe-University Frankfurt, Department of Biological Sciences (Institute of Ecology, Evolution and Diversity) invites applications for the position of a Curator of Fungi (culture collection) (TvH E13, 75%). The position is initially available from 1st of January 2013 to 31st of December 2015. We are seeking an individual who will be responsible for the establishment, maintenance, and enlargement of a culture collection of fungi. The collection will be established within the framework of the LOEWE excellence cluster Integrative Fungal Research $\pm$ . The cluster has recently been funded, and includes researchers in mycology at four universities in Germany and the Senckenberg Society. The aim of the cluster is to synergistically tie together the basic research areas of biodiversity research, molecular genetics, and genomics with translational research in biochemistry and biotechnology.

The applicant must hold a M.Sc. in biology and have a strong background in mycology and organismal research. Experiences in cultivation of fungi from specimens collected in the field, cultivation and conservation of fungal strains from different systematic relationships on different substrates, as well as knowledge of species, and experience in fruiting body induction are beneficial. He or she is expected to interact closely with other researchers in the excellence cluster. We expect a moderate publication record, good written and oral communication skills in English and/or German, and the willingness to learn basic German. Salary and benefits are according to a public service position in Germany (TV-H E 13, 75%).

If interested, please contact Prof. Dr. Meike Piepenbring (piepenbring@bio.uni-frankfurt.de) and submit your application including a cover letter, CV, statement of research achievements, future research plans (no more than one page each), certificates (MSc, BSc, or similar), and the names of two scientists who could

provide references. Applications should be submitted as a single PDF file. Closing date is the 20th of November 2012.

Prof. Dr. Imke Schmitt

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### Hawaii Tech PopGeneticsBioinformatics

Technician position: Population genetics/phylogenomics/bioinformatics Aloha! The USDA-ARS Pacific Basin Agricultural Research Center (Geib Lab) and University of Hawaii Manoa (Rubinoff Lab) have funding for an entry level technician in the area of population genetics/phylogenomics/bioinformatics. 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 are largely computational, analysis of NGS data, focusing on population biology, genomics, etc. Background in population genetics and phylogenetics and knowledge of linux/unix, scripting, etc. is required. In addition, assisting with wetlab molecular biology is within the job scope. Our approaches include RAD-Seq, GBS (genotyping by sequencing), RNA-seq, and multi-gene sequencing. We have advanced computing resources and a very active research program. Salary is ~\$30,000-36,000/yr, hired through University of Hawaii Manoa, and the job will be stationed at the USDA-ARS Pacific Basin Agricultural Research Center in Hilo (Big Island of Hawaii). Funding is secured for 1 year, with a second year of funding currently pending. Minimum undergraduate degree in genetics, biology, or similar is required.

If interested, please contact Dr. Scott Geib at [scott.geib@ars.usda.gov](mailto:scott.geib@ars.usda.gov) and submit CV, Research Narrative, and contact for at least 3 references.

Scott Geib, PhD Research Entomologist Insect Genomics USDA Pacific Basin Agricultural Research Center Tropical Crop and Commodity Protection Research Unit 64 Nowelo Street Hilo HI, 96720

808-959-4335 (office) 808-959-5470 (fax)

[Scott.Geib@ARS.USDA.GOV](mailto:Scott.Geib@ARS.USDA.GOV)

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### Louisiana Field Assistants Seaside Sparrow

FIELD ASSISTANTS (4) Seeking four field assistants for studies of Seaside Sparrow, 15 March - 30 June, 2013. Duties may include assisting with capture/banding birds, taking blood samples, finding/monitoring nests, monitoring predators, and data management. Experience with mist-nets, nest-searching, resighting color-banded birds, taking blood samples, trapping small mammals, and managing field data desirable. Ability to trailer and pilot a small boat highly desirable for one of the positions. Motivation is a primary consideration: the work is hard and demanding. Field assistants will be expected to work both independently and cooperatively, be self-motivated and demonstrate a willingness to learn new skills, and be willing to do minor manipulative research with animals. A demonstrated ability to work in hot and often buggy environments is required. Stipend is equivalent to \$1280 - \$1800/month, depending on qualifications. Housing is provided. To apply, send a cover letter, CV, and a list of 3 references (with phone #s and/or email addresses) to: Dr. Christy Bergeon Burns at [cbergeon@indiana.edu](mailto:cbergeon@indiana.edu), or LSU AgCenter - Renewable Natural Resources Bldg. Rm 227, LSU, Baton Rouge, LA 70803. LSU AgCenter is an Equal Employment Opportunity employer.

[cbergeon@indiana.edu](mailto:cbergeon@indiana.edu)

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### MasseyU Bioinformatics Tech

Dear EvolDir,

We have a technician position in bioinformatics available at Massey University in New Zealand. This is available at the Auckland campus in the Institute of Natural Sciences (INS; <http://ins.massey.ac.nz>), a new Institute that is rapidly expanding and has a strong computational biology focus.

The position is an exciting new role that will provide bioinformatics expertise to the newly-

established New Zealand Genomics Ltd (NZGL; <http://www.nzgenomics.co.nz/>) through Massey University. The successful candidate will provide services in experimental design, and statistical and bioinformatics analyses, with an emphasis on next-generation DNA sequencing data. They will deploy and maintain analytic and data management pipelines as well as generating custom bioinformatic solutions. They will be a key member of the distributed NZGL bioinformatics team that also includes members from Auckland and Otago Universities, and will have a small component of their time dedicated to assisting research within INS.

The successful candidates will have a BSc (or equivalent) and a post-graduate qualification in molecular biology and/or computing, or equivalent experience. Applicants must have experience working in a UNIX environment and should be familiar with at least one of Perl, Java, Python, C or C++. Experience in the analysis of next-generation sequencing data is preferred. Good communication and writing skills are essential.

For more information about the position, please contact Dr. Austen Ganley (a.r.ganley@massey.ac.nz).

To apply for the position, please refer to the job on the Nature.jobs website ( <http://www.nature.com/naturejobs/science/jobs/285759-Bioinformatics-technician-position-in-New-Zealand> ), and follow the link within that (the link gets modified by the mailing list, hence the indirect route).

Closing date: 28 October 2012 (NZ time)

Many thanks,

Austen

Austen Ganley (PhD) Senior Lecturer, Room 14.05 Institute of Natural Sciences Massey University (Albany) Auckland NEW ZEALAND

Website: <http://rdnaome.org> <http://www.massey.ac.nz/~aganley/> Phone +64-9-414-0800 ext 41512 Fax +64-9-441-8142

Mailing address: Building 11, INS Massey University (Albany) Private Bag 102-904 North Shore Mail Centre Auckland NEW ZEALAND

A.R.Ganley@massey.ac.nz

### Internship in Computational Biology

We are looking for a motivated and autonomous intern to study gene expression in hybrid organisms. The student will work on natural hybrids of two or three different species of fungal endosymbionts of grasses. The purpose of this project is to build software allowing us to identify the genomic origin of expressed genes. To do that, the intern will have to analyze expression data (from RNA-seq) to find SNPs on the sequenced mRNAs allowing to identify from which of the parental genome the expressed gene come from. The data will have to be saved in a database using the standard BioSQL schema.

This job will allow the intern to become more familiar with new biological and bioinformatics tools like next generation sequencing, RNA-Seq data analysis and comparative genomics. This position requires a good understanding of genetic problems, a good command of at least one scripting language (Perl, Python...), a basic knowledge of MySQL or any relational database management system. Knowledge in biological programming libraries (BioPython, BioPerl, BioRuby...), Java, C++ or any compiled language is an asset but not required. Undergraduate or Master degree is required.

Payment of plane tickets and a generous tax-free stipend are guaranteed for up to six months.

The position will be based in the Computational Biology Research Group lead by Associate Professor Murray P. Cox (email [m.p.cox@massey.ac.nz](mailto:m.p.cox@massey.ac.nz)), at Massey University, New Zealand. The research team has a strong high-impact publication culture, and is firmly embedded in the international scientific community, with extensive collaborative links to the United States, France, Australia and Indonesia. Nevertheless, this position also offers a rare opportunity to experience New Zealand's unique natural and cultural environment. Palmerston North, a university town with a large international community, offers a full range of social and cultural amenities. The city is located close to mountains and the sea, and presents regular opportunities for hiking, skiing, surfing, and adventure sports.

Information about the Institute of Molecular Bio-Sciences (<http://imbs.massey.ac.nz/>) and the Computational Biology Research Group (<http://massey.genomicus.com/>) is available online. For more information about the position, you can contact Dr Pierre-Yves Dupont (email [p.y.dupont@massey.ac.nz](mailto:p.y.dupont@massey.ac.nz)).

To apply for this position, send the following documents (in PDF format) to Dr Pierre-Yves Dupont (email [p.y.dupont@massey.ac.nz](mailto:p.y.dupont@massey.ac.nz)):

1. A short cover letter.
2. A curriculum vitae, with transcript details.
3. The names and contact details of

two referees willing to provide a confidential letter of recommendation upon request.

Informal enquiries are welcome. Formal applications are due by Sunday 2nd December 2012.

Dr. Pierre-Yves Dupont Institute of Molecular Bio-Sciences Massey University Private Bag 11 222 Palmerston North 4442 NEW ZEALAND

<http://massey.genomicus.com/>  
p.y.dupont@massey.ac.nz

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## McMasterU 2 TeachingEvolPsych

The Department of Psychology, Neuroscience & Behaviour (PNB) and the Life Sciences Program at McMaster University invite applications for two Teaching-track Faculty positions at the Assistant Professor level, to begin on July 1, 2013. The primary duties of both teaching-track positions will be to teach and mentor undergraduate students in the PNB and the Life Sciences programs. Courses in PNB would be in such areas as experimental design, statistics, animal behaviour, fundamentals of neuroscience, clinical neuroscience, and sensation and perception. Courses in Life Sciences would be in the area of neural communication and information processing, neurobiological mechanisms of behaviour, behaviour processes, and behavioural and evolutionary ecology.

Candidates should have a Ph.D. in Psychology, Neuroscience, Biology, or other related Life Science discipline, as well as experience teaching undergraduate students. Please send a curriculum vitae, statement of teaching interests, supporting documents relevant to teaching credentials and 3 letters of reference to:

PNB/Life Science Search Committee Department of Psychology, Neuroscience & Behaviour McMaster University 1280 Main Street West Hamilton, Ontario Canada L8S 4K1

Materials may be sent as e-mail attachments in pdf format to pnb@mcmaster.ca. Deadline for receipt of the application is February 15, 2013.

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. McMaster University is strongly committed to employment equity within its community, and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candi-

dates, including women, members of visible minorities, Aboriginal persons, members of sexual minorities, and persons with disabilities.

Patrick Bennett <pjbennett@mac.com>

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## MissouriBotanicalGarden ConservationGenetics

Summary of the position:

A full-time assistant scientist in conservation genetics is available in the Center for Conservation and Sustainable Development of the Missouri Botanical Garden (MBG). The candidate is expected to take a leadership role in using molecular approaches to solve practical problems in conservation biology and restoration ecology. Candidates should have a solid understanding of botanical garden collections and interest in plant conservation. This individual will also implement projects to understand variation in genetic structure and diversity in wild plant populations and in botanical garden collections. The successful candidate will have the capacity to attract financial support for research activities by preparing proposals and obtaining grants from outside funding agencies. The incumbent will be expected to collaborate with staff in the Science & Conservation, Horticulture, and Education Divisions at MBG; students and faculty from local universities; and governmental and non-governmental organizations.

The position will be based in St. Louis, where a vibrant community of systematists, ecologists, and evolutionary biologists interact through partnerships among MBG, Washington University, the University of Missouri-St. Louis and Saint Louis University. Missouri Botanical Garden offers a comprehensive benefits package.

Qualifications and/or Experience: Candidates should have a strong background in one or more of the following fields: genetics, evolution, ecology, conservation biology, or a related discipline. A Ph.D. in one or more of these fields is required by the start date. In addition, candidates should have excellent writing and communications skills as well as an eagerness to produce and publish scientific results. \* Strong background including a minimum of (3) years prior experience or coursework in one or more of the following fields: genetics, evolution, botany, or ecology. \* Demonstrated ability including a minimum of (3) years experience using standard laboratory techniques to extract and sequence DNA. \* Prior experience writing scientific papers, grant



proposals and reports.

**Application Process:** To be considered, applicants should apply on-line and submit a brief statement of research interests, a CV, copies of relevant publications or manuscripts, and three letters of recommendation from people familiar with their research to [recruiting@mobot.org](mailto:recruiting@mobot.org) before December 31, 2012.

For more information please visit our website or contact the Recruiter Link to comprehensive posting and job application: <http://www.mobot.org/jobs/-mbgjobs.asp#K011> Missouri Botanical Garden Website: [www.mobot.org](http://www.mobot.org) Recruiter: Tracy Breckenridge E-mail: [recruiting@mobot.org](mailto:recruiting@mobot.org)

Equal Employment Opportunity/Affirmative Action Employer

Matthew Albrecht, Ph.D. Center for Conservation & Sustainable Development Missouri Botanical Garden P.O. Box 299 St. Louis, MO 63166-0299

p: 314.577.0262 f: 314.577.0847 w: <http://www.mobot.org/MOBOT/Research/curators/-albrecht.shtml> [Matthew.Albrecht@mobot.org](mailto:Matthew.Albrecht@mobot.org)

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## MonashU Genomics

The Monash University School of Biological Sciences is seeking to appoint dynamic individuals wishing to pursue academic careers in Ecology as a Senior Lecturer (Level C) or Lecturer (Level B), or in Ecological Genomics as a Lecturer (Level B), on a continuing basis. These positions represent an exciting opportunity to develop a world-class program of research alongside a group of leading researchers in ecology and genomics, and in support of the school's strategic aims to grow its leadership in the investigation of adaptation and change in emerging environments.

We particularly encourage applications for the Lecturer in Ecological Genomics in the field of the genomic basis of life history/physiological responses to environmental change. The applicants should have:

an outstanding track record of excellence in research a demonstrated ability to obtain external research funds developed and delivered teaching materials excellent written and verbal communication skills successfully supervised higher degree by research students (Level C only). To be successful you will:

be innovative in and develop/lead successful research

programs in ecology or ecological genomics be proactive in building funded research collaborations including with appropriate external partners excel in teaching activities at the undergraduate level and in post-graduate supervision. This role is a full-time position; however, flexible working arrangements may be negotiated.

<http://jobs.monash.edu.au/jobDetails.asp?sJobIDs=-505417&lWorkTypeID=&lLocationID=-&lCategoryID=641%2C+640%2C+636&lBrandID=-&stp=AW&sLanguage=en> Thursday 29 November 2012, 11:55pm Aus. Eastern Daylight Time

Elizabeth McGraw <[beth.mcgraw@monash.edu](mailto:beth.mcgraw@monash.edu)>

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## NHM LosAngeles GeoreferenceTech

The Natural History Museum of Los Angeles County is seeking an Assistant Collections Manager for our Ichthyology Division. We invite applications for a 1.5 year full time Georeferencing Technician who will assign latitudes and longitudes to natural history collections data from locality descriptions using geographic tools. The selected candidate will be responsible for georeferencing locations assigned from various geographic regions within the FishNet2 network (a collaborative effort to establish a global network of fish collections) using specially developed webbased collaborative georeferencing tools. Training will be provided in the use of these tools.

The successful applicant should ideally have a working knowledge of geographic information systems, georeferencing standards and protocols, and be able to work independently and with principal investigators toward project oriented goals while collaborating with similar personnel at other institutions that are part of the Fishnet2 network.

Required qualifications include:

Degree at bachelors level in biology, geography, museum studies, biodiversity informatics or closely related field. Fundamental computer skills including use of word processing and spreadsheet applications, relational databases, electronic mapping technologies and use of physical maps, and the Internet as related to the project goals. Ability to communicate in an effective and professional manner.

Salary is commensurate with experience plus excellent benefits. This is a full time, regular, non-exempt posi-

tion.

Review of applications begins immediately and continues until position is filled.

Please apply online at <http://www.nhm.org/site/-about-our-museums/working-at-nhm/jobs-nhm> under the listing "Assistant Collections Manager, Ichthyology"

Christine Thacker <thacker@nhm.org>

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### Netherlands Palaeontology Technician

research technician/analyst (palaeontology)

We seek to attract a research technician/analyst who will be responsible for developing the palaeontological laboratory facilities necessary for research on Palaeozoic vertebrates as well as processing computed tomography data in collaboration with the principal investigator. Responsibilities will include mechanical preparation and thin-sectioning, chemical preparation, fieldwork, and rendering computed tomography data.

**General requirements and skills** The applicant should have qualifications in a relevant field (i.e. palaeontology, biology, or geology) and must have prior experience with digital rendering techniques for computed tomography data, petrographic or palaeohistologic thin-sectioning, photographic and illustration skills, extensive field experience (especially multi-week work in remote areas and limited services/facilities), basic knowledge of the preparation and conservation of fossils, including chemical preparation techniques.

We offer A contract (36hours per week) for a period of one year, to be extended with maximum four years, after successful year evaluations months. A salary of circa 37.000 gross per year. Feel free to contact Dr. Martin Brazeau with questions about the position, martin.brazeau@naturalis.nl

**Procedure** Applicants are invited to submit their application including a CV (and lists of publications, if available), three letters of reference (at least one of which must be from a person who has worked with the applicant on expedition), and a portfolio of their work (including screen shots of rendered tomography data, thin sections, photographs of prepared specimens, and/or figures from publications presenting their work), along with a brief explanation of the portfolio con-

tents before 30 November, 2012 by email to Sollicitaties@naturalis.nl

Dr. Martin D. Brazeau NCB Research Fellow

"Brazeau, M.D." <Martin.Brazeau@naturalis.nl>

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### NewcastleU ConservationGenetics

A full time Lectureship in Vertebrate Ecology and Biodiversity is available with a closing date of 7 December 2012 with presentations and interviews scheduled for 10 January 2013. This could be in any area of ecology and conservation of vertebrates, e.g. molecular ecology or conservation genetics of vertebrates. Further information and the official advert: <https://www15.i-grasp.com/fe/tpl.newcastle02.asp?s=-eOxZwCHeRpGSxUuGpm&jobid=-46857,4102255259&key=54115741&c=-720287353412&pagestamp=sejjujvwnbsscolfg>

Potential applicants are invited to visit the School and are asked to contact the Head of School for an appointment:

Dr Heather J Finlayson Head of School School of Biology Ridley Building Newcastle University Newcastle upon Tyne NE1 7RU heather.finlayson@ncl.ac.uk Tel: (0191) 222 5359

Best wishes, Kirsten Wolff Reader in Evolutionary Genetics email: kirsten.wolff@ncl.ac.uk

Kirsten Wolff <kirsten.wolff@newcastle.ac.uk>

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### NorthlandCollege TeachingEvolutionBiol

<http://www.northland.edu/about-northland-employment-overview.htm?id=1127> Assistant Professor of Biology Date Posted: 10/22/2012 Salary: \$42,000-\$44,000 Status: Full Time Summary Position description: This is primarily a teaching position and the teaching load will be 6 courses per year, including two sections of a mid-level Genetics course, a molecular techniques course, and a general biology course taught in the liberal education program as part of an integrated block. There also exists the

opportunity to develop other courses in the applicant's area of expertise consistent with the mission and needs of the College. The successful applicant must demonstrate a commitment to the liberal arts that includes interdisciplinary teaching, service to the college and the larger community, and scholarly work that provides opportunities for student research.

Responsibilities Qualifications: A Ph.D., conferred by August 2013 in the area of genetics or related field is required.

How to Apply Applications Interested applicants should submit a letter of application which includes a statement of teaching philosophy, a curriculum vitae, and the names and contact information of at least three references. Review of applications will begin on December 1, 2012, with a late August start date. The position will remain open until filled.

Affirmative Action/Equal Opportunity Employer Northland College has adopted a strategic initiative to increase the diversity of its faculty and staff. The College provides equal opportunity for all qualified persons regardless of race, color, religion, sex, national origin, disability, sexual orientation, or veteran status. Northland College is an affirmative action employer. People of color, women, and others who would provide diverse perspectives to our College are encouraged to apply for this position. AA/EOE

Paula Spaeth Anich <panich@northland.edu>

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**OregonStateU**  
**VertebrateEvolutionaryEcol**

Dear EvolDir Colleagues,

My department at Oregon State University (Fisheries and Wildlife) seeks to hire a tenure track vertebrate ecologist at the assistant professor level. The specific field of ecology is open and evolutionary ecology would certainly qualify, particularly if coupled with a focus on landscape ecology, climate change, restoration or quantitative approaches. Please see the official announcement below.

Sincerely,

– Brian Sidlauskas

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VERTEBRATE ECOLOGIST

ASSISTANT PROFESSOR, TENURE TRACK

Join Us!

The Fisheries and Wildlife Department at Oregon State University is inviting applications from Vertebrate Ecologists for a tenure track Assistant Professor position in our Department. We are searching to hire an energetic, enthusiastic colleague to complement our existing strengths in teaching, research and service. We have nationally recognized programs in wildlife, fisheries and conservation biology. Our research spans all continents and ranges from African mammals to Antarctic penguins, South American freshwater fishes, Pacific salmon, and Caribbean marine species. Come and share the great diversity of Oregon's environment and natural resources, the Pacific Ocean, the deepest lake in North America, temperate rainforests, networks of freshwater rivers and streams, major urban communities, progressive agricultural areas, mountains and high deserts. We invite you to visit the application web site ([https://jobs.oregonstate.edu/applicants/-jsp/shared/Welcome\\_css.jsp](https://jobs.oregonstate.edu/applicants/-jsp/shared/Welcome_css.jsp); search for posting number 0009896) for details about the position and complete information on how to apply.

REQUIRED QUALIFICATIONS:

- Ph.D. or equivalent advanced degree in Fisheries and Wildlife, Conservation Biology, Ecology, Zoology, or related biological disciplines;
- Strong interest in undergraduate and graduate teaching both on campus and online;
- Experience conducting research related to vertebrate animals;
- Strong record of peer-reviewed and refereed publications, appropriate for the level of experience;
- Strong communication and organizational skills; and
- Commitment to promoting and enhancing diversity

PREFERRED QUALIFICATIONS: - Post-doctoral or post-graduate professional experience; - Demonstrated excellence or significant potential for excellence in teaching of undergraduate and graduate students; - Success in obtaining extramural funding through grants and contracts; - Experience with supervising and mentoring undergraduate and graduate students; - Demonstrated research in climate change biology, landscape ecology, quantitative ecology, or restoration ecology

For full consideration, applications must be received by 01/01/13

OSU is an Affirmative Action/Equal Opportunity Employer

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Brian Sidlauskas Assistant Professor Department of

Fisheries and Wildlife 104 Nash Hall Oregon State University Corvallis, OR 97331-3803

Voice: 541-737-1939 Fax: 541-737-3590  
 Email: brian.sidlauskas@oregonstate.edu Web:  
<http://people.oregonstate.edu/~sidlausb/>  
 brian.sidlauskas@oregonstate.edu

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## ReedC Oregon AnimalBehaviour

\*Assistant/Associate Professor of Biology (Visiting)\*

The Biology Department at Reed College invites applications for a visiting professor position (preferably at the rank of assistant professor) for the 2013-14 academic year, with the possibility of a second year. We seek applicants with a PhD (required), and post-doctoral experience (preferred) in animal behavior and/or genetics, preferably working with invertebrate or non-mammalian vertebrate organisms. Teaching responsibilities include an upper level lecture/lab course, a seminar course in the candidate's area of expertise, one lower level course, and advising senior thesis research projects. Supplies, equipment, and space are available to support collaborative research with students.

Reed College is a highly selective liberal arts institution with a distinguished record of educational accomplishment and a strong commitment to scholarship (<http://web.reed.edu>). The Reed community believes that cultural diversity is essential to the excellence of our academic program. All applicants are invited to address how their teaching, scholarship, mentoring, community service, or other activities could support Reed's commitment to diversity and inclusion (see <http://www.reed.edu/diversity/>).

For full consideration, application materials (cover letter, curriculum vitae, statement of research and teaching interests, one to two relevant reprints, and three letters of recommendation) should be sent as PDF(s) to [biology.search@reed.edu](mailto:biology.search@reed.edu) subject "visiting biology search" by January 10<sup>th</sup> 2013.

Specific inquiries should be directed to Susan Renn, Chair, Visiting Biologist Search Committee, [renns@reed.edu](mailto:renns@reed.edu)

Suzy Renn <[renns@reed.edu](mailto:renns@reed.edu)>

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## ReedC Oregon ComputationalBiologist

Dear colleagues,

Please find the job ad (below, or follow the link at the bottom to the ad in Science) for a tenure-track position in computational biology at Reed College. For those unfamiliar with Reed, it is a research-oriented small liberal arts college with a pretty amazing record of sending students on to pursue PhDs in the life sciences and for training students that continue on in computational fields.

Please share this announcement with anyone who might be interested— the position is in the math department, but I (and others in the biology department) will undoubtedly interact heavily with the person who is hired.

All best, Sarah

Sarah Schaack, PhD Reed College Assistant Professor  
 Department of Biology, B106 3203 Southeast Woodstock Boulevard Portland, OR 97202 office: 503-517-7948 lab: 503-517-7976

Email: [schaack\(at\)reed.edu](mailto:schaack(at)reed.edu) <[schaack@reed.edu](mailto:schaack@reed.edu)>  
 Website: <https://sites.google.com/site/schaackwork/>  
 The Mathematics Department at Reed College invites applications for a tenure-track faculty position in computer science with research focus in computational biology, to begin in the fall of 2013. We seek applicants committed to building the department's computer science program—teaching and expanding its core coursework—and to developing an undergraduate research program and coursework in computational biology.

Reed is a distinguished liberal arts college with 1400 students that offers a demanding academic program to bright and dedicated undergraduates. Faculty members teach five semester courses per year (usually two course preparations per semester) and supervise senior theses (required of all students). Information can be found at <http://academic.reed.edu/math/searches/-cscbsearch.html> . Applications must be submitted through the MathJobs.org website and should include a cover letter, curriculum vitae, teaching statement, research statement, and three letters of recommendation. The cover letter should address how the applicant's teaching and scholarship are suited to the liberal arts college environment. All applicants are in-

vited to address how their teaching, scholarship, mentoring, community service, or other activities could support Reed's commitment to diversity and inclusion (see <http://www.reed.edu/diversity/>). Applications will be accepted until the position is filled, but they should be received by January 10, 2013, to guarantee full consideration. The applicant should have a Ph.D. in computer science by the time of their appointment.

The Reed community believes that cultural diversity is essential to the excellence of our academic program. An equal opportunity employer, Reed College encourages applications from members of underrepresented groups.

Any questions may be directed to the search committee chair, Jim Fix, [jimfix@reed.edu](mailto:jimfix@reed.edu).

<http://scjobs.sciencemag.org/jobs/1593-94671/-Tenure-Track-Position-in-Computer-Science-Computational-Biology-Reed-College-Portland-OR-USA> [schaackmobile@gmail.com](mailto:schaackmobile@gmail.com)

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## RiceU TeachBehaviourEvolution

Rice University is seeking an instructor for the Spring 2013 semester to teach Animal Behavior (and the related Animal Behavior lab course). This is a temporary position. The lecture course uses evolutionary theory to evaluate behavioral adaptations of organisms to their environment. The lab course focuses on formulating and testing hypotheses on bird behavior using field experiments with birds on campus.

The instructor should have an advanced degree in a relevant field and demonstrated ability to teach a rigorous undergraduate course

These courses are popular with Ecology and Evolutionary Biology majors, Biochemistry and Cell Biology majors, and non-majors. General questions about the course or appointment should be sent to [siemann@rice.edu](mailto:siemann@rice.edu).

Rice University is located in Houston, TX, an exciting and affordable city with world-class opportunities for dining, arts, and entertainment and access to diverse terrestrial and aquatic environments. Rice University is consistently ranked as one of the top universities in the US with small classes and excellent students.

To apply, please send your cv, a teaching statement, and contact information for two references to: [zorbas@rice.edu](mailto:zorbas@rice.edu). Review of applications will begin

on November 19th.

Evan Siemann

Chair and Professor of Ecology and Evolutionary Biology Rice

University <http://eeb.rice.edu/>  
[rdh@rice.edu](mailto:rdh@rice.edu)

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## RowanU NewJersey EvoBiol teaching

### Position Announcement

Position: Instructor in Evolutionary Biology or Ecology - Full Time Tenure-Track Department: Biological Sciences Description: The Department of Biological Sciences invites applications to apply for a full-time, tenure-track Instructor position to begin Sept. 1, 2013. Courses taught will include majors-level introductory lab courses in organismal diversity and evolution or in ecology. In addition, the course load will include upper level lab courses within the candidate's areas of expertise, or a majors-level course in biological statistics. The teaching load for the position will be approximately five lab courses per academic year. The successful candidate will contribute appropriate service to the department or University.

Qualifications: Master's degree, or an equivalent degree in biology or a closely related field of science is required. A Ph.D. is preferred. Applicants should have expertise or previous teaching experience in organismal diversity, evolution or ecology. A background including biological statistics is preferred. Evidence of previous success and experience in college teaching is preferred. A strong commitment to excellence in undergraduate education is expected.

Starting Date: September 1, 2013 Salary: \$43,724-\$45,910 General Info: The department serves 700 biology majors with 12 full-time faculty members and 2.5 full-time laboratory technicians. We have 10 fully equipped, technology supported classrooms as well as research labs supporting the major fields of biology. Current objectives for the department include development of programs in bioinformatics and in environmental studies, contributing to the success of the School of Biomedical Sciences, and contributing to the success of the Cooper Medical School at Rowan University. For information on the Department of Biologi-



cal Sciences, please refer to the department's website at <http://www.rowan.edu/biology>. Rowan University values diversity and is committed to equal opportunity in employment.

All positions are contingent upon budget appropriations.

Contact: The deadline for the submission materials from the applicant is January 4, 2013.

Send by e-mail a cover letter, CV, names of two references, a statement of teaching philosophy, at least two previous student evaluations of teaching, and unofficial copies of graduate transcripts. Applicants should also arrange for delivery of at least two letters of reference attesting to the applicant's teaching abilities. Applicants should submit materials by e-mail to both [holbrook@rowan.edu](mailto:holbrook@rowan.edu) and [joslin@rowan.edu](mailto:joslin@rowan.edu). A single .pdf file containing all requested documents is preferred.

Postal mail (not preferred) may be sent to:

Faculty Search Committee - Evolutionary Biology / Ecologist Dept. of Biological Sciences Rowan University 201 Mullica Hill Road Glassboro, NJ 08028

Inquiries may be addressed to Dr. Luke Holbrook ([holbrook@rowan.edu](mailto:holbrook@rowan.edu)).

[Srinivasan@rowan.edu](mailto:Srinivasan@rowan.edu)

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## Royal Botanic Gardens Kew Evolutionary Mycology

The Mycology Section at the Royal Botanic Gardens, Kew invites applications for an appointment as a Senior Researcher in the team. The successful candidate will conduct research on fungal systematics of Ascomycota or Basidiomycota. Candidates with research experience in molecular phylogenetics, molecular ecology, genomics, and areas related to fungal conservation are particularly encouraged to apply. The successful candidate will be expected to develop a strong, extramurally funded research programme investigating fungal systematics, contribute to curation of the collections, disseminate research findings in high impact scientific journals and at conferences, and provide expert taxonomic advice when needed.

\*Key Qualifications and experience\*

-PhD in mycology or related discipline, and appropriate post-doctoral research experience

-Strong publication record on topics relevant to the position

-Excellent written & oral skills (communication and presentation of results of research, good publication record)

-Demonstrable ability to raise external funding to support research

Benefits include 30 days holiday per year, a choice of defined benefit or stakeholder pension, a flexible benefits scheme, as well as a great working environment.

We are committed to equality of opportunity and welcome applications from all sections of the community. We guarantee to interview all disabled applicants who meet the essential criteria for the post. If you wish to be considered as a disabled applicant please make this clear in your application.

CLOSING DATE: 7 December 2012, 12 noon

INTERVIEW DATE: 17 December 2012

Further details on the post and instructions on how to apply can be found at [http://www.kew.org/about-kew/jobs/ref\\_Nov12\\_SeniorResearchMycology.htm](http://www.kew.org/about-kew/jobs/ref_Nov12_SeniorResearchMycology.htm) Dr Bryn T M Dentinger Head of Mycology Jodrell Laboratory Royal Botanic Gardens, Kew Richmond Surrey TW9 3DS United Kingdom (020) 8332 5378 [b.dentinger@kew.org](mailto:b.dentinger@kew.org)

[B.Dentinger@kew.org](mailto:B.Dentinger@kew.org)

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## Ryerson University Conservation Biology

\*Tenure-Track Faculty Position in Biology\*

\*Department of Chemistry and Biology\*

\*Ryerson University\*

The Department of Chemistry and Biology invites applications for a tenure-track position in Ecology. The appointment will be at the Assistant Professor level, although an exceptional candidate may be appointed at a higher level. The successful applicant will have a Ph.D., post-doctoral experience, and an outstanding research record of work in ecology. Areas of particular interest include aquatic or terrestrial ecology, conservation biology/biodiversity, behavioral ecology, molecular ecology and invertebrate ecology. The new faculty member must have the ability to establish and maintain a strong, independent, externally-funded research program. The new faculty member is expected to demon-

strate excellence in teaching at the undergraduate and graduate levels, to contribute to the teaching of key courses such as Zoology, Ecology, Ecosystems Processes and upper-level Environmental biology electives and to the development of new courses and the evolution of program curricula. This position commences August 1, 2013, subject to final budgetary approval.

The Department of Chemistry and Biology is in a phase of dynamic growth, both at the undergraduate and graduate levels. In addition to a B.Sc. in Biology, Ryerson offers a M.Sc. and Ph.D. program in Molecular Science as well as a M.A.Sc. and Ph.D. program in Environmental Applied Science and Management. New faculty members will have the opportunity to supervise students in these graduate programs. The successful applicant will complement a department with current strengths in Environmental Biology and Microbiology and in Cell and Molecular Biology.

Interested candidates should prepare their application packages, including cover letter, \*curriculum vitae\*, statement of teaching interests and philosophy, research proposal, and up to three recent publications. Research proposals should conform to the guidelines for the “free-form” portion of form 101 for the NSERC Discovery Program see <http://www.nserc-crsng.gc.ca/OnlineServices-ServicesEnLigne/instructions/101/-e.asp?prog=dgunder> “Proposal” for details. Candidates should not include form 100 or Part I of form 101 with their submissions; selected candidates may be requested to submit a budget at a later date. Applications should be sent to Dr. Stephen Wylie, Chair, Department of Chemistry and Biology by e-mail (pdf attachments preferred) to [cabchair@ryerson.ca](mailto:cabchair@ryerson.ca). Applicants should arrange to have three letters of reference submitted directly to the Department Chair at the email address above or by post (Department of Chemistry and Biology, Ryerson University, 350 Victoria Street, Toronto, Ontario, Canada, M5B 2K3). For e-mail submissions, signed, scanned pdf letters sent from the referee’s official university or business email address are acceptable. Deadline for submission is \*December 7, 2012\* although applications will be accepted until the positions are filled, only those received by the deadline will be guaranteed full consideration.

Located in the heart of Toronto, the largest and most culturally diverse city in the country, Ryerson University is committed to diversity, equity and inclusion. The university is known for innovative programs built on the integration of theoretical and practically oriented learning. Our undergraduate and graduate programs are distinguished by a professionally focused curriculum and strong emphasis on excellence in teaching, research and creative activities. Ryerson is also a leader

in adult learning, with the largest university-based continuing education school in Canada.

These positions fall under the jurisdiction of the Ryerson Faculty Association (RFA). The RFA collective agreement can be viewed at: [http://www.ryerson.ca/-teaching/employment\\_resources/rfa.html](http://www.ryerson.ca/-teaching/employment_resources/rfa.html). The RFA’s website can be found at: <http://www.ryerson.ca/~rfa/>. A summary of RFA benefits can be found at: <http://www.ryerson.ca/hr/working/etoolkit/benefits/rfa/>. Ryerson University has an employment equity program and encourages applications from all qualified individuals including women, Aboriginal peoples, persons with disabilities, and members of visible minorities. Members of designated groups are encouraged to self-identify. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

[lesley.g.campbell@ryerson.ca](mailto:lesley.g.campbell@ryerson.ca)

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## SELouisianaU DeptHead

Southeastern Louisiana University

Position: Department Head for the Department of Biological Sciences

Southeastern Louisiana University in Hammond invites applications for the position of Department Head in the Department of Biological Sciences. To be considered for the position, applicants must have a Ph.D. in any area of Biology and must have credentials that warrant appointment at the rank of associate professor or professor.

Southeastern Louisiana University is primarily a teaching institution whose mission is successful education of undergraduate and graduate students and services to employers and communities in the region. Hammond is located 50 miles between the metropolitan centers of Baton Rouge and New Orleans. Southeastern has an undergraduate enrollment of approximately 15,000 and the Department of Biological Sciences has approximately 850 undergraduate majors in five concentrations: Ecology/Environmental/Evolutionary Biology; Microbiology/Molecular Biology; Integrative Biology, Plant Science, and Biology Education. The Department also has approximately 30 graduate students in our MS degree program. For information concerning the Department of Biological Sciences please visit our web page at: [www.selu.edu/biology](http://www.selu.edu/biology) The department

head is responsible for the planning, direction, and development of the department, and furthering the teaching mission. The successful candidate will oversee all activities in the department, including but not limited to the promotion of undergraduate and graduate education, oversight of course scheduling, support of student and faculty development/recruitment, evaluation of faculty in accordance with university and departmental guidelines, administration of the departmental budget, and fostering a research environment in support of the teaching mission. In addition, the successful candidate will engage in teaching undergraduate and graduate courses and will be encouraged to maintain a research program appropriate in a department with both an undergraduate and master's level degree program.

To be considered as an official applicant, the candidate must submit an online application, which will include a letter of application, a detailed vita, academic transcripts (official transcripts required upon employment), and the names, addresses and telephone numbers of three references who can be contacted by Southeastern Louisiana University. Applicants must apply online at: <http://jobs.selu.edu/applicants/-Central?quickFind=55293> Initial review of applicants will begin on January 4, 2013, and the selection process will continue until the position is filled. Southeastern is an Equal Opportunity/Affirmative Action Employer.

For more information, feel free to contact Rick E. Miller, [rickmiller@selu.edu](mailto:rickmiller@selu.edu)

[richard.miller@selu.edu](mailto:richard.miller@selu.edu)

\$74,872.00 to \$79,864.00 / Per Year

OPEN PERIOD:

Monday, October 22, 2012 to Monday, December 03, 2012

SERIES & GRADE:

GS-0410-12

POSITION INFORMATION:

Full-Time - Federal; TERM NTE 4 years

PROMOTION POTENTIAL: 12

DUTY LOCATIONS:

1 vacancy in the following location: Washington, DC, USView Map < <https://www.usajobs.gov/GetJob/ViewDetails/329176700> >

WHO MAY BE CONSIDERED:

This position is open to all U.S. Citizens or U.S. Nationals.

Karen Osborn [osbornk@si.edu](mailto:osbornk@si.edu) 202-633-3668 Research Zoologist/Curator Department of Invertebrate Zoology Smithsonian National Museum of Natural History, MRC-163 P.O. Box 37012 Washington, DC 20013-7012 USA

Courier address: Smithsonian Institution, MRC 0163, Natural History, West Loading Dock 10th and Constitution Ave., Washington, DC 20560

[OsbornK@si.edu](mailto:OsbornK@si.edu)

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## Smithsonian InvertEvolutionaryBiology

Please find below information about an open position at the Smithsonian National Museum of Natural History for an invertebrate biologist. Unfortunately we are only able to hire US citizens because it is a federal position. As a federal position, the search process is a bit different than the typical academic search so please contact me if you have questions.

Thank you for helping to spread the word, Karen

<https://www.usajobs.gov/GetJob/ViewDetails/-329176700> Job Title: Research Zoologist Agency: Smithsonian Institution Job Announcement Number:13A-JW-297914-DEU-NMNH SALARY RANGE:

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## SmithsonianInstitution Technician

Laboratory Technician Center for Conservation and Evolutionary Genetics, Smithsonian Conservation Biology Institute, National Zoo

We are recruiting at least one technician to conduct DNA analyses in the Center for Conservation and Evolutionary Genetics Laboratory. The position will involve basic DNA skills (DNA extraction, PCR and standard DNA sequencing), next-generation sequencing (454 and Illumina) library preparation, ancient DNA, and other molecular methods as required. The position is available initially for one year and will begin as soon as possible following the deadline, but no later than January 2013. Minimum qualification is a bachelor's degree in biology or similar field, or an equivalent combination of education or experience. Demonstrated

laboratory experience in one or more of the above areas are required.

To apply, email (1) a brief letter of application detailing your interests and experience in the methods listed above, (2) a current curriculum vitae or resume, and (3) names, addresses and phone numbers of at least three references to Robert Fleischer (fleischerr@si.edu). Deadline for applications is 9 November 2012. Please contact Dr. Fleischer if you have any questions concerning the position.

Center for Conservation and Evolutionary Genetics  
Smithsonian Conservation Biology Institute National  
Zoological Park PO BOX 37012 MRC 5503 Washing-  
ton, DC 20013-7012 USA

“Fleischer, Robert” <FleischerR@si.edu>

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## StonyBrookU BioinformaticsTech HumanEvo

Bioinformatics Position in Human Evolution Part-Time / Full-Time

A bioinformatics position is available in the Henn Lab at State University of New York, Stony Brook in the Dept. of Ecology and Evolution. We are a new research lab specializing in human population genetics and human evolution. Much of our research involves field collection of samples from Africa, next-generation sequencing of human genomes and modeling evolution in African populations. For example, how did the genetic architecture of height evolve as humans moved throughout Africa and eventually Eurasia? Please see [www.stanford.edu/~sylpha](http://www.stanford.edu/~sylpha) [my postdoctoral website] for additional information on research projects and recent publications. We seek a bioinformatics scientist to build pipelines for high-throughput sequence data analysis, interface with the cluster run by the Laufer Center for Quantitative Biology, maintain genomic databases, implement mathematical biological models and most importantly, be a resource for bioinformatics questions for other postdocs and graduate students. Opportunities to lead projects, participate in workshops and travel will be available; we have many collaborators both in the US and internationally.

Skills: Experience with scripting languages such as Python or PERL, experience with statistical analysis in R or MATLAB, experience with relational databases, UNIX environment, working knowledge of genetics a

plus, bachelor’s degree in bioinformatics, computer science, biology or similar field.

Applications for either a postdoctoral or bioinformatic research scientist roles are welcome. Part-time position will be considered. Start date January 2013 or later. E-mail a CV and any questions to [bmhenn@stanford.edu](mailto:bmhenn@stanford.edu)

– Brenna M. Henn, PhD Postdoctoral Scholar Bustamante Lab Dept. of Genetics, Stanford University

[bmhenn@stanford.edu](mailto:bmhenn@stanford.edu)

[quercus29@gmail.com](mailto:quercus29@gmail.com)

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## StonyBrookU ChairDeptEcolEvol

CHAIR - Department of Ecology and Evolution

The Department of Ecology and Evolution at Stony Brook University is seeking an individual with an outstanding academic background in any field of ecology or evolutionary biology to serve as the Department Chair. The successful candidate should have internationally recognized research credentials, a track record of extramurally funded research, demonstrated commitment to excellence in research and teaching, and proven leadership skills in an academic environment. Applicants should present a compelling vision to guiding the future trajectory of the Department, and capitalizing on the new initiatives put forward by the Department and University. The successful candidate will teach graduate and/or undergraduate courses according to their area of expertise.

The Department is a dynamic and growing department in a Tier I, AAU university offering competitive teaching loads and startups. Information about department faculty and our strong graduate training program is available at <http://life.bio.sunysb.edu/ee/>. Areas of strength in our program include population genetics, conservation ecology, molecular evolution and phylogenetics, evolutionary genomics, species interactions, invasion ecology, biogeography, mathematical ecology, and marine and freshwater ecology. The Department has recently benefited from new University initiatives that include faculty hiring in a new cross-departmental human evolution major, and active involvement in a number of campus-wide multi-disciplinary cluster hires. SUNY 2020 has reinvigorated Stony Brook University with increasing resources and a drive for academic excellence. The University is a member of the prestigious Association of American Universities and co-

manager of nearby Brookhaven National Laboratory, a multidisciplinary research laboratory supporting world class scientific programs utilizing state of-the-art facilities. Stony Brook University Medical Center is Suffolk County's only academic medical center and tertiary care provider. Collaborations are also possible with Cold Spring Harbor Laboratories. The campus is close to marine and terrestrial research sites, including 50,000 acres of legally protected pine barrens and woodlands. While in the New York metropolitan area, Stony Brook is located on the north shore of eastern Long Island, NY, with access to farmlands, vineyards, miles of beaches, and convenient access to the cultural resources of New York City.

Applicants must hold a PhD in Ecology, Evolution, Statistics or related field, and have demonstrated excellence in research and leadership. Applications are due January 15, 2013. Applicants should complete the Academic Jobs application process online at <https://academicjobsonline.org/ajo/jobs/2297>. The application process consists of: 1) a cover letter detailing administrative leadership experiences and philosophy, 2) a statement of research and teaching experience, 3) a resume, and 4) the names and contact details of three academic referees. Electronic submission via academicjobsonline is strongly preferred.

Alternatively, applicants may submit the application materials by mail to: Chair of Search Committee Chair, c/0 Donna DiGiovanni, Assistant to Chair, Department of Ecology and Evolution, Life Sciences Building, Room 650, Stony Brook University, Stony Brook, NY 11794-5245. For a full position description, application procedures, and to apply online, visit <https://academicjobsonline.org/ajo/jobs/2297>. Walter F. Eanes Professor and Chairman Dept. of Ecology and Evolution Stony Brook University Stony Brook, NY 11794 Phone:631-632-8593 <http://life.bio.sunysb.edu/ee/eaneslab/> [Walter Eanes <walter.eanes@stonybrook.edu>](mailto:walter.eanes@stonybrook.edu)

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## TempleU EvolutionaryBiol

As part of an ongoing expansion, the Department of Biology at Temple University anticipates hiring multiple faculty over the next several years. This year, we invite applications for positions at the Associate and Full Professor levels. We are especially interested in candidates with funded, innovative research programs in areas

that complement and extend departmental strengths in Molecular/Cellular/Developmental Biology, Integrative/Organismal Biology, Ecology/Evolution, and Neurobiology. Substantial laboratory space and additional resources provide opportunities for research program expansion. Candidates also are expected to contribute to undergraduate and graduate teaching. Applicants should submit a curriculum vitae, a research program summary, and a statement of teaching philosophy to: <http://bio.cst.temple.edu/search>. Review of applications will begin immediately, with priority given to applications received by December 15, 2012. For additional information please see <https://bio.cst.temple.edu/>. Temple University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community (AA, EOE, m/f/d/v).

Erik Cordes Assistant Professor Department of Biology Temple University BL315 1900 N 12th St Philadelphia PA 19122 office: 215-204-8876 fax: 215-204-6646 <http://astro.temple.edu/~ecordes/> Erik Cordes <[ecordes@temple.edu](mailto:ecordes@temple.edu)>

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## TexasTechU EvolutionaryGenetics

Texas Tech University

Faculty Position in Physiological Ecology or Evolutionary Genetics Department of Biological Sciences Lubbock, Texas USA

The Department of Biological Sciences at Texas Tech University seeks applicants for a tenure-track Assistant Professorship to begin in the 2013-2014 academic year. We seek an outstanding scientist working on either the relationship of structure to function (Physiological Ecology), the relationship of genes to structure and/or function (Ecological Genetics), or the integration of both fields within a broad ecological and evolutionary context. Candidates using experimental, comparative, and/or genome-wide approaches to major questions in any biological system are encouraged to apply. The successful candidate will be expected to supervise an independent research program that will attract extramural funding, to provide research training for graduate and undergraduate students, and to teach in their area of specialty at the undergraduate and graduate levels.

Texas Tech University is growing into one of the premier research institutions in Texas, using support from



Texas National Research University Fund, and is dedicated to the goal of building a culturally diverse faculty committed to teaching and working in a multicultural environment. The Department of Biological Sciences has historical strengths in organismal biology, ecology, evolution, behavior, and systematics. The successful candidate will enjoy working in a collaborative, integrative and supportive environment for scientific productivity and interaction.

Application materials should include curriculum vitae, three representative publications, statements of research and teaching interests, and the names and contact information for at least three references. A PhD in the Biological Sciences is required and post-doctoral experience is encouraged. To apply, please go to:

<http://jobs.texastech.edu/postings/49867> Application review will begin on December 10, 2012 and continue until the position is filled. Questions can be addressed to [william.resetarits@ttu.edu](mailto:william.resetarits@ttu.edu) For further information about the department and graduate programs, see <http://www.biol.ttu.edu/>. The entities of the Texas Tech University System are Equal Opportunity Employers and employ without regard to sex, race, color, national origin, religion, age, disability, genetic information, status as a disabled or Vietnam era veteran, or other protected classes.

matt olson associate professor dept bio sci tx tech u

[matt.olson@ttu.edu](mailto:matt.olson@ttu.edu)

“Olson, Matt” <[matt.olson@ttu.edu](mailto:matt.olson@ttu.edu)>

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## UAlabama 2 ComputationalBiol MicrobialBiol

### ASSISTANT PROFESSORS

Department of Biological Sciences

The University of Alabama is among the top academic research institutions in the southeastern United States, and the Department of Biological Sciences is committed to maintaining this tradition of excellence. We currently seek applicants for tenure-track faculty positions at the rank of Assistant Professor in (1) Computational Biology, and (2) Microbial Biology.

Computational Biology

All areas of computational biology and bioinformatics will be considered. Applications from candidates with

a demonstrated record of developing and/or applying computational approaches to study biological questions in areas including comparative genomics and transcriptomics, evolutionary genomics, phylogenomics, genetics/population genetics, cell and molecular biology, and systems biology and a demonstrated interest in collaborative research are especially encouraged to apply. Candidates must have a Ph.D. in the biological sciences or related field, and postdoctoral experience. The successful applicant will be expected to develop an active, externally funded research program and participate in the undergraduate core curriculum in addition to teaching upper-level undergraduate and graduate courses. Applicants may contact the chair of the computational biology search committee, Dr. Julie Olson at [jolson@bama.ua.edu](mailto:jolson@bama.ua.edu) or 205-348-2633, if additional information is required.

Microbial Biology

All areas of microbial biology will be considered. Applicants conducting research in the areas of microbial systems biology, stress response mechanisms, host-microbe interactions, and microbial genetics using genomics, proteomics, and/or transcriptomics approaches are particularly encouraged to apply. Candidates must have a Ph.D. degree in the Biological Sciences or related field of study, postdoctoral experience, and a strong publication record. The successful applicant will be expected to develop an active, externally funded research program, interact with and enhance existing research groups in the department, and have an interest in developing quality instruction at the undergraduate and graduate levels, with course responsibilities within areas of expertise and departmental needs, including courses in the Microbiology core curriculum, such as General Microbiology and Microbial Genetics. The ideal candidate will also demonstrate the potential to develop a collaborative, multidisciplinary research program. Applicants may contact the chair of the Microbial Biology Search Committee, Dr. Stevan Marcus, [atsmarcus@as.ua.edu](mailto:atsmarcus@as.ua.edu) or 205-348-8094, if additional information is required.

To apply, go to <https://facultyjobs.ua.edu>, complete the online application (Job #0807478) or (Job #0807485), and upload (1) an application letter with a list of at least four references (including contact information) under “Other Document 1”; (2) CV; (3) statement of research interests and goals; and (4) statement of teaching interests and philosophy. Consideration of applications will begin December 15, 2012, and continue until the positions are filled. Prior to the hiring, the final candidate(s) may be required to successfully pass a pre-employment background investigation.

Additional information on the Department of Biological Sciences and the available positions can be found on our website at <http://bsc.ua.edu>. The University of Alabama is an Equal Opportunity/Equal Access Employer and actively seeks diversity among its employees. Women and minorities are encouraged to apply.

touching lives THE UNIVERSITY OF ALABAMA

Jeffrey D. Lozier Assistant Professor Department of Biological Sciences Box 870344 University of Alabama, Tuscaloosa AL 35401

<http://bama.ua.edu/~jlozier> jlozier@as.ua.edu

jeffrey.lozier@ua.edu

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## UAlabama ComputationalBiologist

Faculty Position - Computational Biologist

The University of Alabama The Department of Biological Sciences at The University of Alabama invites applicants for a tenure-track faculty position at the rank of ASSISTANT PROFESSOR in COMPUTATIONAL BIOLOGY to begin August 2013. All areas of computational biology and bioinformatics will be considered. Applications from candidates with a demonstrated record of developing and/or applying computational approaches to study biological questions in areas including comparative genomics and transcriptomics, evolutionary genomics, phylogenomics, genetics, cell and molecular biology, and systems biology are especially encouraged to apply.

Candidates must have a Ph.D. in the biological sciences or related field, with demonstrable computational and/or mathematical expertise, and post-doctoral research experience. The successful applicant will be expected to participate in the undergraduate core curriculum in addition to teaching upper-level undergraduate and graduate courses in bioinformatics, computational biology, or other related specialties (<http://bsc.ua.edu/>). The candidate is expected to establish an active, independent, externally funded research program that includes graduate and undergraduate student mentoring. S/he will interact with a wide variety of biologists across the department's two core areas, Ecology, Evolution and Systematics, and Molecular and Cellular Biology. Interactions are also possible with other Science and Engineering Departments.

A complete application includes (1) an application let-

ter with a list of at least four references (including contact information); (2) CV; (3) statement of research interests and goals; and (4) statement of teaching interests and philosophy. 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 #0807485), and upload all requested documents. Potential candidates may contact the chairperson of the search committee, Dr. Julie Olson at [jolson@bama.ua.edu](mailto:jolson@bama.ua.edu) or 205-348-2633, if additional information is required. Consideration of applications will begin 15 December, 2012, 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.

Juan M. Lopez-Bautista, Associate Professor and 2012 PSA President The University of Alabama, Department of Biological Sciences 500 Hackberry Lane, Mary Harmon Bryant Hall #309 Tuscaloosa, AL 35487-0345 <http://www.as.ua.edu/phycolab> Ph Office (205) 348-1791; Labs (205) 348-4263/5844

jlopez@ua.edu

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## UCalifornia Irvine SystemsBiology

The University of California, Irvine is continuing its recruiting initiative in Systems Biology.

One position is available this year, for which candidates will be considered from all areas of Systems Biology, including modeling, mathematical and computational biology, biological networks, regulatory dynamics and control, spatial dynamics and morphogenesis, and synthetic biology. Applications are being solicited at the Assistant Professor level, and appointment can be made in any of several departments, including Developmental and Cell Biology, Molecular Biology and Biochemistry, Ecology and Evolutionary Biology, Biomedical Engineering, Mathematics, Physics and Astronomy, Computer Science, and Statistics. We highly value candidates with strong backgrounds in modeling and/or computation. Applications at the Associate and Full Professor level will also be considered, with appointment being subject to the availability of funds.

The successful applicant is expected to conduct a strong

research program and to contribute to the teaching of undergraduate and graduate students. Systems Biology research and training at UCI is fostered by several interdisciplinary research units, an NIGMS National Center for Systems Biology, and Ph.D. training programs in Bioinformatics, and Mathematical and Computational Biology (for more information, see <http://ccbs.uci.edu/>).

Applicants should submit a letter of application, curriculum vitae, bibliography, three letters of reference, and statements of research and teaching interests using the on-line recruitment system (see instructions at <http://ccbs.uci.edu/> or <https://recruit.ap.uci.edu/> < <https://recruit.ap.uci.edu/> >, under "Institutes and Centers"). To receive full consideration, material should be received by December 3, 2012.

The University of California, Irvine is an equal opportunity employer committed to excellence through diversity, and strongly encourages applications from all qualified applicants, including women and minorities. UCI is responsive to the needs of dual career couples, is dedicated to work-life balance through an array of family-friendly policies, and is the recipient of an NSF ADVANCE Award for gender equity./

Karen Martin Administrator, Center for Complex Biological Systems University of California, Irvine #949/824-3377

Karen Martin <kymartin@uci.edu>

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## UCalifornia LosAngeles StatGenetics 2

Faculty Position in Statistical Genetics/Genomics

The Departments of Human Genetics and the Department of Statistics at the University of California Los Angeles are now accepting applications for a state-funded, tenure-track, or tenured, faculty position split between the two departments. Starting academic rank and salary will be based on level of experience. The successful applicant will join a faculty of 8 computational geneticists in the Department of Human Genetics in the School of Medicine, led by Department Chair Kenneth Lange, and a faculty of 14 statisticians with applied research interests in the Department of Statistics in the College of Letters and Science, led by Department Chair Rick Paik Schoenberg. The successful applicant will have the opportunity to interact with a diverse faculty of laboratory and clinical researchers and

mathematical and computational biologists at UCLA. The appointee will be expected to carry out an active and independent research program and participate in undergraduate and graduate student education. Experience in mentoring women and underrepresented minorities in STEM fields is desired. Consideration will also be given to candidates whose experience in teaching, research or community service has prepared them to contribute to diversity and excellence. UCLA is an Affirmative Action/Equal Opportunity Employer. All qualified applicants are encouraged to apply, including minorities and women.

Please do not have letters of recommendation sent on your behalf. These letters will be solicited as part of the second phase of search.

For full consideration, applicants should send their CVs, a statement of research interests (maximum 3 pages), reprints of 3 significant publications, and the names of 3 professional references by December 1, 2012 to:

Janet Sinsheimer Ph.D. Search Committee Chair c/o Anne Carson EMAIL: [genstat@mednet.ucla.edu](mailto:genstat@mednet.ucla.edu) Mail: Department of Human Genetics The David Geffen School of Medicine at UCLA 695 Charles E. Young Drive South Los Angeles, CA 90095-7088

"Sinsheimer, Janet" <[JanetS@mednet.ucla.edu](mailto:JanetS@mednet.ucla.edu)>

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## UCalifornia Merced PopulationGenetics

The University of California, Merced, invites applicants for a faculty position in Population Genetics/Genomics at the Assistant Professor rank (tenure-track). We particularly invite applications from active researchers who work on non-model organisms with, or interested in developing, a field research component that complements and advances theoretical and/or applied aspects of conservation biology. Applicants must have a Ph.D. in the biological sciences or other relevant field, a strong publication record, and demonstrated potential to develop an independent, innovative, externally funded research program. Applicants must be able to teach effectively at both undergraduate and graduate levels, and teach and mentor students of a diverse student population. For more information and to apply, visit: <http://jobs.ucmerced.edu/n/academic/-position.jsf?positionId=3D4294>. The application dead-

line is January 18, 2013. AA/EOE

Michael N Dawson Associate Professor of Evolutionary Biology School of Natural Sciences, University of California, Merced 5200 North Lake Road, Merced, CA 95343, USA

Tel.: 209-228-4056 Fax.: 209-228-4060

email: mdawson@ucmerced.edu

dawson.mn@gmail.com

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### UCalifornia Riverside ArthropodSymbiont

Applications from those studying the evolution of arthropods and their symbionts are welcomed.

Department of Entomology invites applications for an Assistant Professor and Assistant Entomologist in the area of Arthropod Symbiont Interactions at the University of California, Riverside. Position available July 1, 2013, tenure-track position, 9-month appointment, 25% IR/75% OR. Appointment level and salary commensurate with experience. Ph.D. in Entomology, Biology, Microbiology, Ecology or a related discipline is required; post-doctoral experience is preferred.

The focus of this position will be on studying interactions between symbionts and their arthropod hosts. Emphasis will be placed on the use of modern techniques to elucidate how these interactions shape the biology, ecology, evolution, and behavior of arthropods and their symbionts. Applied and basic research consistent with the mission of the Agricultural Experiment Station directed toward managing arthropod pests and/or vectors of diseases is expected. Teaching responsibilities include supervision of graduate students, participation in undergraduate instruction (e.g. entomology, microbiology, ecology, or evolution), as well as a graduate course taught in an area of interest. Interactions with the other research groups in interdepartmental programs are encouraged.

Send a curriculum vitae, statements of research interests, teaching interests and philosophy, up to three select reprints of publications, manuscripts in press, and arrange for four confidential letters of recommendation to be sent to: Dr. Richard Stouthamer, Arthropod Symbiont Interactions Search Committee Chair, Department of Entomology, University of California, Riverside, CA 92521; E-mail:

richard.stouthamer@ucr.edu; phone: 951-827-2422; fax: 951-827-3086. Review of applications will begin March 15, 2013, but this position will remain open until filled. Information about the Entomology Department and an expanded description can be found on the website: <http://www.entomology.ucr.edu>. The University of California is an Affirmative Action / Equal Opportunity Employer committed to excellence through diversity, and strongly encourages applications from all qualified applicants, including women and minorities. [http://affirmativeaction.ucr.edu/forms/-eeo\\_survey.html](http://affirmativeaction.ucr.edu/forms/-eeo_survey.html) Bradley J. White, Ph.D. Assistant Professor Center for Disease Vector Research Department of Entomology University of California Riverside, CA 92521

bradley.white@ucr.edu

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### UCalifornia Riverside EvolutionaryEcol

Job Advertisement

Faculty Position- Assistant Professor EvolutionaryEcol University of California, Riverside

The Department of Biology invites applications for a 9-month tenure-track faculty position in the area of Community Ecology, starting July 1, 2013. We are searching for an empirical ecologist who studies relationships between interacting species and their environment. Examples of research focus could include (but are not limited to) community assembly, consumer-resource dynamics, evolutionary ecology, including ecological genetics and genomics, interactions between ecology and evolution, and responses of communities to stressors such as climate change and invasive species. The ideal candidate will have a strong field component to their research and expertise in advanced statistical techniques. The successful candidate will join a vibrant community of researchers in the Department of Biology, The Ecology, Evolution and Organismal Biology Graduate Program, the Center for Conservation Biology, the Center for Invasive Species Research, the Institute for Integrative Genome Biology, and have access to modern campus facilities in genomics, proteomics, microscopy, stable isotope analysis, geographic information systems, ecological sensing technologies and field stations and facilities. Consult [www.biology.ucr.edu](http://www.biology.ucr.edu) for details about the department. Applicants will be expected to pursue vigorously extramurally-funded research and contribute

to undergraduate and graduate teaching. A Ph.D. and demonstrated excellence in research are required.

Applications, including a curriculum vitae, separate statements of research and teaching interests, and up to three selected reprints must be submitted through: <https://academicjobsonline.org/ajo/jobs/2304>. In addition, applicants should request that three letters of recommendation be submitted through this site.

Evaluation of applications will begin January 3, 2013, but the position will remain open until filled.

The University of California is an Affirmative Action/Equal Opportunity Employer.

Kristine Specht <kristine.specht@ucr.edu>

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## UCentArkansas PopGenetics

### UCENTARKANSAS.POPULATION GENETICIST

Population Geneticist: The Department of Biology << <http://www.uca.edu/biology/> >> at the University of Central Arkansas invites applications for a tenure-track faculty position in the area of population genetics. The appointment will be at the Assistant Professor level and will begin on August 15, 2013. A field-based emphasis involving evolution and/or conservation of non-model organisms is expected. Applicants must value teaching and be dedicated to developing an active research program involving undergraduate and Master's level students. Primary teaching responsibilities will be in sophomore-level Genetics for majors and our freshman curriculum with opportunities to develop upper-division and graduate courses that augment current programs. For more information view the full job ad at << <http://uca.edu/hr/employment/asstprofbiology101212ds.php/> >>. Application deadline extended to 01 December 2012.

Thanks, Rick

Dr. Richard D. Noyes Department of Biology 180 Lewis Science Center University of Central Arkansas Conway, Arkansas 72035

rnoyes@uca.edu 501-450-5926

Rick Noyes <RNoyes@uca.edu>

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## UCollege Dublin ResAssist MolEvolutionAgeing

Research Assistant: Molecular Evolution of Exceptional Ageing, University College Dublin

Ageing is the gradual and irreversible breakdown of living systems associated with the advancement of time, which leads to an increase in vulnerability and eventual mortality. It is considered as one of the most familiar but least well-understood processes in biology, with hundreds of theories developed about 'why' and 'how' we age. Despite recent advances in ageing research, the intrinsic complexity of the ageing process has prevented a full understanding of this process, therefore, ageing remains a grand challenge in contemporary biology. The new European Research Council funded research team that Dr. Teeling is gathering will tackle this challenge by uncovering the molecular mechanisms of halted ageing in a unique model system, the bats. We will couple state of the art-field biology with cutting-edge next generation comparative genomic and transcriptomic studies to address this challenge.

A Research Assistant (RA) position is available for up to five years is available in the Teeling Laboratory.

Duties:

The RA will aid in the generation of all molecular data for the duration of the ERC project. The RA will ensure the smooth running of the laboratory, purchasing of consumables, shipping of samples and will help maintain the DNA and RNA collections. The RA will aid the PhD students and postdoc in the generation of molecular data. The RA will be actively involved in the teaching and supervision of undergraduates and MSc students and will also help train the PhD students in laboratory skills. The RA will assist the PI in necessary day-to-day running of the project when required.

Mandatory Experience:

- Honours BSc in Biology or equivalent
- Experience in the generation of molecular data in the laboratory- e.g. PCR, DNA extraction, RNA extraction, mtDNA isolation, RNA generation and analyses, DNA preservation, sequencing.
- Experience in working in a large molecular laboratory
- Understanding of data base development and maintenance



nance for DNA/ RNA collections

- Experience in analysing molecular data

- Experience in team work

Desirable Experience:

§Laboratory management experience

§Next Generation Technology Skills and Experience

§MSc in Molecular Biology techniques

§Skills in analysing molecular data

A full description of the job specification, eligibility and application process are detailed on the University College Dublin Vacancies website: REF 005525

<http://www.ucd.ie/hr/jobvacancies/> All applications must be through the UCD website listed above.

Closing date: 18th Dec 2012

For informal enquires please contact:  
emma.teeling@ucd.ie

Prof. Emma Teeling, University College Dublin, Ireland

<http://batlab.ucd.ie/> Emma Teeling  
<Emma.Teeling@ucd.ie> Emma Teeling  
<Emma.Teeling@ucd.ie>

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## UCollege London EukaryoticEvolutionDiversity

Senior Lecturer/Reader in Eukaryotic Evolution and Diversity : London, United Kingdom UCL Division of Biosciences Research Department of Genetics, Evolution and Environment

Senior Lecturer/Reader in Eukaryotic Evolution and Diversity

The appointment will be full time on UCL Grade 9. The salary range will be Â£51,052 - Â£55,512 per annum, inclusive of London Allowance.

The UCL Research Department of Genetics, Evolution and Environment is seeking to recruit an outstanding individual developing world-class research in an area of Eukaryotic Evolution and Diversity. The post holder will establish, develop and continue independent and collaborative research programmes examining significant aspects of one or more areas of: eukaryotic origins; the early evolution of eukaryotic traits; the phy-

logeny and diversity of eukaryotes. Applications from candidates with a research programme including but not restricted to comparative genomics, phylogenetics and following computational, theoretical or experimental approaches are welcomed. The successful candidate will also be expected to make an appropriate contribution to the department's portfolios of graduate and undergraduate teaching.

The successful candidate should have a PhD in a relevant field of biology, and have a demonstrated capability to initiate and conduct leading-edge research, demonstrated capability for teaching and the determination to make a positive impact as part of a team.

For further details about the vacancy and how to apply online please go to <http://www.ucl.ac.uk/hr/jobs/> and search on Reference Number 1292218.

Informal enquiries can be made to Professor Max Telford (m.telford@ucl.ac.uk), Dr Nick Lane (nick.lane@ucl.ac.uk). Please include an account of your current research activities along with a plan of future research intentions with your application. If you have any queries regarding the application process, please contact Jeremy Guyer, email:jeremy.guyer@ucl.ac.uk , tel: 020 7679 3456.

Closing Date: 5th December 2012

Interview Date: 8 January 2013

We particularly welcome female applicants and those from an ethnic minority, as they are under-represented within UCL at this level.

Max Telford Professor of Zoology Department of Genetics, Evolution and Environment, University College London, Darwin Building, Gower Street, London WC1E 6BT, UK. Tel: +44 (0)20 7679 2554 (Internal: 32554) Fax: +44 (0)20 7679 7096 <http://www.ucl.ac.uk/biology/academic-staff/-telford/telford.html> a new open access journal EvoDevo: <http://www.evodevojournal.com/> Telford & Littlewood: Animal Evolution. OUP < <http://ukcatalogue.oup.com/product/9780199570300.do> >

Software to align Nucleotide sequence according to Amino Acid translation TranslatorX < <http://www.translatorx.co.uk> >

Files and software for downloading: < <http://web.mac.com/maxtelford/iWeb/Work/-Downloads.html> >

Mrimpatient: If you cant wait to see latest result of MrBayes analysis. Xstem and Ystem: Software for 2y structure data in rRNA phylogenetic analyses. MtZoa and MtHydro : new amino acid substitution matrices

Hacked version of MrBayes using these matrices

Xenoturbella You Tube video < <http://uk.youtube.com/watch?v=yJXNcoxL2Xs> >

The Linnean Society of London < <http://www.linnean.org/> >

“Telford, Max” <m.telford@ucl.ac.uk>

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## UColorado Denver EvolutionaryMicrobiol

Microbiology Faculty Position University of Colorado Denver

The Department of Integrative Biology on the University of Colorado Denver downtown campus seeks to fill a new Assistant Professor tenure-track faculty position in microbiology (Job #819517 at [www.jobsatcu.com](http://www.jobsatcu.com) <<http://www.jobsatcu.com> >). The successful candidate will establish a nationally recognized, externally funded research program related to the field of microbiology. Teaching responsibilities include undergraduate and graduate level courses in microbiology or areas related to the candidates expertise. Minimum requirements are a Ph.D. in the biological sciences or related field, a strong record of peer-reviewed publications in microbiology, and research experience in the broadly defined areas of microbial ecology and molecular epidemiology, with particular interest in molecular approaches to studying host-microbiome interactions, environment-microbiome interactions, infectious disease ecology, and ecology and evolution of microbial communities. Preferred qualifications include Postdoctoral research, experience applying to national funding agencies, and a record of mentoring students and teaching experience. Review of applications will begin December 21, 2012, and will continue until the position is filled. CU Denver is dedicated to ensuring a safe and secure environment for our faculty, staff, students and visitors. To achieve this goal, we conduct background investigations for all prospective employees. The University of Colorado is committed to diversity and equality in education and employment.

“Swallow, John” <JOHN.SWALLOW@ucdenver.edu>

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## UConnecticut EvolutionaryResponseChange

Job Posting Title: Assistant Professor - Ecological or Evolutionary Responses to Global Change

Job Summary: Life on Earth is being subjected simultaneously to three of the largest unplanned, uncontrolled experiments in human history: rapid global climate change, massive habitat transformation, and a homogenization of the planet's biota through the spread of invasive species. We seek a researcher who integrates ecology and evolution to understand responses of biodiversity to global change at organismal, population, community, ecosystem or biogeographical scales. Applicants are expected to have a strong statistical or theoretical background. He or she will be expected to: 1) supervise an independent research program that will attract extramural funding; 2) teach at the undergraduate and graduate levels, including courses such as biostatistics, ecology or evolution, and a course in the applicant's specialty; 3) provide research training for graduate and undergraduate students; 4) offer professional service to the Department and University; and 5) perform public outreach. This position builds on existing Departmental strengths in ecology, evolutionary biology, conservation biology, systematics, and organismal biology. More information about the Department of Ecology and Evolutionary Biology can be found at <http://hydrodictyon.eeb.uconn.edu/eebwww/>. Minimum and Preferred Qualifications: The successful applicant will have completed requirements for a Ph.D. in Ecology and Evolutionary Biology or a related field and have a minimum of two publications in the area of ecological or evolutionary responses to global change. Preference will be given to a researcher who integrates across evolution and ecology, has acquired extramural fellowships or grants, and has the potential to establish a nationally recognized research and teaching program on ecological or evolutionary responses to global change. Evaluations of such potential will be made by assessment of: 1) graduate and postdoctoral experience; 2) research accomplishments, productivity and extramural funding; 3) statement of teaching and research objectives; 4) professional references; and 5) expertise in ecological and evolutionary responses to global change.

Appointment Terms: This is a 9-month, tenure-track

Assistant Professor position to begin August 23rd, 2013.

To Apply: Applicants should submit a curriculum vitae, a summary of research accomplishments and future research objectives, a description of teaching experience and philosophy, and the names and contact information of three professional references through Husky Hire (<http://jobs.uconn.edu>). Applicants should arrange to have three letters of recommendation sent via e-mail to Kathleen Tebo at [kathleen.tebo@uconn.edu](mailto:kathleen.tebo@uconn.edu). Review of applications will begin on 12/15/2012. Questions regarding this position may be addressed to [kathleen.tebo@uconn.edu](mailto:kathleen.tebo@uconn.edu). The University of Connecticut is an EEO/AA employer and encourages applications from under-represented groups, including minorities, women, and people with disabilities.

Carl Schlichting Professor Ecology & Evolutionary Biology University of Connecticut

[schlicht@uconn.edu](mailto:schlicht@uconn.edu)

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## UConnecticut Storrs Eukaryotic Genomics

Faculty Position - Eukaryotic Genetics and Genomics  
University of Connecticut - Storrs

The Department of Molecular and Cell Biology at the University of Connecticut seeks to fill two 9-month faculty positions: one at the tenure-track Assistant Professor level, and one at open rank, in EUKARYOTIC GENETICS AND GENOMICS, starting August 23, 2013 (Search #2013194). We are interested in candidates who study aspects of eukaryotic genetics, genomics and/or genome biology. Areas of interest include but are not limited to: computational genomics, genetic regulatory networks, mitosis or meiosis, transcriptional control, epigenetics and chromatin structure, genome stability, genome evolution, or the genetics of complex traits. The Department has strengths in genomics, chromosome biology, computational biology, genome evolution and developmental genetics. Information on these and other research strengths in the Department and at the University of Connecticut can be found at <http://mcb.uconn.edu> and <http://genetics.uconn.edu>. The successful candidate for the Assistant Professor position will be expected to develop a strong extramurally funded research program, teach at the undergraduate and graduate levels, and employ state-of-the-art

or emerging techniques to address important biological questions. To be considered at an advanced level, candidates must also have an internationally recognized and well-funded research program.

Minimum qualifications: Ph.D. in Genetics, or a closely related field, postdoctoral experience, a strong record of research accomplishments, and excellent written and oral communication skills.

Preferred qualifications: We encourage applicants who use innovative approaches that complement the existing strengths of the department. Successful candidates will be encouraged to form collaborations with a growing number of researchers that are engaged in genetic and genomic research at the University of Connecticut, and at the nearby Jackson Laboratory for Genomic Medicine (<http://genetichealth.jax.org>). Preferred qualifications include the ability to contribute to the diversity and excellence of the learning experience and academic community through research, teaching, and/or service.

To Apply: Applications should be submitted as a SINGLE PDF document via Husky Hire (<http://www.jobs.uconn.edu>) containing a CV, cover letter and concise statements of research and teaching interests. The applicant must arrange to have three letters of reference sent via e-mail to [MCB.Genomics.Search@uconn.edu](mailto:MCB.Genomics.Search@uconn.edu) as a PDF document on letterhead with signature. To ensure full consideration, applications should be received by December 15, 2012. The University of Connecticut is an EEO/AA employer.

[rachel.oneill@uconn.edu](mailto:rachel.oneill@uconn.edu)

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## UFlorida Plant Systematics

Faculty Position in Plant Systematics, Assistant, Associate, or Full Professor, Department of Biology, University of Florida

The Department of Biology, University of Florida, invites applications for a nine month tenure-track faculty position in Plant Systematics at the level of Assistant, Associate, or Full Professor, effective fall semester, 2013. The Department offers a collegial environment and enjoys strong ties with the Florida Museum of Natural History, UF Genetics Institute, UF Emerging Pathogens Institute and multiple University centers in biomedical, veterinary, environmental and agricultural

sciences. For more information on the department go to <http://www.biology.ufl.edu>. We will consider outstanding candidates from all areas of plant systematics, with an emphasis on researchers interested in diversity and natural history; we especially encourage applications from those working in areas that complement existing strengths in molecular systematics and phylogenetic analysis. Instruction at both undergraduate and graduate levels is expected, e.g., courses in plant taxonomy, local flora, and involvement in introductory biology. Successful applicants must have a Ph.D. and postdoctoral experience. We are seeking candidates whose research is interdisciplinary and who can collaborate with faculty in the department and elsewhere on campus. The successful applicant will be expected to develop a vigorous, externally funded research program and share a strong commitment to excellence in teaching and mentoring graduate and undergraduate students.

Interested applicants must apply online at: <https://jobs.ufl.edu> (requisition # 0901934). For full consideration, the application should include curriculum vitae, statements of research interests and teaching philosophy (of no more than 3 pages each), a maximum of three reprints in PDF format and three letters of reference (required for all applicants). For more information, please go to our website: <http://www.biology.ufl.edu/-jobs/plsyst.aspx>. Review of applications will begin on January 3, 2013.

All candidates for employment are subject to a pre-employment screening which includes a review of criminal records, reference checks, and verification of education.

As part of the application process, applicants are invited to complete an online confidential and voluntary self-disclosure card. This information is stored within GatorJobs and is accessible by job number to Faculty Development (when needed to fulfill reporting obligations). The self-disclosure form can be found at: <http://www.hr.ufl.edu/job/datacard.htm>. Our department is committed to diversity as a component of excellence. Women, minorities and members of other underserved groups are encouraged to apply. The University of Florida is an Equal Opportunity Institution

Nico Cellinese, Ph.D. Assistant Curator, Botany & Informatics Joint Assistant Professor, Department of Biology

Florida Museum of Natural History University of Florida 354 Dickinson Hall, PO Box 117800 Gainesville, FL 32611-7800, U.S.A. Tel. 352-273-1979 Fax 352-846-1861 <http://cellinese.blogspot.com/> ncellinese@flmnh.ufl.edu

## UGroningen BehaviouralEvolution

PhD position Behavioural Evolution (1,0 fte)

Vacancy number 212248

Job description

Research description Dispersal is the movement of individuals from their birthplace to their location of breeding. Dispersal plays a key role in social-organisation, the mating system and social evolution. Behaviour, such as dispersal, may be influenced by the presence and behaviour of other individuals, which is the social environment in which the behaviour is expressed. Consequently as social behaviour evolves, the environment it is expressed in does as well. Therefore evolution of social behaviour is complicated by the need to consider the role of both the social environment in which individuals live, and the degree of social interactions between individuals on the expression of individual behaviours. The combined effects of these have rarely been considered. The proposed project will investigate how the social environment affects the expression of dispersal, and the consequences this has for individual lifetime fitness parameters. We will use field experiments to manipulate social interactions and phenotype frequencies in wild Seychelles warbler populations to investigate how specific perturbations influence the expression of individual behaviours and subsequent fitness. There are very few studies that have experimentally manipulated the social environment in the wild. For our experiments, we will focus on the islands of Cousin (high density and saturated population) and Denis (rapidly expanding from very low density), for which we have comprehensive behavioural and pedigree data.

This project is closely linked to the TopGrant funded post-doctoral position in Theoretical Evolutionary Ecology. The close collaboration between molecular, theoretical and behavioural researchers, along with access to the long-term Seychelles warbler dataset, provides a unique opportunity to forge a link between conceptual models and real-world data.

Research group The PhD will work in the BESO research group which is part of the Centre for Ecological and Evolutionary Studies at the University of Groningen (The Netherlands) with Prof. Jan Komdeur. Dr David Richardson (University of East Anglia, UK), Dr Hannah Dugdale (University of Sheffield, UK) and

Prof. Terry Burke (University of Sheffield, UK) will co-supervise the project.

#### Requirements

- BSc Honours or MSc Behavioural Ecology, Evolutionary Biology or related discipline with ample experience in field research on birds - excellent academic record (as shown by a list of examination marks); proven ability to plan and prioritize work and to work to and meet deadlines; strong commitment to excellence in research and teaching - excellent field skills: experience in bird ringing, avian DNA collection, bird colour ring reading, and behavioural observations - excellent organisational and interpersonal skills; ability to work in a team consisting of scientists, students and technical assistants with different backgrounds - excellent communication skills: effective paper writing skills (preferably demonstrated by publications) and experience with delivering presentations - working knowledge of programmes like Microsoft Access, MARK, and SAS/R is desirable - good command of the English language (oral and written).

#### Conditions of employment

The University of Groningen offers a salary of ? 2,042 (scale 50, number 0) gross per month in the first year, up to a maximum of ? 2,612 (scale 50, number 3) gross per month in the final year, based on a full-time position. The position requires residence in Groningen and must result in a PhD thesis within the 4-year contract period. A PhD training program is part of the agreement and the successful candidate will be enrolled in the Graduate School of Science. The successful candidate will first be offered a temporary position of 1 year with the perspective of prolongation for another 3 years. After the first year, there will be an evaluation on the perspectives of the successful completion of the PhD thesis within the next three years. If these perspectives are poor, the contract may not be renewed.

**Starting date:** The preferred starting date is 1 February 2013. The position will be filled as soon as suitable candidates have been found.

**Application** You can apply for this job before 8 December 2012 Dutch local time by sending your application (including a letter of motivation outlining your fit for the PhD, a curriculum vitae, a list of examination marks, a publication list, and the names and addresses of three academic referees who are willing to provide letters of reference (upon request)). Please click on "Apply" below on the advertisement on the website of the University of Groningen for the application form.

#### Organisation

The research project 'Causes and consequences of variation in dispersal behaviour' is a collaborative effort of the Behavioural Ecology and Self-Organization Group (BESO; The Netherlands), School of Biological

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## UHouston GenomicsBioinformatics

Faculty Openings : College of Natural Sciences & Mathematics : University of Houston

### BIOLOGY AND BIOCHEMISTRY

Assistant, Associate, or Full Professor Genomics / Bioinformatics Tenured or Tenure-Track

#### Description:

The Department of Biology and Biochemistry at the University of Houston invites applications for a faculty position at any level from individuals using genomic, bioinformatic, or computational approaches to investigate fundamental problems in eukaryotic cell or molecular biology.

Areas of interest include, but are not limited to, neuroscience and behavior, developmental biology, metabolic regulation, or regulation of gene expression at the transcriptional or posttranscriptional levels. Individuals using in vivo model systems are especially encouraged to apply.

The department and university offer a scientifically diverse and highly collaborative environment.

The successful applicant will be expected to develop and maintain a competitively funded research program and participate in graduate and undergraduate teaching.

Qualifications include an earned doctorate and an established record of research as demonstrated by publications and strong potential for continued external funding.

#### Application Procedures:

Candidates should submit a pdf that includes a cover letter, a personal statement, a CV, and names and contact information of at least 3 references to [genomics@nsm.uh.edu](mailto:genomics@nsm.uh.edu).



Consideration of applications will begin immediately and will continue until the position is filled.

Equal Opportunity / Affirmative Action:

The University of Houston is an Equal Opportunity/Affirmative Action employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

razevedo@uh.edu

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## UMaryland EvolutionaryBiol

### TENURE-TRACK FACULTY POSITIONS IN BIOLOGY UNIVERSITY OF MARYLAND, COLLEGE PARK DEPARTMENT OF BIOLOGY

The Department of Biology at the University of Maryland College Park is seeking to hire several exceptional tenure-track faculty members at any professional rank. Successful candidates will extend, complement, or integrate the Department's existing research strengths in ecology, evolutionary and developmental biology, comparative genomics, sensory neuroscience, and biophysics. Each will be expected to establish a vibrant research program and to be a creative and dedicated teacher at the undergraduate and graduate levels. More information about the Department can be found at [www.biology.umd.edu](http://www.biology.umd.edu). In certain cases, joint appointments with other campus units may be appropriate.

To apply, please visit <https://jobs.umd.edu/-applicants/Central?quickFind=3D55652>. Use this site to submit a CV, a concise statement of current and future research interests, a description of teaching interests, and contact information for three references. Applications received by December 1, 2012 will receive best consideration, but review will continue until all positions are filled.

The University of Maryland is an equal opportunity/affirmative action employer. Applications from minorities and women are encouraged.

Carlos A. Machado machado@umd.edu

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## UMontreal 2 EvolutionaryEcol

Hello All,

The Department of Biological Sciences at the University of Montreal, Quebec, is looking for candidates to fill two professorial positions: i) Aquatic Ecosystem Management, and ii) Plant Ecology and Ecophysiology. Though we are not searching specifically for people in evolutionary biology, the jobs are open to researchers who wish to create an evolutionary program.

#### 1. Professor of Plant Ecology and Ecophysiology

Posted: October 12, 2012 The Department of Biological Sciences invites applications for a full-time tenure-track position as Assistant Professor in Plant Ecology and Ecophysiology.

**Responsibilities** The successful candidate will be expected to teach at all three levels of the curriculum, supervise graduate students, engage in ongoing research and publication, and contribute to the academic life and reputation of the University.

The candidate will develop an innovative research program using ecophysiological approaches to study plant function in relation to the abiotic and biotic environment. The research may be conducted at different levels, ranging from individual plants to ecosystems.

**Requirements** Ph.D. in plant ecology, plant ecophysiology or in a related field. Postdoctoral experience is an asset. Strong publication record in international journals with high visibility. Interest in interdisciplinary research and openness to collaboration with members of the Department of Biology and other departments in the University. Excellent aptitude for teaching in higher education and incorporating new technologies. Proficiency in the French language. The Université de Montréal is a French-speaking university with an international reputation. French is the teaching language. To renew its faculty, the University is intensively recruiting the world's best specialists. In accordance with the institution's language policy: [http://secretariatgeneral.umontreal.ca/fileadmin/-user\\_upload/secretariat/doc\\_officiels/reglements/-administration/adm10-34\\_politique-linguistique.pdf](http://secretariatgeneral.umontreal.ca/fileadmin/-user_upload/secretariat/doc_officiels/reglements/-administration/adm10-34_politique-linguistique.pdf), the Université de Montréal provides support for newly-recruited faculty to attain proficiency in French.

**Salary** The Université de Montréal offers competitive salaries and a complete range of employee benefits.

**Starting Date** June 1, 2013

**Deadline** The complete application, including cover letter, curriculum vitae, a description of the research program (2 pages max.), copies of 3 recent publications, and a statement of teaching philosophy must be received at the address below by December 3, 2012.

Three letters of recommendation are also to be sent directly to the selection committee at the following address:

Comité de sélection/écologie et écophysiologie végétale a/s de Martine Girard Département de sciences biologiques Université de Montréal C. P. 6128, succursale Centre-ville Montréal (Québec) H3C 3J7 Courriel : [martine.girard.3@umontreal.ca](mailto:martine.girard.3@umontreal.ca) Téléphone : 514-343-6878 For more information about the Department of Biological Sciences, please consult the Web site at: <http://www.bio.umontreal.ca/index.html> . Confidentiality

The Université de Montréal application process allows all regular professors in the Department to have access to all documents unless the applicant explicitly states in her or his cover letter that access to the application should be limited to the selection committee. This restriction on accessibility will be lifted if the applicant is invited for an interview.

#### Employment Equity Program

The Université de Montréal upholds the principles of employment equity and welcomes applications from women, ethnic and visible minorities, aboriginals and people with disabilities. All applicants are asked to complete the employment equity identification questionnaire posted at <http://www.fas.umontreal.ca/affaires-professorales/documents/quest-acces-emploi-EN.pdf> and attach it to their application.

#### Immigration Requirements

In compliance with Canadian immigration requirements, priority shall be given to Canadian citizens and permanent residents.

#### 2. Professor of Aquatic Ecosystem Management

Posted: October 10, 2012 The Department of biological sciences is seeking applications for a full-time tenure-track professor position at the rank of assistant, associate or full professor in aquatic ecosystem management. The appointed candidate will be nominated for the Canada Research Chairs program, Tier I. Applications must include a summary of the candidate's research program, in concordance with the form found at:

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### UOxford EvolutionaryBiol

UNIVERSITY OF OXFORD, U.K. Department of Zoology: Search for two permanent faculty appointments.

(1) University Lecturer in Evolutionary Biology Department of Zoology in association with New College. You will be expected to lead a research programme in analytical, theoretical or quantitative evolutionary biology. Further details: <http://www.zoo.ox.ac.uk/node/376> (2) University Lecturer in Animal Behaviour Department of Zoology in association with St Hugh's College. You will be expected to lead a research programme in animal behaviour, with an emphasis on mechanistic or physiological approaches. Further details: <http://www.zoo.ox.ac.uk/node/377> In each case the postholder is expected to lead a research programme and to take part in undergraduate teaching for the Department and College. For full details, please follow links above. The closing date for applications is noon (GMT) on 10 December 2012. Each post is expected to start on 1 October 2013.

The University of Oxford is an Equal Opportunities Employer

[peter.holland@zoo.ox.ac.uk](mailto:peter.holland@zoo.ox.ac.uk)

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### URochester 2 EvolutionaryBiol

Two Faculty Positions in Ecology & Evolutionary Biology University of Rochester

The Department of Biology at the University of Rochester invites applications for two tenure track positions in Ecology & Evolutionary Biology. Highly qualified candidates conducting research in any area of ecology and evolutionary biology will be considered.

The successful candidates will contribute to the Department's existing strengths in evolutionary genetics and genomics (<http://www.rochester.edu/College/BIO/professors/dept/Ecology+and+Evolutionary+Biology>) and benefit from state of the art infrastructure and core facilities at the University.

Candidates with a strong record of accomplishment should upload application materials at <https://>

[/www.rochester.edu/fort/biology](http://www.rochester.edu/fort/biology) .Complete applications include: a CV; a statement of research interests/ plans; pdfs of three publications; and a statement of teaching experiences and interests. Instructions for supplying three letters of recommendation are provided on the application website.

Applications will be reviewed on a rolling basis until both positions are filled.

The University of Rochester is an Equal Opportunity Employer, has a strong commitment to diversity, and actively encourages applications from candidates from groups underrepresented in higher education.

daven.presgraves@rochester.edu

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## USouthFlorida 6 TheoreticalComputationalBiol

I am appending an announcement for six positions in USF's School of Natural Sciences and Mathematics. These positions are being searched for jointly by all the departments in the School, but those hired will have an appointment (and tenure home) in a department.

The positions are broadly defined as being for candidates developing theory, computational techniques, and mathematical and/or statistical modeling. Some of the areas directly relevant to our department include mathematical biology, phylogenetic modeling, population genetics, quantitative genetics, ecosystem ecology, population ecology, biomechanics, conservation biology, evolutionary bioinformatics, spatial ecology, global change biology, invasive species, marine biology, and disease ecology/evolution; this list is not intended to be restrictive.

The text of the official advertisement is as follows:

TENURE-TRACK FACULTY SEARCHES in the School of Natural Sciences and Mathematics (SNSM) College of Arts and Sciences, University of South Florida, Tampa, FL 33620

SNSM at USF invites applications for six tenure-track faculty positions in the application of theory/computational science and/or mathematical/statistical modeling to biomedical sciences, global change sciences or materials science. These positions are directed at the enhancement of interdisciplinary research and teaching in ongoing School research clusters. Specifically, the positions will simultaneously

strengthen the Computational Theory and Practices research cluster in SNSM, and provide interdisciplinary expansion of three additional research clusters in the areas of Biomedical Sciences, Global Change Sciences and Materials Science. Each of these faculty positions will have a tenure home in one or more of six constituent departments in SNSM including Cell Biology, Microbiology & Molecular Biology; Chemistry; Geology; Integrative Biology; Mathematics & Statistics; and Physics. These positions are at the Assistant Professor level, but an Associate Professor appointment may be considered commensurate with qualifications and experience, and based on the availability of funding. Applicants will be expected to develop a vigorous, externally funded research program in one or more of the research cluster areas. It is anticipated that these interdisciplinary hires will leverage shared infrastructure and interactions in SNSM research clusters with existing computational and experimental research efforts, illustrative examples of which include but are not limited to:

Biomedical Sciences: Biomechanics, biotechnology, drug discovery and delivery, functional genomics, imaging science (including biomedical imaging), mathematical physics, metabolomics, numerical analysis, proteomics, statistical modeling of large data sets, structural and computational biology, systems biology;

Global Change Sciences: Biogeochemistry, coastal science, conservation biology, disease biology, environmental detection and monitoring, evolutionary biology, freshwater biology and pollution, global change biology, hydrogeology, invasive species, laser science, marine biology, numerical analysis, natural hazards, statistical modeling of large data sets;

Materials Science: Biomaterials, energy-related materials, magnetic materials, mathematical physics, metal-organic materials, nanomaterials, numerical analysis, photonic materials, polymers/soft condensed matter, structural crystallography, theory and simulations of materials.

Further information regarding these efforts is available on the SNSM departmental websites at <http://biology.usf.edu/cmmb>; <http://biology.usf.edu/ib>; <http://chemistry.usf.edu> ; <http://geology.usf.edu>; <http://math.usf.edu>; and <http://physics.usf.edu>.

The School of Natural Sciences and Mathematics has 120 full-time faculty members with external research funding of \$47M. Further information regarding SNSM is available at <http://sciences.cas.usf.edu>. The University of South Florida is a high-impact, global research university dedicated to student success. USF ranks 50th in the nation for federal expenditures in research

and total expenditures in research among all U.S. universities, public or private, according to the National Science Foundation. Serving more than 47,000 students, the USF System has an annual budget of \$1.5 billion and an annual economic impact of \$3.7 billion. USF is a member of the Big East Athletic Conference.

Application information: Applicants should use the Online Application Link given below to submit their letter of application, curriculum vita and publication record, a completed teaching and research questionnaire (found at: <http://sciences.cas.usf.edu/careers/>-The application letter should describe the relevance of the proposed research and teaching plan

— / —

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>

## UTennessee Knoxville Director MathBio

Director for the National Institute of Mathematical and Biological Synthesis

The University of Tennessee, Knoxville requests nominations and applications of individuals to lead the National Institute for Mathematical and Biological Synthesis (NIMBioS). We seek an internationally-recognized biologist or mathematician with extensive experience working at the interface of these two fields to direct NIMBioS over the next five years of its support from the National Science Foundation and to provide the vision and guidance necessary to aid the University in planning for the longer-term sustainability of NIMBioS beyond the supported renewal period, which ends in 2018.

NIMBioS has been highly successful in responding to the needs for research and education across a diversity of biological disciplines that benefit from collaborative efforts with mathematical and computational scientists. We seek an innovative leader who can guide the current and future activities of this national resource.

Requirements are a Ph.D. and research experience to be appointed to a permanent position as Full Professor in a University Department, demonstrated experience managing federally-funded projects appropriate to lead a unit with approximately 25 full-time staff and re-

searchers, and a recognized record of national and international accomplishment in the biological sciences. The candidate should have experience guiding students and post-doctoral researchers, demonstrated ability to compose effective research proposals for external support, experience developing partnerships, and a commitment to enhancing the diversity of those involved in interdisciplinary research. Departmental affiliation of the successful candidate will be determined based upon input from the candidate, appropriate departments, and the University administration. Nominations and applications from individuals from under-represented groups in biology and mathematics are particularly encouraged. For further information, please contact Prof. Daniel Simberloff at [dsimberloff@utk.edu](mailto:dsimberloff@utk.edu).

Applications should include a cover letter detailing your experience and interest in the position, a current CV, and the names and contact information for five individuals who can attest to your abilities to direct NIMBioS. For information about NIMBioS, visit <http://nimbios.org>. Applications should be sent as PDFs to: Ms. Chandra Eskridge at [director-search@nimbios.org](mailto:director-search@nimbios.org). Review of applications will begin December 9 and will continue until the position is filled.

All qualified applicants will receive equal consideration for employment and admissions without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, or covered veteran status.

Eligibility and other terms and conditions of employment benefits at The University of Tennessee are governed by laws and regulations of the State of Tennessee, and this non-discrimination statement is intended to be consistent with those laws and regulations.

In accordance with the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, The University of Tennessee affirmatively states that it does not discriminate on the basis of race, sex, or disability in its education programs and activities, and this policy extends to employment by the University.

Inquiries and charges of violation of Title VI (race, color, national origin), Title IX (sex), Section 504 (disability), ADA (disability), Age Discrimination in Employment Act (age), sexual orientation, or veteran status should be directed to the Office of Equity and Diversity (OED), 1840 Melrose Avenue, Knoxville, TN 37996-3560, telephone (865) 974-2498 (V/TTY available) or 974-2440. Requests for accommodation of a disability should be directed to the ADA Coordinator at the Office of Equity and Diversity.

The Knoxville campus of the University of Tennessee is seeking candidates who have the ability to contribute in meaningful ways to the diversity and intercultural goals of the University.

Sergey Gavrilets Distinguished Professor Arts and Sciences Excellence Professor Department of Ecology and Evolutionary Biology Department of Mathematics Associate Director for Scientific Activities National Institute for Mathematical and Biological Synthesis (NIMBioS) University of Tennessee Knoxville, TN 37996

phone: (865) 974-8136 fax: (865) 974-3067 e-mail: [gavrila@tiem.utk.edu](mailto:gavrila@tiem.utk.edu) web: [www.tiem.utk.edu/~gavrila](http://www.tiem.utk.edu/~gavrila) NIMBioS: [www.nimbios.org](http://www.nimbios.org) [gavrila@tiem.utk.edu](mailto:gavrila@tiem.utk.edu)

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## UWisconsin LaCrosse ComparativeVertebrateAnatomist

\*Vertebrate Anatomist \*\*\*

The Department of Biology, College of Science and Health, at the University of Wisconsin-La Crosse is expanding and invites applications for a new tenure-track position. We seek a dynamic teacher/scholar with a commitment to excellence in teaching and the potential to develop an externally funded research program. Preference will be given to applicants with teaching/research interests in herpetology, ichthyology, mammalogy, or ornithology who will develop a comparative vertebrate anatomy course. The candidate should also be able to contribute to core courses in biology as well as develop courses in her/his area of expertise.

The UW-L Biology Department values diversity in its faculty, staff, and students. We seek a colleague who shares our department's commitment to diversity and who will be a dedicated teacher, active scholar, and effective mentor for students with varied backgrounds, preparation, and career goals. UW-L is a nationally renowned comprehensive university with demonstrated excellence in undergraduate and graduate education and research. Our highly productive and collegial department of 30 active faculty members creates a stellar environment for professional and personal achievement. In addition, we have a history of collaborative work with other departments, as well as local and regional agencies. Moreover, the beautiful surroundings of the region, unique regional biodiversity, in combination with a strong education system, affordable housing, and friendly atmosphere consistently identifies La

Crosse as one of the top places to live in the country.

This position is a 100% appointment for the nine-month academic year at the level of assistant professor. A Ph.D. or equivalent terminal degree in an area of biological science is required. Academic year salary is competitive and commensurate with experience. Start date is August 26, 2013. All applications must be submitted electronically at \* <https://employment.uwlax.edu> \*. Applications must include 1) a cover letter addressing your particular qualifications and interest in our position, 2) a curriculum vitae, 3) a statement describing how your teaching experiences have enhanced student learning, 4) a statement of research interests, and 5) the names and contact information of three references (letters of recommendation and transcripts may be requested later in the review process). Electronic applications must be received by January 7, 2013. The University of Wisconsin-La Crosse is an AA/EEO employer. If you have a special need/accommodation to aid your participation in our hiring process, please contact the chair of the search committee, Kathryn E. Perez ([kperez@uwlax.edu](mailto:kperez@uwlax.edu)) to make appropriate arrangements. Employment will require a criminal background check. A pending criminal charge or conviction will not necessarily disqualify an applicant. In compliance with the Wisconsin Fair Employment Act, UW-La Crosse does not discriminate on the basis of arrest or conviction record.

barrett klein Department of Biology University of Wisconsin - La Crosse La Crosse, WI [www.pupating.org](http://www.pupating.org)  
barrett klein <[barrett@pupating.org](mailto:barrett@pupating.org)>

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## UZurich EvolutionaryBiol

3-year PhD positions on "Comparative genomic, life history & behavioral analysis of incipient speciation due to thermal adaptation or sexual selection in geographically isolated sepsid flies" at the Institute of Evolutionary Biology & Environmental Studies, University of Zürich (starting 2013)

We study speciation in Sepsid dung flies (Diptera: Sepsidae), caused by natural & sexual selection and thermal adaptation, by combining experimental, population and genomic approaches. One project investigates the comparative evolution of sexual size differences (dimorphism), primary and secondary sexual trait morphology (including sperm competition), and mating behavior in various thermal environments to identify the



mechanisms leading to population differentiation and species separation. A second project investigates the extent of population differentiation in European and North American populations of particularly widespread species (including field work). We further use experimental evolution over many generations at hot and cool temperatures in the laboratory to identify the thermal traits contributing to continental and latitudinal population differentiation. A third project studies the genetics and genomics of population differentiation of widespread sepsid species (genome size: 200-300 Mb) using whole-genome sequencing, to examine the molecular genetic basis of the ongoing speciation process and to identify candidate genes involved in speciation and/or differentiation hot-spots within the genome. The single nucleotide polymorphisms (SNPs) and microsatellites obtained will be used for Quantitative Trait Locus (QTL) and association mapping of functional traits based on continental hybrid crosses.

We are looking for motivated and competent persons with a strong quantitative background in evolutionary biology, genetics & genomics, ecology, and/or behavior. The PhD positions will be embedded in our Evolutionary Biology or Ecology PhD programs (<http://www.ieu.uzh.ch/teaching/phd.html>). We encourage applications via these programs (next deadline: 1 December 2012). We offer a stimulating research environment with many research groups interested in evolution & ecology. Salary according to the directives of University of Zurich (UZH). Languages: German and/or English.

Electronic applications, including a cover letter detailing your motivation and expectations, CV and 2-3 references, per e-mail (in PDF format; deadline 15 January 2013) to

Dr. Wolf Blanckenhorn Evolutionary Biology & Environmental Studies University of Zurich-Irchel 34 (building)-J (floor) - 26 (office) Winterthurerstrasse 190 CH-8057 Zurich

Phone: +41 44 635.47.55 E-mail: [wolf.blanckenhorn@ieu.uzh.ch](mailto:wolf.blanckenhorn@ieu.uzh.ch)  
[www.ieu.uzh.ch/research/evolbiol.html](http://www.ieu.uzh.ch/research/evolbiol.html)  
[wolf.blanckenhorn@uzh.ch](http://www.wolf.blanckenhorn@uzh.ch)

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## Vienna PopulationGenomics

Junior Faculty Position Tenure Track: Statistical Genetics / Population Genomics at the Max F. Perutz

Laboratories, University of Vienna.

The Max F. Perutz Laboratories (MFPL; [www.mfpl.ac.at](http://www.mfpl.ac.at)) are a recently established joint venture of the University of Vienna and the Medical University of Vienna, engaged in top level biomedical research and training. MFPL houses more than 60 research groups in various areas of Molecular Biology and is embedded in the Vienna Biocenter Campus. The working language of the Institute is English. MFPL is committed to promoting work/life balance, and the campus hosts an international kindergarten.

In recent years, Vienna has developed into one of the leading centers in evolutionary biology ([www.evovienna.at](http://www.evovienna.at)). In addition to a stimulating scientific environment, Vienna also offers an extraordinarily high quality of life. Affordable housing, excellent public transport, great restaurants, a range of international schools, two operas, two music centers, many theaters and museums in combination with a pleasant climate make Vienna one of the most attractive cities in Europe.

### Faculty opening

An independent junior faculty position (roughly equivalent to an assistant professorship) is offered to strengthen the Computational Biology and Bioinformatics unit in the area of population genetic modeling. In particular candidates with a track record in statistical genetics or population genomic modeling and data analysis are encouraged to apply. The successful candidate will have a record of high quality research in evolutionary modeling. S/he is expected to develop and maintain an independent research group, and to attract extramural funding.

The position holder will be a co-leader of the Mathematics and Biosciences Group (MaBS), currently led by Joachim Hermisson. Several other groups on campus are involved in evolutionary genetics research, including the groups of Magnus Nordborg (Gregor Mendel Institute) and Arndt von Haeseler (Center for Integrated Bioinformatics Vienna). Moreover, a diverse group of researchers interact through activities of the Vienna School of Population Genetics ([www.popgen-vienna.at](http://www.popgen-vienna.at)), which attracts an international body of graduate students. The Vienna Biocenter provides access to an excellent core facility, including several Illumina sequencers, bioinformatics services, and a high-speed computer cluster.

The starting date is flexible (spring 2013 or later). The advertised position is a scientific tenure track position: within the first two years of employment the University of Vienna may offer an agreement if the scientific

performance of the employee suggests that the required qualification can be reached. This agreement is connected with the title of Professor [AssistenzprofessorIn]. In case the goals of the agreement are met, the employment will be made permanent and the title of the employee will be changed to Professor [assoziierte/r ProfessorIn]. We offer a competitive salary and a start-up package.

Application files:

1. Application letter (max. 5 pages), to be structured as follows: a. Achievements in research b. Experience and activities in teaching (and advancement of young researchers), teaching plans c. Achievements in knowledge transfer and knowledge management d. Future plans in research and contribution to the scientific profile of the Faculty and the University, respectively
2. Enclosures: a. CV and degree certificates/transcripts b. List of publications, including journal impact factors and number of citations, as well as a list of the V in the opinion of the applicant V 5 most important publications c. Scientific talks, also

listing the 5 most important ones d. factors (e.g. experience as publisher, functions in scientific societies or program committees) e. Acquired third-party fund projects (topic, runtime, origin, volume) f. Teaching (and advancement of young researchers): courses held at universities, supervised theses, teaching evaluations (if existent) g. Names of three references with contact details

Applications shall be submitted in English (preferably as a single PDF) to [facultyopenings@mfpl.ac.at](mailto:facultyopenings@mfpl.ac.at), with cc to [joachim.hermisson@univie.ac.at](mailto:joachim.hermisson@univie.ac.at). Informal inquiries can be sent to [joachim.hermisson@univie.ac.at](mailto:joachim.hermisson@univie.ac.at). The application period ends on January 4th, 2013. Women are strongly encouraged to apply.

Joachim Hermisson Professor for Mathematics and Biosciences University of Vienna Department for Mathematics Nordbergstr. 15, 1090 Vienna, Austria and Max F.Perutz Laboratories Dr.-Bohrgasse 9, 1030 Vienna, Austria phone: +43 (0) 1 4277 50648 email: [joachim.hermisson@univie.ac.at](mailto:joachim.hermisson@univie.ac.at) [www.mabs.at](http://www.mabs.at) [joachim.hermisson@univie.ac.at](mailto:joachim.hermisson@univie.ac.at)

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American Society of Naturalists: Nominations for the 2013 Sewall Wright Award

The Sewall Wright Award is given annually and honors a senior but active investigator who is making fundamental contributions to the Society's goals in promoting the conceptual unification of the natural biological sciences. The award includes an honorarium of \$1,000. The recipient need not be a member of the Society. For the 2013 Sewall Wright Award, the nomination packet, which must include a letter of nomination and a curriculum vitae (including a publication list), should be sent by January 1, 2013, to Mathew Leibold at mleibold@austin.utexas.edu. Please indicate 'Sewall Wright Award' in the subject line.

"Leibold, Mathew A" <mleibold@austin.utexas.edu>

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### AlleleMeanVar program

Can anyone recommend a program that will calculate allele size mean and variance per locus from a data set of microsatellite allele fragment sizes (not number of repeats). Yes, I can do this in Excel, but it is cumbersome, especially when there is missing data in different places in the spreadsheet.

Thanks, Alan

Alan W. Meerow, Ph.D., Research Geneticist and Systematist USDA-ARS-SHRS, National Germplasm Repository 13601 Old Cutler Road, Miami, FL 33158 USA voice: 786-573-7075; cell: 786-412-1821; FAX: 786-573-7102 email: alan.meerow@ars.usda.gov

"Meerow, Alan" <Alan.Meerow@ARS.USDA.GOV>

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### AmerSocNaturalists StudentResearchAward

Applications for 2013 ASN Student Research Awards  
The ASN Student Research Awards support research by student members that advances the goals of the society: the conceptual unification of ecology, evolution, or behavior. Each award consists of a \$2,000 check to the candidate. An applicant must be a member of the ASN (membership is international), must hold a bach-

elor's degree or equivalent, must have passed to candidacy in a PhD program or equivalent, and must be at least one year from completing the PhD. Applicants should send a two-page proposal (not including references). In addition, applicants should include a budget with justification (one page), a short curriculum vitae (two pages), a statement from the PhD supervisor that verifies that the applicant meets the eligibility requirements, and the supervisor's recommendation supporting the research proposed by the student (one page). Projects in all types of research (i.e., laboratory, field, theory) are encouraged. A total of six proposals will receive awards. Proposals will be judged on originality, strength and significance of the questions being addressed, prospects for significant results, and the match between the proposed research and the ASN mission. All materials should be compiled into one PDF file and sent via e-mail to John Kelly (jkk@ku.edu) with "ASN Student Research Award" in the subject line. Deadline for submission of all materials is January 31, 2013. More information is available at [www.asnamnat.org](http://www.asnamnat.org) jkk@ku.edu

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### ApplEvolutionary EpistemologyLab

Dear Evolutionary Biologists,

On behalf of the NIBA (Network Integrated Biocollections Alliance) workshop organizers and the writing committee, I am pleased to let you know that a draft Implementation Plan for the NIBA is now ready for public comment. The plan is available at <http://blogs.aibs.org/niba/>.

Comments may be posted to the comment section of this website or submitted via email to publicpolicy@aibs.org

Unfortunately, we only have a small window of opportunity to solicit, consider and incorporate public comments. However, the writing committee has pledged to consider and address all suggestions received by November 26, 2012.

The writing committee is also very interested in comments and suggestions from all stakeholders, including the Evolutionary Biology Community, who did not participate in the September workshop. Thus, we are requesting that you refer interested colleagues to the website and encourage them to carefully review the document and provide any comments.

Once again, thank you for your participation and continuing efforts toward the goal of developing an Implementation Plan for the Network Integrated Biocollections Alliance.

Thank you, Robert Gropp AIBS

Joseph Cook <tucojoe@gmail.com>

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## BirdPlumageStudy Volunteers

I am conducting a study of geographical variation in bird plumage characteristics, and I am looking for volunteers to take a survey. Participants will rate the similarity of the plumage of several species.

If you are able to volunteer to take this survey, please e-mail me at [nathanbwarbler@gmail.com](mailto:nathanbwarbler@gmail.com), and I will send you an e-mail with the URL to the survey and more information.

Thank you in advance,

Nathan Burroughs Department of Ecology & Evolutionary Biology University of California, Los Angeles  
[nathanbwarbler@gmail.com](mailto:nathanbwarbler@gmail.com)

Nathan Burroughs <[nathanbwarbler@gmail.com](mailto:nathanbwarbler@gmail.com)>

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## CurrentZool SexSelIssue

Dear colleagues,

The journal Current Zoology (formally Acta Zoologica Sinica) is preparing a special column entitled 'New horizons in sexual selection research'. The purpose of the special column is to highlight three themes in sexual selection: 1) sexual selection in females, 2) new developments in sexual selection theory and 3) new developments in genetic techniques to study sexual selection. We are particularly looking for articles that combine genomic/next generation sequencing methodology to study various aspects of sexual selection. Original and review/opinion articles are welcomed.

A special column consists of three-eight peer-reviewed papers, published free of charge and available to all (i.e. open access). For more information about the special column please see journal please [http://](http://www.currentzoology.org/newsdetail.asp?id=1471)

[www.currentzoology.org/newsdetail.asp?id=1471](http://www.currentzoology.org/newsdetail.asp?id=1471) and for more information about the journal please see <<http://www.currentzoology.org>>.

If you would like to participate in this special column, please send a potential title and abstract to <[mobley@evolbio.mpg.de](mailto:mobley@evolbio.mpg.de)> and copy executive editor <[jiazy@ioz.ac.cn](mailto:jiazy@ioz.ac.cn)>. Abstracts are due on Dec 1st, 2012 and full manuscripts are due March 10th, 2013 for publication in August 2013. Manuscripts received after the deadline will be considered as submission for regular issues.

I look forward to your submissions and please do not hesitate to contact me with any questions.

Sincerely, Kenyon Mobley

– Untitled Document

Kenyon Mobley Max Planck Institute for Evolutionary Biology Department of Evolutionary Ecology August-Thienemann-Straße 2 24306 Plön, Germany +49 (0)4522-763-347 Max Planck Institute Research Page <<http://www.evolbio.mpg.de/english/people/-staff/wissPersonal/wissM89/index.html>>

<<http://www.actazool.org/newsdetail.asp?id=1471>>

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## DIYABC answers

Dear all, Thank you for the reassuring feedback on DIYABC. I have received a number of emails that seem to agree on the following:

1. This beta version can be temperamental also with Windows XP;
2. The "START" screen, when everything seems to be ready to rock & roll, if often represents a 'freezing' moment;
3. Sometimes, even if it seems to freeze and to 'not respond', it may still produce the simulation data;
4. It doesn't seem to enjoy much changes in the default settings;
5. Sometimes you need to start the analysis again 2 or 3 times, and then it works fine;
6. I personally got it to work after trying several times and removing the final mtDNA sequence (although it had accepted it was there and took me through all the settings);
7. I also banged on the desk furiously several times,

but I am unsure it had any influence on the outcome.

8. There is a general sense of relief and expectation for the release of the new version, which should be with us before the end of the year.

Thank you so much again and good luck.

Stefano.

Dr. Stefano Mariani Reader in Wildlife Biology | School of Environment & Life Sciences Room 316, Peel Building, University of Salford, Salford M5 4WT, UK t: +44 (0)161-295-6913 | m: +44 (0)7712-689-871 s.mariani@salford.ac.uk | [www.salford.ac.uk/environment-life-sciences](http://www.salford.ac.uk/environment-life-sciences) <http://www.seek.salford.ac.uk/profiles/SMariani.jsp> Researcher.ID: A-2964-2012

S.Mariani@salford.ac.uk

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## DIYABC problems

Dear all, I was very happily working with DIYABC, and, suddenly, it stopped responding. I've tried many times to start again, simplifying scenarios, shortening runs, using various numbers of cores. The same thing keeps happening: I prepare all the settings and progress smoothly until the final screenshot where I just need to press 'START' to build the simulated data sets, and as soon as I click, it freezes. The task manager just tells me that the program is not responding. I am running v1.0.4.46beta on a WindowsXP platform - as suggested - and on exactly the very same PC on which the software has been running smoothly in the past two months. Does anyone have any idea of what might be happening?

Thanks,

Stefano.

Dr. Stefano Mariani Reader in Wildlife Biology | School of Environment & Life Sciences Room 316, Peel Building, University of Salford, Salford M5 4WT, UK t: +44 (0)161-295-6913 | m: +44 (0)7712-689-871 s.mariani@salford.ac.uk | [www.salford.ac.uk/environment-life-sciences](http://www.salford.ac.uk/environment-life-sciences) <http://www.seek.salford.ac.uk/profiles/SMariani.jsp> Researcher.ID: A-2964-2012

S.Mariani@salford.ac.uk

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## Drosophila isofemale lines

Hi all

I'm in the Jiggins lab in Cambridge and I am looking to try and get hold of 100 isofemale lines of *Drosophila sechellia* and *Drosophila mauritiana*, if anyone has any lines being currently maintained, for a study investigating the evolutionary genetics underlying difference in immune capability in these species.

Any help you can give me would be hugely appreciated.

John

/John McGonigle Genetics Department Downing site Cambridge, England UK CB23EH

Phone +44 (0)1223 333 945 E-mail: jem207@cam.ac.uk /

jem207@cam.ac.uk

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## EuropeanSocEvolBiol CallForTravelStipends

\*ESEB TRAVEL STIPENDS 2013\*

The European Society of Evolutionary Biology (ESEB) is pleased to announce the call for applications for travel stipends 2013. These stipends are for students and young scientists to attend the ESEB Congress in Lisbon in August 2013 (<http://www.eseb2013.com/>). The stipend will contribute to covering travel, living expenses and congress registration fees. The stipend will be paid out as a reimbursement after the congress, based on specification of the expenses.

Eligibility: - Applicants must be ESEB members (for becoming a member of ESEB, see <http://www.eseb.org/>). - Applications can be submitted by scientists at various stages of their professional career (e.g., Masters and PhD students, postdocs, and lecturers). - Scientists working in a country with high GDP are not eligible (for the list of excluded countries see below). - People who received an ESEB travel stipend in the last five years are not eligible. - Applicants must submit to present either an oral communication or a



poster to be eligible for the stipend. This will be verified before the reimbursement, but no proof that a poster or talk is accepted is necessary at the application stage.

PLEASE NOTE THAT THESE STIPENDS ARE GIVEN IN CONJUNCTION WITH ANALOGOUS STIPENDS OFFERED BY THE SSE (separate call), SO THERE IS NO NEED TO APPLY TO BOTH

How to apply: send your application by email to the ESEB Travel Bursary Committee, c/o Dr. Martijn Egas <egas@uva.nl>. The application should be no more than 2 pages long and include:

- Name of the applicant; - Budget, including sources of additional support; - An explanation of how attendance to the meeting will further the attendant's professional goals; - and a CV

Please submit the application as a single PDF-file. A support letter from the applicant advisor/mentor/senior colleague is also required. Support letters should be sent to the same email address (egas@uva.nl) by the applicant's mentor.

Deadline: 31 January 2013 24:00 GMT.

Members professionally based in the following countries are not eligible for the travel stipend: Australia, Austria, Belgium, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Singapore, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, United Kingdom, United States of America.

Ute Friedrich ESEB office Manager  
Email:office@eseb.org

European Society for Evolutionary Biology  
[www.eseb.org](http://www.eseb.org) office@eseb.org

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## Evolutionary Demography Society

Announcing the Evolutionary Demography Society, please circulate

Dear Colleagues,

We are pleased to announce the formation of the Evolutionary Demography Society (EvoDemoS)

and to invite interested researchers to join. While many societies include life-history evolution or evolutionary

demography within the range of topics they consider, no active society focuses on these topics across taxa and disciplines. EvoDemoS is intended to fill this gap.

EvoDemoS is an interdisciplinary scientific society dedicated to the study of the interactions of ecology and evolutionary biology with demography, including but not limited to patterns of mortality, reproduction and migration over age, stage and state and the evolutionary processes that produce those patterns. All taxa and methodologies are of interest. Our primary goal is to facilitate communication between researchers, and as such we are pleased to offer free membership for 2013 to any interested researcher. We invite members from students to established experts. We will organize yearly meetings to provide a specific forum for evolutionary demography. Our first meeting will be in Odense, Denmark in October of 2013, and will be open only to society members. Membership can be gained by emailing your name, preferred email address, affiliation and a sentence describing your research interests to: [evodemo-list@demogr.mpg.de](mailto:evodemo-list@demogr.mpg.de)

Questions and comments can be addressed to this same address.

Please feel free to distribute this announcement broadly.

Sincerely, The Board of the Evolutionary Demography Society

President James W. Vaupel, Max Planck Institute for Demographic Research and University of Southern Denmark

Vice President Shripad Tuljapurkar (Tulja), Stanford University

Secretary/Treasurer Daniel A. Levitis, Max Planck Institute for Demographic Research and University of Southern Denmark

Board Members Anne M. Bronikowski, Iowa State University James R. Carey, University of California, Davis Hal Caswell, Woods Hole Oceanographic Institution Charlotte Jessica E. Metcalf, University of Oxford Tim Coulson, Imperial College London Timothy Gage, State University of New York at Albany Jean-Michel Gaillard, Université de Lyon and Centre national de la recherche scientifique Thomas B. Kirkwood, Newcastle University Daniel H. Nussey, University of Edinburgh Fanie Pelletier, L'Université de Sherbrooke Deborah Roach, University of Virginia Rudi G.J. Westendorp, Leiden University

"Levitis, Daniel" <[Levitis@demogr.mpg.de](mailto:Levitis@demogr.mpg.de)>

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## Fst data

Hi All,

Does anyone know of a software package that can take allele frequency data, e.g. from multiple allozymes, and use these to calculate Fst values? I am trying to make use of data from some older papers that include a table of allele frequencies in each population, but never calculated pairwise Fst between populations. The data in the tables is total allele frequencies for each population, rather than by individual genotypes. i.e. there is no information on which individuals had which alleles or which alleles for a given locus occurred with which alleles for another locus, so the types of infiles used for e.g. Fstat, Arelquin, Genepop, etc would not be possible to make.

Data example: Locus Allele Pop1 Pop2 pgm A 0.5 0.3  
B 0.5 0.7 Pgi A 0.3 0.5 B 0.7 0.5

Thanks for your thoughts and suggestions, Amy

–

Amy Baco-Taylor, PhD EOAS/Oceanography 117 N. Woodward Avenue P.O. Box 3064320 Tallahassee, FL 32306-4320

Phone: (850) 645-1547 Fax: (850) 644-2581

abacotaylor@fsu.edu

Amy Baco-Taylor <abacotaylor@fsu.edu>

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## Human exome positions

Hello,

I am working on the human genome version GRCh37 in Ensembl ([ftp://ftp.ensembl.org/pub/current\\_fasta/homo\\_sapiens](ftp://ftp.ensembl.org/pub/current_fasta/homo_sapiens)). The files have gene position information, but do not have exon and intron position. Is there anyone who can tell where I can find it?

Best regards,

Haiwei Luo Visiting post-doc in Indiana University

Haiwei Luo <hluo2006@gmail.com>

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## Human exome positions answers

Hello,

I thank the following people who responded my question posted several days ago. Now I received a couple of great responses. Please see the following messages.

(1) From Jason E Stajich this is documented at the ensembl site, I would read more on their help pages and just looking at the base folder <ftp://ftp.ensembl.org/pub>

For your question you want the GTF file: [ftp://ftp.ensembl.org/pub/current\\_gtf/homo\\_sapiens/Homo\\_sapiens.G](ftp://ftp.ensembl.org/pub/current_gtf/homo_sapiens/Homo_sapiens.G)

(2) From Micha<sup>3</sup> Kabza

Ensembl FTP (<http://www.ensembl.org/info/data/-ftp/index.html>) contains GTF files with exon positions or you can download them using BioMart (<http://www.ensembl.org/biomart/martview>) . There is no explicit intron representation of introns in Ensembl, however. I've recently developed software that can help with your problem. It's available at <http://galago.amu.edu.pl/wendigo/>. You can use the SQLite databases from the webpage or use Python modules to access them. Keep in mind that Wendigo uses 0-based coordinates (exactly like UCSC, unlike Ensembl).

Currently it has no citation, but the paper is under review in BMC Genomics.

(3) From Anna

You can get the exon and intron positions from UC Santa Cruz genome browser (<http://genome.ucsc.edu/>). Below are links to answers to questions similar to yours.

<https://lists.soe.ucsc.edu/pipermail/genome/2011-August/026943.html> <http://seqanswers.com/forums/-showthread.php?t=3D5803> (4) From Mehmet Somel

I get the positions from Ensembl Biomart: <http://www.ensembl.org/biomart/martview/> In attributes, you choose “structures”.

(5) From Timothy O'Connor It depends on which gene models/annotation you decide to use. One tool that should give you what you want, plus a whole lot more, is SeattleSeq (<http://snp.gs.washington.edu/-SeattleSeqAnnotation137/>). At the end of the list of things to include is two different gene model annotations where you can choose one or both versions.

For large lists of variants it might be best to use the custom format split into multiple files. But it also has the capacity to directly annotate VCF files (which also may need to be split if the number of variants is greater than 500K).

(6) From Julien Roux You can find this in the GTF file describing the gene models. It can be downloaded together with the genome sequence file from: [http://useast.ensembl.org/\\*\\*info/data/ftp/index.html](http://useast.ensembl.org/**info/data/ftp/index.html) —

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Haiwei Luo Visiting post-doc in Indiana University

Haiwei Luo <[hluo2006@gmail.com](mailto:hluo2006@gmail.com)>

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## Illumina pricing

Dear Evoldir members,

We are shopping around for competitive pricing for Illumina sequencing services. The best price we have found for a 1-lane, Illumina Hi-Seq, paired end run is \$2,290.00. Is anyone aware of any companies that offer Illumina sequencing for less? We have already performed the library preparation using a RAD tag protocol. We appreciate any suggestions you might have.

Thank you, Carla Hurt

– Carla Hurt, Ph.D. Dept. of Biology Cox science center, rm 36 1301 Memorial Dr., University of Miami Coral Gables, Fl 33146 PH# (305) 284-6566 Lab webpage: [hurtlab.net](http://hurtlab.net) Core Lab server access: <http://zorki.bio.miami.edu/~corelab/> [hurtc@bio.miami.edu](mailto:hurtc@bio.miami.edu)

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## Image competition

We'd like to get as many images as possible from ecologists and evolutionary biologists.

BMC Ecology has opened its very first image competition this year and wants to see your visual interpretations of ecological processes.

The “BMC Ecology Image Competition 2012” is open to everyone affiliated with a research institution and with only a month left until the competition closes (the closing date is the 1st December 2012) be sure to submit your entries soon.

We consider all images from photos to data visualizations. Entries should be submitted to one of five categories that reflect the editorial sections of the journal. The winner of each category will be chosen by each of the journal's Section Editors and the categories are:

Behavioural and physiological ecology

Conservation ecology and biodiversity research

Community, population, and macroecology

Landscape ecology and ecosystems

Theoretical ecology and models

If you're not sure which category your image fits into - don't worry, we can help you out!

There are further details in our blog post on how to submit your image, and the prizes for the winning images - there will be an overall winner and prizes for the images that best represent each section.

<http://blogs.biomedcentral.com/bmcblog/2012/07/06/bmc-ecology-image-comp-2012/>

Please submit your images to the journal's Executive Editor: [simon.harold@biomedcentral.com](mailto:simon.harold@biomedcentral.com)

Good luck, and we look forward to receiving your entries!

Kind regards,

Simon Harold

Executive Editor

BMC Ecology

Please note that we can only consider images that are released under a Creative Commons license.

Simon Harold <[Simon.Harold@biomedcentral.com](mailto:Simon.Harold@biomedcentral.com)>

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## JasperLoftusHills Award

### Jasper Loftus-Hills Young Investigator Awards 2013

The Jasper Loftus-Hills Young Investigator Award was established in 1984 to recognize promising outstanding work by investigators who received their doctorates in the three years preceding the application deadline or who are in their final year of graduate school. Jasper Loftus-Hills (1946-1974) was an Australian biologist of exceptional promise who had published 16 articles in the three years between receiving his degree and when he was killed by a hit-and-run driver while recording frog calls along a Texas highway. The recipient need not be a member of the Society. The award includes presentation of a research paper at the annual meeting of the American Society of Naturalists (ASN), an award of \$500, a travel allowance of \$700 plus the cost of registration for the meetings, and a supplement of \$500 in case of intercontinental travel. The prize committee requests applications for the 2013 award from anyone supporting the objectives of the Society. Suggested names and addresses of people who should be encouraged to apply are also welcome. Applications should consist of no more than three pages that summarize the applicant's work (excluding tables, figures, and references), no more than four appropriate reprints, and a curriculum vitae. Two letters from individuals familiar with the applicant's work should also be sent to the address below. All application materials should be sent via e-mail by January 1, 2013, to Russell Bonduriansky at [r.bonduriansky@unsw.edu.au](mailto:r.bonduriansky@unsw.edu.au). Please indicate "Young Investigators' Award" in the subject line.

Russell Bonduriansky <[bonduriansky@gmail.com](mailto:bonduriansky@gmail.com)>

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### PoPoolationDB update

We have just upgraded PoPoolation DB. Now you can retrieve genome-wide polymorphism data for three *Drosophila* species:

One *D. melanogaster* population from Portugal <http://www.popoolation.at/pgt/index.html> One sample of African *D. simulans* (from multiple locations) [http://www.popoolation.at/pgt/dsim\\_browse.html](http://www.popoolation.at/pgt/dsim_browse.html) One *D. mauritiana* population: [http://www.popoolation.at/pgt/dmau\\_browse.html](http://www.popoolation.at/pgt/dmau_browse.html) All databases can be queried by position or sequence; *D. melanogaster* and *D. mauritiana* also by gene name.

Further details about the *D. melanogaster* database and a generic description of PoPoolation DB can be found at: <http://www.biomedcentral.com/1471-2156/>

12/27 The *D. simulans* and *D. mauritiana* samples are described in: <http://genome.cshlp.org/content/early/2012/10/10/gr.139873.112.long> enjoy!

Christian Schlötterer Institut für Populationsgenetik  
Vetmeduni Vienna Veterinärplatz 1 1210 Wien Austria/Europe

phone: +43-1-25077-4300 fax: +43-1-25077-4390  
<http://i122server.vu-wien.ac.at/pop> Vienna Graduate School of Population Genetics <http://www.popgen-vienna.at> [schlote@gmail.com](mailto:schlote@gmail.com)

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### Software

#### NewMorphometricSoftware in R

Hello all,

We are happy to announce the release of GeoMorph: a morphometrics package in R for the collection and analysis of landmark-based geometric morphometric data. It is available on the CRAN package website.

Geomorph provides routines for all stages of a geometric morphometric analysis. It allows one to read, manipulate, and digitize 2D and 3D landmark data, generate shape variables via Procrustes analysis for points, curves and surfaces, perform statistical analyses of shape variation and covariation, and provide graphical depictions of shapes and patterns of shape variation.

Most of geomorph's functions are designed for researchers interested in testing ecological and evolutionary hypotheses of shape variation and covariation. Methods are available to:

Data -read existing landmark data files into R (nts, tps, Morphologika format) -digitize 3D landmarks from surface images within R -estimate missing landmarks on specimens

Shape -Superimpose specimens using GPA (for both landmarks and semilandmarks)

Analyses -Anova/regression designs -integration/modularity analyses -analysis of phenotypic trajectories -assessment of phylogenetic signal for shape data

Visualization -scatterplots of shapes -shape deformation plots -plots of allometric trajectories -plotting phylogenies in shape space

In the coming months we will add additional functions of interest to evolutionary biologists.

Dean

Dr. Dean C. Adams Professor Department of Ecology, Evolution, and Organismal Biology Department of Statistics Iowa State University Ames, Iowa 50011 [www.public.iastate.edu/~dcadams/](http://www.public.iastate.edu/~dcadams/) phone: 515-294-3834

dcadams@iastate.edu

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## Software Transformer-4

Dear EvolDir members:

We are pleased to announce the release of the software T4-2.0.0, which greatly enhances the capabilities of its predecessor T4-1.3. T4-2.0.0 boosts the analysis of any genotype matrix in PC, Mac or Linux, and it admits data coding formats compatible with all the molecular techniques used in the investigation of biodiversity, either codominant (allozymes, nuclear microsatellites, SNP coded with two letters per genotype), or dominant (chloroplast microsatellites coded with three digits per haplotype, AFLPs, RFLPs, ISSR or any other molecular technique that can be binary-coded, or DNA sequence matrices). DNA sequence, SNP coded with one letter per genotype, and RAD matrices are considered dominant by T4 2.0.0, and they can only be imported to this version of T4 from fasta, mega, nexus, or phylip files.

T4-2.0.0 is suitable for matrices containing an unlimited number of alleles per locus, loci, individuals, populations, or taxa (diploid individuals, in the case of codominant data). The only limit is the space available in the hard disk of the user's computer. Most matrices resident in T4's matrix explorer can be transformed easily, swiftly and simultaneously into the input formats of one or several of the 38 most commonly used population genetic software (and for any possible combination of the populations that each matrix contains).

T4-2.0.0 also allows the users to quickly publish "genetic diversity digests" in the Demiurge information system. Such "digests" are peer-reviewed and made up by a geo-referenced T4 genotype matrix plus any ancillary information relevant to its interpretation that the authors see fit to include (see an example of a published digest in [http://www.demiurge-project.org/-matrix\\_digests/14](http://www.demiurge-project.org/-matrix_digests/14)).

To use T4-2.0.0, just register in the Demiurge information system by clicking on

<http://demiurge-project.org/register> Examples of all types of matrices suitable to be imported to T4 are available in the T4 download page (<http://demiurge-project.org/download.t4>). An exhaustive user's manual is available upon opening the software (clicking on "Help/Help contents")

A note about the T4 v 2.0.0 software and the Demiurge information system has been submitted to Mol. Ecol. Res. A short video summarizing the utilities of this software and the Demiurge system can be seen clicking on <http://vimeo.com/29828406>. Previous versions of T4 have been downloaded and used by researchers from 26 countries, and some of the digests published in Demiurge are already associated with papers in several impact journals.

T4-2.0.0 and the Demiurge system are deliverables resulting from several work packages in the project Demiurgo (MAC/1/C20). These work packages were co-funded by the Programa de Cooperación Transnacional Madeira-Açores-Canarias 2007-2013, the Instituto Tecnológico de Canarias (Gobierno de Canarias), and the Jardín Botánico Canario «Viera y Clavijo» -Unidad Asociada CSIC (Cabildo de Gran Canaria).

On behalf of all the Demiurge team,

Juli

–

Dr. Juli Caujapé Castells

Head Dept. of Molecular Biodiversity & DNA bank Jardín Botánico Canario "Viera y Clavijo"-Unidad Asociada CSIC Cabildo de Gran Canaria,

Associate Director of Research UNESCO chair for the conservation of Plant diversity in Macaronesia and the West of Africa Cabildo de Gran Canaria.

Ap. de Correos 14 de Tafira Alta 35017 Las Palmas de Gran Canaria, Spain phone: +34 928219421 ext. 14770 fax: +34 928 219581

The Jardín Botánico Canario "Viera y Clavijo"-UA CSIC <http://www.jardincanario.org/> The Department of Molecular Biodiversity & DNA Bank <http://www.bioclimac.com/mbdna/> The Demiurge information system for biodiversity's genetic diversity <http://www.demiurge-project.org/> <http://vimeo.com/29828406> The Island-biodiv project <http://www.island-biodiv.org> GreenTank, plataforma informativa sobre biodiversidad e investigación <http://www.greentank.es> The Island Plant Conservation Network <http://www.bgci.org/ourwork/islands/> [julicaujape@gmail.com](mailto:julicaujape@gmail.com)



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## Tucson Hackathon Jan28-Feb1

Phylogenies! Hacking! Tucson in January!

An implicit promise of the Tree of Life project is that, ultimately, expert knowledge of species phylogeny will be accessible and usable by everybody. In other words, we will all be able to get the species trees we need, in a useable form, when we need them. The Phylotastic project aims to make that vision a reality, by developing a loosely coupled system of components that, in response to a user's query (a list of taxa plus conditions), will rectify names, find suitable source trees, prune and graft to get the right species, estimate branch lengths, and return the results with metadata on sources and methods.

In June 2012, the HIP (Hackathons, Interoperability, Phylogenies) working group of NESCent staged a hackathon (<http://en.wikipedia.org/wiki/Hackathon>) to prototype components of a Phylotastic system, and implement demos to show their potential. Thanks to 25 participants who responded to an open call (just like this one), that hackathon was an extraordinary success (see <http://phylotastic.org/>).

Now we are gearing up for a second hackathon, to take another step toward providing computable, convenient, credible access to the Tree of Life. We aim to recruit a diverse group of participants, including students, faculty, postdocs, and staff of both genders and from different backgrounds. Only some of the seats at the hackathon will be filled by expert hackers who spend their time coding. We also need folks who can:

\* Provide knowledge of workflows and downstream uses of trees \* Design user interfaces \* Test software \* Make screencasts, develop tutorials, and document user experiences

Applications are now being accepted to Phylotastic 2, which will take place January 28th, 2013 to February 1st, 2013 at the BIO5 facility in warm and sunny Tucson, AZ (<http://bio5.arizona.edu/about-bio5>). Information on how to apply is provided below. Partial support (and, if funds allow, full support) for travel, food and lodging will be available to each successful applicant who indicates need. We particularly welcome applications from women and members of underrepresented groups.

To understand how you might be able to contribute, re-

view the slideshow (ppt format, <http://bit.ly/RWRgIc>, or PDF format, <http://bit.ly/POaoci>), consult the web site ([phylotastic.org](http://phylotastic.org)) or contact a member of the HIP leadership team (listed below).

Sincerely,

Arlin Stoltzfus ([arlin@umd.edu](mailto:arlin@umd.edu)), on behalf of the HIP (Hackathons, Interoperability and Phylogenies) Leadership Team

HOW TO APPLY Before 16 November, 2012 at midnight, EST, fill out the online form here <http://tinyurl.com/PhyloTastic2>. Note that:

\* The application form asks you to describe how you can contribute to Phylotastic. Remember that we are not just looking for expert coders. There are many other ways to contribute. \* Support for travel, housing and meals will be available to each successful applicant who indicates need. \* Please understand that your application is not a guarantee of participation in the event. Funds and space are limited: we may not be able to sponsor every individual who is qualified to participate.

LEADERSHIP TEAM Karen Cranston, [karen.cranston@nescent.org](mailto:karen.cranston@nescent.org) Brian Sidlauskas, [brian.sidlauskas@oregonstate.edu](mailto:brian.sidlauskas@oregonstate.edu) Arlin Stoltzfus, [arlin@umd.edu](mailto:arlin@umd.edu) Mike Rosenberg [mrosenb@asu.edu](mailto:mrosenb@asu.edu) Brian O'Meara, [bomeara@utk.edu](mailto:bomeara@utk.edu) Mark Westneat [mwestneat@fieldmuseum.org](mailto:mwestneat@fieldmuseum.org) Enrico Pontelli [epontell@cs.nmsu.edu](mailto:epontell@cs.nmsu.edu) Rutger Vos [rutgeraldo@gmail.com](mailto:rutgeraldo@gmail.com) Naim Matasci [nmatasci@iplantcollaborative.org](mailto:nmatasci@iplantcollaborative.org)

Arlin Stoltzfus ([arlin@umd.edu](mailto:arlin@umd.edu)) Fellow, IBBR; Adj. Assoc. Prof., UMCP; Research Biologist, NIST IBBR, 9600 Gudelsky Drive, Rockville, MD, 20850 tel: 240 314 6208; web: [www.molevol.org](http://www.molevol.org) [arlin@umd.edu](mailto:arlin@umd.edu)

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## Tucson Hackathon Jan28-Feb1 LastCall

Dear Evoldir-

This is the last call to apply for the Phylotastic hackathon at the Bio5 facility in Tucson, Jan 28 to Feb 1, 2013, sponsored by Hackathons, Interoperability, Phylogenies (HIP), a NESCent working group.

Our aim is to build a distributed delivery system for expert knowledge of species phylogeny, i.e., the Tree of Life. At the first hackathon, we built some components and sketched out how they would work together. This

time, we aim to recruit a diverse set of scientists, programmers, and scientist-programmers to build on our previous results, focusing on supporting use-cases, integrating processes, and adapting end-user tools.

If that sounds interesting, please scan the materials below and consider how you could be a part of this exciting project. The application period closes on Friday (<http://tinyurl.com/PhyloTastic2>; details below). Regards,

Arlin

Arlin Stoltzfus (arlin@umd.edu) Fellow, IBBR; Adj. Assoc. Prof., UMCP; Research Biologist, NIST IBBR, 9600 Gudelsky Drive, Rockville, MD, 20850 tel: 240 314 6208; web: [www.molevol.org](http://www.molevol.org) Phylogenies! Hacking! Tucson in January!

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Arlin Stoltzfus <arlin@umd.edu>

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## UGroningen VolFieldAssist AvianEvolution

\*UGRONINGEN.FieldAssist.Shorebirds\*\*\*

Volunteers are needed \*from 10 March to 15 May 2013\* for an ongoing capture-recapture program on the Ruffs, \*Philomachus pugnax, \*supervised by Prof. Dr. The-

unis Piersma of the University of Groningen. Our current research aims to contribute to better understand demographic and ecological processes playing a role in the ongoing decline of the population Ruffs using the Netherlands during migratory stopover. The fieldwork consists in the monitoring of colour-banded birds in Southwest Friesland, a characteristic Dutch meadow area in the north of The Netherlands. We collect data on the timing of migration, habitat use, phenotype characteristics, feeding and reproductive behaviour of the birds; but you will also assist with the banding of the birds, blood sampling, and data entry. Volunteers and students involved will live together in our field station in a small village along the shore of Lake IJsselmeer.

We are looking for happy and motivated applicants! Days in the field can be long thus we need easy going people able to maintain a professional attitude at all time. Autonomy, good team working and precision during the work are as well primordial. Good observation skills, previous experience with handling birds and colour-ring reading will be definitely a plus but beginners are welcome to apply. Command of Dutch or Frisian is not necessary ;-). Commitment for the all period is required. Applicants willing to improve their spoken English are encouraged to apply (this is an excellent opportunity to improve!). But note that a good understanding is needed.

\*Support provided:\* We provide housing and field equipment. Well pay the traveling cost, but volunteers must pay food expenses (we cook all together which allow good and cheap meal V count 3-4 Euros per day).

\*To apply: \*

Please send a resume/CV (keep it to relevant details), a cover letter (interests, career goals, relevant experience for the position and availability, not too long please ;-)) and one or two references if possible to: \*\*

\*Lucie SCHMALTZ [l.schmaltz@rug.n\*] V PhD candidate, Animal Ecology Group, University of Groningen. Centre for Life Sciences, Nijenborgh 7 - 9747 AG GRONINGEN

Office : +31 50 363 2091

We will begin reviewing applications from 1th January 2013 and continue until position is filled.

\*For more information on the position or our research, you can have a look at the following website or just contact me! \* <http://www.rug.nl/biologie/onderzoek/onderzoekgroepen/dieroecologie/-onderzoek/researchStudies/ruffnewsletter2009.pdf>

Lucie Schmaltz

PhD Student Animal Ecology Group University of Groningen Centre for life sciences Nijenborgh 7 9747 AG Groningen

Lucie SCHMALTZ <lucie.schmaltz@gmail.com>

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## UWyoming SummerResearchOpportunities

For more information, see <http://www.wyomingbioinformatics.org/SummerSchool/> Bioinformatics and Computational Molecular Biology Undergraduate Summer Research Program

University of Wyoming

The University of Wyoming is proud to offer summer research opportunities to external undergraduate students to engage in research in bioinformatics and computational molecular biology in Laramie. The summer research program will return in 2013 and last from May 27, 2013 to August 2, 2013 and will include a stipend of \$3500 for the period. Confirmed external speakers in the summer program include Claus Wilke (University of Texas) and Michael Lynch (Indiana University).

The program includes both lectures and educational opportunities as well as a focus on a research experience. Lectures will be given by both University of Wyoming faculty and external speakers.

Several labs that will host bioinformatics/computational molecular biology students include:

Alex Buerkle: Statistical genetics and models of adaptation and speciation Jay Gatlin: Models of mitotic spindle movement Mark Gomelsky: Microbiology; protein engineering Jan Kubelka: Protein folding David Liberles: Comparative genomics and molecular evolution Rongsong Liu: Epidemiological modeling Jessica Siltberg-Liberles: Protein structural bioinformatics Anne Sylvester: Comparative genomics of maize Dan Wall: Genetics of bacterial motility Naomi Ward: Metagenomics and Microbial Genomics Cynthia Weinig: Environmental Genetics and Adaptation in Plants

To apply, send a resume, cover letter, and statement of research interests to liberles@uwyo.edu, arrange to have 2 letters of recommendation sent directly by the letter writer to liberles@uwyo.edu, and arrange to have an official transcript sent to:

David Liberles Department of Molecular Biology Dept.

3944 University of Wyoming Laramie, WY 82071

Your cover letter should indicate: 1). Any prior experience in computer programming and if none, any interest in a mini-tutorial on programming; 2). Your plans (if known) immediately after graduation and if they include immediately attending graduate or professional school; 3). If your ultimate career plans involve a Ph.D., an M.D., or an M.D./Ph.D., and 4). Your top two choices of research group to work in over the summer.

Review of applications for the 2013 Program will begin on February 4, 2013 and continue until the class has been filled.

David Liberles <liberles@uwyo.edu>

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### UZurich VolFieldAssist BirdEvolution

UZurich FieldAssist BirdEvolution

Expenses-paid assistant positions to study evolution of family living and cooperative breeding in birds in Spain.

We are seeking applicants for research volunteers for the upcoming breeding season to join our project investigating the evolution of family living and cooperative breeding in birds. The research is conducted in Andalusia, southern Spain. Starting dates range from the end of February to the middle of March and work will continue through June.

Our project researches the shifts in parental investment patterns in pair living, kin-group living and cooperatively breeding birds. The project is based at the University of Zurich, Switzerland (PI Michael Griesser, PhD students Emeline Mourocq & Gretchen Wagner).

The work of the volunteers will consist of carrying out experiments, locating nests, assisting the PhD students with catching and ringing birds, behavioral observations and data management. This work will give insight into experimental and is carried out in scenic semi-arid habitats of southern Spain. Depending on the field workload, we work up to 6 days per week and the days can be long (10-12 hours), including field work and data entry. Observe that temperatures at the beginning of the season can be below 0°C, and later in the breeding season be easily above 35°C. The work can be physically strenuous at times.

Quali:

- (1) BSc or higher in Biology or similar quali
- (2) Ability to work and live in small groups and sociable personality
- (3) Fluent in English
- (4) Previous experience a plus
- (5) Good physical condition and ability to endure long, physically demanding days
- (6) Knowledge in observing & handling birds is a plus
- (7) Driving license is helpful
- (8) Basic knowledge of Spanish is helpful

These are expenses-paid assistant positions, covering accommodation, food, and travel expenses of up to 300€ to and from the study site.

Applications - including a CV, a letter of motivation (1 pg.) and the name of two referees - should be sent to both:

Emeline Mourocq: emeline.mourocq@uzh.ch and

Gretchen Wagner: gretchen.wagner@uzh.ch

Please use "Volunteer Field Assistant Position in Spain" as the subject and note your availability during this time period in the body of the e-mail. Applications received until 1st January 2013 will be given full consideration.

For further information on the project, see:

<http://www.aim.uzh.ch/Research/birdfamilies.html>

<http://www.aim.uzh.ch/Research/birdfamilies/-mourocq.html>

<http://www.aim.uzh.ch/Research/birdfamilies/-wagner.html>

emeline mourocq <emeline.mourocq@uzh.ch>

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### WillametteU Volunteers PollinationCoevolution

The Smith lab at Willamette University is soliciting applications for volunteers to participate in field research studying the pollination biology and coevolution of Joshua trees (\*Yucca brevifolia\*) and yucca moths (genus \*Tegeticula\*) from late March to mid April of 2013.

Pending the availability of funding, volunteers will assist in the completion of pollination experiments in a

plant hybrid zone located in central Nevada. Participation will require living at a remote field site continuously for approximately four weeks. Cost of transportation to the field site will be covered and food while in the field will be covered.

Successful applicants will be of above-average physical fitness (i.e., capable of walking 10 miles per day while carrying heavy and awkward loads, able to climb a 6' ladder, and able to lift 40 lbs) and be enthusiastic about living and working closely with others in challenging conditions. The field site has no running water, little opportunity for personal space and time, and no phone/internet services. Daily temperatures may drop below freezing or exceed 90 F. Wind and sandstorms are very common.

Volunteers must have an educational background in biology or a related field (there is no degree requirement, but a familiarity with ecology and natural history is necessary) and must provide their own camping equipment. Essential gear includes a fully-sealable tent capable of withstanding strong winds (i.e., a 4-season tent), a sleeping pad, a sleeping bag rated to 20 degrees F, and backpack with at least a 40 liter capacity.

Prospective volunteers should submit a CV or resume, the name and contact information for one or more professional references, and a letter describing their interest in the project by email to [csmith@willamette.edu](mailto:csmith@willamette.edu). Please include the words 'Volunteer Field Assistant' in the subject line of your message.

Screening of applicants will begin on December 16th, 2012, and continue until all positions are filled. Final

staffing decisions will be dependent on funding.

More information about our research is provided in the following links: <http://www.willamette.edu/~csmith/ChrisSmith.htm> [http://www.nsf.gov/discoveries/disc\\_summ.jsp?cntn\\_id=3D115956&org=3DNSF](http://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=3D115956&org=3DNSF)

Christopher Irwin Smith Assistant Professor Department of Biology Willamette University Salem, OR 97301 ph: 503-370-6181 fax: 503-375-5425

Lab Website: <http://www.willamette.edu/~csmith/ChrisSmith.htm> [csmith@willamette.edu](mailto:csmith@willamette.edu)

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### Within diversity greater between

I am working for my doctoral position in studying phylogenetic studies of 3 apis species in India. I have analysed both mitochondrial and mtDNA data. I need to know why within population diversity is greater than among population diversity in AMOVA results of microsatellites. I have gone through few articles but i couldnt find any explanation convincing. hope i could get an answer in this regard.

Thanks and regards

– K.Omkar Babu Senior Research Fellow Institute of Biotechnology UAS Dharwad INDIA

Omkar Babu <[omkarzf@gmail.com](mailto:omkarzf@gmail.com)>

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## PostDocs

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## ArizonaState InsectSystematicsBiogeography

[http://sols.asu.edu/employment/pdfs/fl2\\_insectsys\\_postdoc.pdf](http://sols.asu.edu/employment/pdfs/fl2_insectsys_postdoc.pdf) A postdoctoral position in insect systematics and biogeography is available in the Franz Lab (<http://franz.lab.asu.edu/>), School of Life Sciences, Arizona State University. The selected candidate will play a co-leading role in producing a comprehensive systematic, phylogenetic, paleontological, and historical biogeographic reappraisal of Central American and West Indian broad-nosed weevils in the *Exophthalmus* genus complex (Coleoptera: Curculionidae: Entiminae: Eustylini, Geonemini; see Zool. J. Linn. Soc. 164: 510-557). Primary research tasks will include oversight and construction of a 150+ taxon, multi-gene molecular phylogeny for this complex, and a fossil-calibrated reconstruction of biogeographic patterns of weevil diversification at the Neotropical mainland/West Indies intersection.

Candidates must have a Ph.D. in insect systematics (ABD will be considered) and a strong record of accomplishment in the areas of field biology, DNA sequencing, molecular phylogenetic analyses, divergence time estimation, and informatics. Excellent leadership, communication and student mentoring skills are highly sought. A strong record of publication, intellectual creativity, and an ability to work independently and overcome challenges are desired. Knowledge of beetle or weevil systematics is preferred but not required. The

preferred starting range is March 1st to May 1st, 2013, and funds are available for up to three years pending suitable progress. The position includes standard ASU benefits for postdoctoral researchers.

Applicants should send a cover letter describing their interests and relevant experience (in particular with regards to the molecular and analytical aspects of the project), a curriculum vitae, and contact information of at least three references to: Dr. Nico Franz, School of Life Sciences, Arizona State University, PO Box 874501, Tempe, AZ, 85287-4501. E-mail: [nico.franz@asu.edu](mailto:nico.franz@asu.edu) (e-mail applications preferred). Informal inquiry via e-mail is encouraged. The initial closing date for receipt of applications is December 1, 2012; applications will be reviewed every two weeks thereafter until the search is closed.

A background check is required for employment. Arizona State University is an equal opportunity/affirmative action employer committed to excellence through diversity. Women and minorities are encouraged to apply. (<https://www.asu.edu/titleIX/>) For additional information on the School of Life Sciences, please visit <http://sols.asu.edu>. Nico M. Franz, Ph.D. Associate Professor & Curator of Insects School of Life Sciences PO Box 874501 Arizona State University Tempe, AZ 85287-4501

Office: (480) 965-2036 Collection: (480) 965-2850  
Fax: (480) 965-6899 E-mail: [nico.franz@asu.edu](mailto:nico.franz@asu.edu)  
<[nico.franz@asu.edu](mailto:nico.franz@asu.edu)>

Franz Lab: <http://franz.lab.asu.edu/> ASUHIC: <http://symbiota1.acis.ufl.edu/scan/portal/collections/misc/collprofiles.php?collid=1> [nmfranz@asu.edu](mailto:nmfranz@asu.edu)

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## BIOLS Beijing MetagenomicsBioinformatics

Postdoctoral Positions in Metagenomics and Bioinformatics at Beijing Institutes of Life Science, Chinese Academy of Sciences, Beijing, China

The Zhao Lab (<http://159.226.116.227/-About.Us.html>) at the Computational Biology Center of Beijing Institutes of Life Science, Chinese Academy of Sciences, is seeking highly motivated and ambitious Postdoctoral fellows and PhD students in the areas of bioinformatics and metagenomics. Metagenomics based on random sequencing of microbial community DNA offers the opportunity to understand the phylotypic diversity and the functional potential present in microbial communities. We aim to develop sophisticated metagenomic algorithms and softwares, and to combine the power of genomics, bioinformatics and systems biology to understand various environmental communities.

Applicants must have the ability to work in a team, have good communication skills and should be highly motivated and committed to pursuing interdisciplinary research. Programming skills in Perl, Python, Java or C/C++, and/or a knowledge of statistical bioinformatics (R) would be highly regarded.

Please submit a cover letter (including a brief statement of interest), CV and contact information for two references to Prof. Fangqing Zhao at [zhfq@mail.biols.ac.cn](mailto:zhfq@mail.biols.ac.cn)

Closing Date: until filled. Start of position: flexible.

Fangqing Zhao Principal Investigator, Computational Genomics Lab, Beijing Institutes of Life Science, Chinese Academy of Sciences (BIOLS) Tel: 86-10-64869325 Fax: 86-10-64880586 Email: [zhfq@mail.biols.ac.cn](mailto:zhfq@mail.biols.ac.cn)

[zhfq@mail.biols.ac.cn](mailto:zhfq@mail.biols.ac.cn)

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## Berlin EvolutionAnimalPersonalities

The Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) in Berlin invites applications for the

following positions:

2 Postdocs and 3 PhD Students in Animal Behaviour, Ecology and Evolution

The candidates will be part of an integrated research project on the ECOLOGICAL, EVOLUTIONARY AND MANAGEMENT CONSEQUENCES OF FISH BEHAVIOURAL (PERSONALITY) TYPES, based within the Department of Biology and Ecology of Fishes at IGB (PI: Dr. Max Wolf, Co-PIs: Prof. Dr. Jens Krause, Prof. Dr. Robert Arlinghaus, Dr. Thomas Mehner, Dr. Georg Staaks). We are seeking to recruit outstanding young scientists to establish an innovative research project with high international visibility. The specific areas of expertise of the applicants are open but should fit into the general theme. Topics of interest include the consequences of behavioural types for collective decision making, food web interactions, stability and persistence of populations/communities or biodiversity and freshwater fisheries management. Competitive applicants will hold a Diploma / M.Sc. and Ph.D. (Postdoc positions) in Biology or related fields and have a strong interest in animal behaviour. Demonstrated scientific creativity and expertise working with fish is a plus.

The appointments are for two years (Postdocs) and three years (PhD students), salary is paid according to the TVöD (Postdoc: 100%, PhD student: 60% position).

Please submit a curriculum vitae (including publication list), a brief statement of motivation and research interests, copies of up to three publications, and the names and contact information of two referees. Please send all documents as a single PDF file to [BType@igb-berlin.de](mailto:BType@igb-berlin.de). Review of the applications will start on 13. January 2013 and continue until the positions are filled. A workshop for shortlisted applicants will take place in the third week of February, the project will start in April 2013 (or by arrangement). For further enquiries, please contact Max Wolf ([BType@igb-berlin.de](mailto:BType@igb-berlin.de)) or any of the above-mentioned Co-PIs.

IGB ([www.igb-berlin.de](http://www.igb-berlin.de)) is the largest freshwater ecology institute in Germany. It offers excellent laboratory and field facilities for interdisciplinary research, including large-scale experimental infrastructure and long-term research programmes. IGB is a member of Germany's Leibniz Association ([www.wgl.de](http://www.wgl.de)), comprising 86 institutes that cover a broad range of basic and applied research and are funded by Federal and State governments. IGB is part of the Forschungsverbund Berlin e.V. ([www.fv-berlin.de](http://www.fv-berlin.de)), which represents eight research institutes in Berlin focusing on natural sciences, life sciences and environmental sciences, and pur-

suing common interests as a single legal entity while maintaining full scientific autonomy. IGB is linked through joint professorships to all three Berlin universities. IGB and FVB are equal opportunity employers and specifically welcome applications from female scientists. Preference will be given to applicants with disabilities when qualifications are equivalent.

Berlin is a cultural capital of Europe and ranks among the top destinations for science and technology worldwide.

Max Wolf <m.wolf@igb-berlin.de>

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## BielefeldU TheoPopulationGenetics

Dear members of evoldir,

The Biomathematics group at the Faculty of Technology, Bielefeld University, has a vacancy for a

Research Associate (postdoc, TVL-E13)

for a period of 2 years, starting in February 2013 or later; extension is possible.

We are looking for an individual with a PhD in Mathematics, Biomathematics, or Mathematical statistical physics, with a research interest in stochastic processes in biology (preferably either in population genetics or immunobiology). Apart from research, the individual is obliged to teach (4 hours per week during term). Teaching may be done in English.

Bielefeld University offers an excellent research environment, its particular strength being due to close interaction between biomathematics, mathematics, bioinformatics, and biology. In particular, the recently-established Priority Programme on 'Probabilistic Structures in Evolution' (DFG-SPP 1590), see <http://ekvv.unibielefeld.de/blog/uniaktuell/-entry/professorin.ellen.baake.koordiniert.neuen> or <http://www.dfg.de/foerderung/info.wissenschaft/-archiv/2011/info.wissenschaft.11.36/index.html>, provides a unique framework for research on stochastic processes in biology.

Informal inquiries and applications should be sent to the address below before Dec. 4, 2012. Applications via email are welcome.

Bielefeld University is an equal opportunity employer. Women and members of minority groups including disabled persons are strongly encouraged to apply.

Prof. Ellen Baake, Technische Fakultät, Universität Bielefeld, Postfach 100131, 33501 Bielefeld, Germany phone (+49) 521 106 4896 email: [ebaake@techfak.uni-bielefeld.de](mailto:ebaake@techfak.uni-bielefeld.de) URL: <http://www.TechFak.Uni-Bielefeld.DE/ags/bm/> [ebaake@techfak.uni-bielefeld.de](mailto:ebaake@techfak.uni-bielefeld.de)

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## CSIRO Australia InsectPhylogenomics

\*Position Open:\*

\*Postdoctoral Fellow - Insect Phylogenomics \*

\*The Position:\*

The Systematics and Collections Program within CSIRO Ecosystem Sciences comprises staff and collections resources (traditional research collections, cryofrozen tissues, sound, data) of the Australian National Insect Collection (ANIC) and Australian National Wildlife Collection. Recent years have seen growth in molecular and evolutionary research. Taxonomic and biogeographical work on Australian terrestrial insects now embraces morphological and molecular systematics, phylogeography and population genetics as well as modern approaches to morphology such as micro-CT Scanning. We wish to continue this growth and see its relevance maintained with respect to current rapid growth in genomics. A solid grounding in collections is still seen as essential to this work.

This is an opportunity for a molecular systematist with a special interest in insects and phylogenomics to make a substantial contribution to ANIC, the largest and most significant collection of Australian insects in the world. The collection is housed in CSIRO's Ecosystem Sciences, which also conducts research on many other aspects of insect biology (e.g., ecology, biocontrol, biosecurity and insects as model genomic systems).

\*Specifically you will:\*

- Work with members of the Systematics and Collections Program in the design of experiments to capture genomic-scale datasets in Diptera for phylogenetic analysis.
- Publish findings in peer-reviewed key journals.
- Help build CSIRO's research collections in insect diversity

\*Location: \*Black Mountain, ACT \*Salary: \*\$78K - \$85K plus up till 15.4% superannuation \*Ref no: \*ACT12/03446 \*Tenure: \*3 year term CSIRO prefers all

applications to be lodged via our Online Careers Portal. Please visit our website at <http://www.csiro.au/careers>, under “Positions Vacant” search for Reference Number: ACT12/03446

For more information contact: Dr David Yeates Director, Australian National Insect Collection CSIRO Ecosystem Sciences Adjunct Professor, The Australian National University

david.yeates@csiro.au

Brian Wiegmann <bwiegm@ncsu.edu>

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## Cairns Australia PlantSystematics

CSIRO-JCU postdoctoral fellowship at the Australian Tropical Herbarium

An exciting postdoctoral fellowship in plant systematics and evolution is available at the Australian Tropical Herbarium (CNS), Cairns, Australia ([www.ath.org.au](http://www.ath.org.au)). We seek an outstanding postdoctoral researcher to contribute to a dynamic research team. You will employ contemporary, and where appropriate develop innovative methods in the study of the origins, radiations and relationships of tropical plant and/or fungal groups of Australian relevance. Your expertise in the collection and analysis of genetic and/or morphological data will lead to high impact research outcomes. Specific projects to be undertaken will be negotiated with the successful applicant and will reflect both the applicant's expertise and interests, and CNSs research themes.

The Australian Tropical Herbarium (CNS) is a joint venture partnership researching tropical Australian plant and fungal biodiversity and evolution. CNS offers an unrivalled herbarium and spirit specimen collection of Australian tropical plants, full systematics research and field facilities including a new state of the art molecular biology laboratory. This position is offered jointly by two of the partners in the Australian Tropical Herbarium joint venture: the CSIRO and James Cook University. The CSIRO (Commonwealth Science and Industrial Research Organisation, [www.csiro.au](http://www.csiro.au)) is Australia's national science agency and one of the largest and most diverse research agencies in the world. James Cook University ([www.jcu.edu.au](http://www.jcu.edu.au)) is ranked in the worlds top 4% of universities and is Australia's leading university for environmental science and management. Situated on James Cook Universitys Cairns campus, CNS staff enjoy an enviable tropical lifestyle in

a thriving modern small city with an international airport, and ready access to the natural laboratories of the World Heritage-listed Wet Tropics rainforests, tropical savannas and the Great Barrier Reef. More information on this position including a description of duties, selection criteria and instructions on how to apply can be obtained from <http://www.jcu.edu.au/jobs/research/index.htm> (position # 12361). Applications will close on the 23rd November, 2012.

Further enquiries may be made to: Prof Darren Crayn, telephone +61 (0)7 4042 1859, e-mail [darren.crayn@jcu.edu.au](mailto:darren.crayn@jcu.edu.au) Appointment will be full-time for a fixed term of 18 months with the possibility of extension subject to additional funding. Commencing salary (before tax) will be in accordance with qualifications and experience and within the range AU\$71,027 - \$76,005 per annum (Academic Level A). Benefits include generous employer superannuation contribution and attractive options for salary packaging.

“Crayn, Darren” <[darren.crayn@jcu.edu.au](mailto:darren.crayn@jcu.edu.au)>

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## ChicagoFieldMuseum PhylogeneticSynthesis

A postdoctoral research position is available in the lab of Richard Ree ([www.reelab.net](http://www.reelab.net)) at the Field Museum of Natural History in Chicago, IL, USA, for a period of up to 2.5 years starting on or after January 2, 2013.

This position is part of the Open Tree of Life project ([www.opentreeoflife.org](http://www.opentreeoflife.org)), an NSF-funded collaborative initiative to assemble a “first-draft” phylogeny of all known species and catalyze ongoing synthesis of phylogenetic knowledge. The researcher's primary responsibility will be to contribute original research toward answering the question, “how can we build maximally comprehensive and accurate phylogenies from published results of systematic studies?”

The researcher will also be expected to participate in collaborative software development with the aim of producing free and open source bioinformatic tools and infrastructure to enable synthesis: see <http://github.com/opentreeoflife>. The ideal candidate will be experienced in phylogenetic methods and proficient in Python, Javascript/HTML5, Java, and/or C/C++ (in that order of preference). She or he will also be energetic, enthusiastic, able to think creatively, and able to work collaboratively. Experience in empirical systemat-

ics, graph databases (Neo4j), and relational databases (MySQL) is desirable.

For further information or to apply, send an e-mail cover letter with the names and e-mail addresses of two references, and a current CV, to Richard Ree (rree at fieldmuseum dot org). Application review will commence December 15 and continue until the position is filled.

rree@fieldmuseum.org

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### DalhousieU LakeTroutPopGenomics

Postdoctoral position

A postdoctoral researcher position is available in Paul Bentzen's laboratory in the Department of Biology at Dalhousie University, Halifax, Nova Scotia. Core responsibilities for the researcher will be to work with existing data sets on microsatellite and mtDNA variation in lake trout (*Salvelinus namaycush*) populations that display sympatric morphological and/or ecotypic divergence in several large lakes scattered across North America, with the aim of producing several publications for the primary literature. Opportunities will also exist for the researcher to conduct further, novel research on the population genomics of lake trout or other fish species, using approaches such as RADseq.

Qualified candidates will have or be about to receive a PhD degree, expertise in population genetic analyses and research interests in evolutionary or conservation genetics. Experience with geometric morphometric analysis and/or analysis of RAD data would also be beneficial.

The starting date is flexible, but could be as early as January, 2013. The position is for 2 years, with the possibility of renewal for a third year. Starting salary will be \$40,000 (Canadian). Interested individuals should contact Paul Bentzen (paul.bentzen@dal.ca). Formal applications should include a CV, cover letter with a statement of research interests, and sample publications, but feel free to contact me first with informal queries.

– Paul Bentzen Professor Dept. of Biology Dalhousie University 902-494-1105

Paul Bentzen <paul.bentzen@dal.ca>

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### DukeU EvolutionaryEcol

Duke University, Biology Department, Postdoctoral Position in Evolutionary Ecology

A Postdoctoral Researcher is wanted to participate in an NSF funded project on the evolutionary ecology of germination and life histories in *Arabidopsis thaliana*. The project involves fieldwork and lab experiments that investigate the genetic basis of germination responses to seasonal environmental cues and natural selection on loci associated with life-history variation. Results will be integrated in a mathematical model to predict life cycles of different genotypes in different seasonal environments. The position requires a motivating interest in evolutionary ecology and genetics and a successful publication record. Some experience with mathematical modeling is preferred.

Available as early as 1 December, 2012. One year, subject to renewal. Competitive salary and full Duke benefits. Duke University is an Equal Opportunity/Affirmative Action employer. Please send CV and names and contact information for three references to Kathleen Donohue: k.donohue@duke.edu

DEADLINE FOR CONSIDERATION: 1 DECEMBER, 2012

– Kathleen Donohue Professor Department of Biology Duke University Box 90338 Durham, NC 27708 USA

Office: 919 613-7467 Lab: 919 613-7468 Fax: 919-660-7293 k.donohue@duke.edu

Kathleen Donohue <k.donohue@duke.edu>

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### Hobart Australia TheoretPhylogenetics

FACULTY OF SCIENCE, ENGINEERING & TECHNOLOGY SCHOOL OF MATHEMATICS & PHYSICS HOBART Postdoctoral Research Fellow (Level A) Mathematics and Statistics - Phylogenetics (Ref No HAN 273/12)

Applications are invited for appointment to this position, which will be offered on a full-time fixed-term ba-



sis, commencing on at the beginning of Semester 1, 2013, this appointment will be for a period of 18 months.

The position is funded by a Human Frontier Science Program grant which was awarded to use ancient and modern DNA of Sacred Ibis to investigate questions about microsatellite evolution and to test support for different demographic scenarios for ancient Sacred Ibis. The project will be carried out in collaboration with Griffith University and other partner institutions (American University in Cairo, University of Copenhagen). The successful candidate will work on both (1) the development of inference methods for fitting models of microsatellite evolution; and (2), testing different demographic models for Sacred Ibis populations to determine if there are population bottlenecks consistent with domestication.

The School seeks a highly motivated researcher, to work with the theoretical phylogenetics team. The successful applicant will be expected to have an independent research programme and an excellent publication record in the area of mathematical evolution. It is expected that the applicant will have excellent written and verbal communication skills, and he/she may be expected to assist with the supervision of honours and postgraduate students. The appointee will demonstrate effective interpersonal skills and ability to work cooperatively in a team environment.

The appointment will be at Academic Level A and will have a total remuneration package of up to \$90,035 per annum, (comprising salary within the range \$71,920 - \$76,953 plus 17% superannuation, with the option of an additional 3% salary loading in exchange for 14% instead of 17% superannuation). The level of appointment will be commensurate with qualifications and experience.

For further information about the position please contact Dr Barbara Holland, on telephone (03) 6226 1990, fax (03) 6226 2410 or email Barbara.Holland@utas.edu.au.

The closing date for receipt of your application is 10 December 2012.

The following occupational health and safety risk factors have been identified for this position:

Keyboard/Mouse Work, Sitting (including travelling between campuses) and/or standing for extended periods, Working under pressure, including working to constant deadlines and/or in the resolution of conflict

All potential applicants should take these risk factors into consideration when determining their capacity to undertake the duties of the position.

You may submit your application by post or fax - address and fax numbers are provided on the Final checklist for Applicants in the Job application Package - alternatively you may email your application to Nicole.Brown@utas.edu.au

Nicole Brown <Nicole.Brown@utas.edu.au>

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## INRA Nancy France FungalPathogenEvolution

A 2-years postdoctoral position is available at INRA (<http://www.international.inra.fr/>) in Nancy, France, starting from March 2013. The research proposal is focused on the study of the adaptation of the poplar rust fungus (*Melampsora larici-populina*) to the poplar varietal landscape. Our goal is to integrate approaches of population genetics, landscape epidemiology and evolution of life history traits of the poplar rust fungus in order to: (i) identify genetic signatures of adaptation of the pathogen's populations to the poplar varietal landscape; and (ii) assess the ability of the pathogen to adapt to quantitative resistances.

Candidates should have a good background in ecology, evolutionary biology, and population genetics. Knowledge of host - parasite interactions, especially plant pathology, is not mandatory but would be appreciated.

The postdoctoral position will be funded by the INRA Metaprogramme SMaCH (Sustainable Management of Crop Health) and AgreeSkills. The selected candidate(s) and the hosting lab will build a detailed research project, which will subsequently be evaluated by AgreeSkills. The AgreeSkills eligibility requirements and selection procedure are detailed at <http://www.agreeskills.eu/> Applicants should send a letter of interest and a CV, including the names and contact details of two or three referees, to Pascal Frey (frey@nancy.inra.fr) before November 1<sup>st</sup> 2012 (deadline for application at AgreeSkills November 15<sup>th</sup> 2012).

If you know of anyone who might be a good fit for this position please pass on this information to him or her. Thank you. Apologies for cross postings.

Best regards,

Dr Pascal FREY INRA, University of Lorraine Forest Pathology Group UMR1136 "Tree - Microbe Interactions" F-54280 Champenoux FRANCE

Phone: 33 383 394 056 Fax: 33 383 394 069  
 E-mail: [frey@nancy.inra.fr](mailto:frey@nancy.inra.fr) [http://mycor.nancy.inra.fr/EFPFteam/?page\\_id&Pascal](http://mycor.nancy.inra.fr/EFPFteam/?page_id&Pascal)  
 Frey <[frey@nancy.inra.fr](mailto:frey@nancy.inra.fr)>

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## KielU PhD-PDF EvolutionaryGenomics

Postdoc and PhD position in evolutionary genomics - Kiel University, Germany

Topic: Evolutionary genomics of host-parasite interactions

Host-parasite coevolution is predicted to have complex consequences on the genetic architecture of both interacting species. These consequences may relate to the mechanisms that (i) are of direct relevance to the interaction (e.g., resistance, pathogenicity), (ii) associate with a possible cost of co-adaptation (e.g. life-history trade-offs), or (iii) increase evolutionary rates (e.g., recombination). The advertised positions will be involved in the genomic and population genetic analysis of host and parasite material generated through evolution experiments within the German priority programme SPP 1399 on host-parasite coevolution (See: <http://ieb.uni-muenster.de/spp/>). The project aims at understanding the genomic changes that result from such coevolutionary interactions in three model taxa, the micro-parasite *Bacillus thuringiensis* and two of its invertebrate hosts, the nematode *Caenorhabditis elegans* and the insect *Tribolium castaneum*.

The project is funded by the German Science Foundation (postdoc position according to 100% TV-L 13; PhD position according to 65% TV-L 13). It will be based in the Department of Evolutionary Ecology and Genetics at the University of Kiel, Northern Germany, led by Hinrich Schulenburg ([www.uni-kiel.de/zoologie/evoecogen/](http://www.uni-kiel.de/zoologie/evoecogen/)). The positions will be for three years; extensions may be possible. The project is part of the German priority programme SPP 1399 on host-parasite coevolution and thus includes comprehensive interactions with various research groups across Germany and abroad (e.g., Portugal and US). The department itself provides an international and interactive atmosphere, while Kiel University and connected institutes (e.g., Max Planck Institute in Ploen) offer a stimulating research environment with a particular focus on evolutionary biology and also *C. elegans* genetics. The city of Kiel is a medium-sized pleasant town

located at the coast of the Baltic Sea. It is the capital of the most Northern state of Germany, Schleswig-Holstein. It offers many opportunities for leisure activities, including theatres, an opera, the Schleswig-Holstein classical music festival, the heavy metal festival in Wacken, sailing, surfing, cycling, and the famous festivities of the "Kieler Woche" – one of the largest sailing events in Europe.

Requirements for positions: PhD (for postdoc position) or Master (for PhD position) in biology, bioinformatics, or related topic; high motivation; excellent background in bioinformatics and/or genomic analysis and/or population genetics; teamwork; ideally some experience with host-parasite interactions; fluency in English.

Please send applications with CV, one-page statement of research interests, and two references, as a pdf-file by email to [hshulenburg@zoologie.uni-kiel.de](mailto:hshulenburg@zoologie.uni-kiel.de). Deadline for applications: 19th December 2012. Start of position: April 2013 or soon afterwards. Women are especially encouraged to apply. Severely handicapped people will be preferentially considered in case of equivalent qualifications. For further details + questions, send an email to [hshulenburg@zoologie.uni-kiel.de](mailto:hshulenburg@zoologie.uni-kiel.de).

– Hinrich Schulenburg

Zoological Institute Christian-Albrechts-Universität zu Kiel Am Botanischen Garten 1-9 24118 Kiel Germany Tel: +49-431-880-4143/4141 Fax: +49-431-880-2403 Email: [hshulenburg@zoologie.uni-kiel.de](mailto:hshulenburg@zoologie.uni-kiel.de) Web: [www.uni-kiel.de/zoologie/evoecogen/](http://www.uni-kiel.de/zoologie/evoecogen/) Hinrich Schulenburg <[hshulenburg@zoologie.uni-kiel.de](mailto:hshulenburg@zoologie.uni-kiel.de)>

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## Leeds Edinburgh TropicalForestBiodiversity

Postdoctoral Fellowship in tropical forest evolution and biodiversity

Job Summary

Fixed term for 24 months, available from 1 February 1 2013

This post is part of the NERC funded project 'Niche Evolution of South American Trees and its Consequences'. The project aims to make a fundamental advance in our knowledge of the processes that have created patterns of diversity in the tropics by gaining a better understanding of the evolutionary timing and rate of biome switching in plant lineages. Such patterns

of biome switching are not only of interest for studies of plant diversification, but also have far-reaching implications for understanding forest ecology and the conservation of evolutionary (phylogenetic) diversity as a result of land-use or climate change.

The project focuses on the rain forest, seasonally dry forest and savanna biomes of South America, and the postdoc will take a leading role in fieldwork, data generation, data analysis and paper-writing.

The project aims to:

integrate plot and community survey data from all three biomes from a wide variety of sources to create a dataset of floristic composition unparalleled in its ecological breadth and detail, spanning ~1300 sites. We will work at on all tree genera and at the species level in Leguminosae (the legume family) across all plots

quantify the climatic and edaphic niches of: (i) all adequately sampled genera; and (ii) all adequately sampled species of Leguminosae

reconstruct phylogenetic relationships of: (i) all genera found at all inventory sites in all biomes; and (ii) of species of Leguminosae found at >10 plots across all biomes, using existing and de novo sequence data

These datasets will then be used to understanding the timing, rate and nature of biome switching and niche evolution in South American trees.

You will have a completed or soon to be completed (by start of the post) PhD with a background in plant evolution, systematics, ecology, or biogeography. You will need to have fieldwork experience and good skills in quantitative scientific methods, allied to good communication skills. An ability to work in an international team will also be needed, along with some level of fluency in Spanish and/or Portuguese.

The work will be based in the UK at Leeds (first 9 months) and Edinburgh (subsequent 15 months) although you will work closely with all partners involved in the project in Brazil, Peru and Bolivia. The first part of the post will focus mainly on fieldwork and data collection and the second part principally on data analysis and writing.

Further details concerning the Royal Botanic Garden Edinburgh can be found at <http://www.rbge.org.uk/> and for the School of Geography, University of Leeds at: [www.geog.leeds.ac.uk](http://www.geog.leeds.ac.uk) Salary £31,000- £34,000 p.a.

Informal enquiries may be made to Prof Toby Pennington (t.pennington@rbge.ac.uk; +44 (0)131 248 2818), Dr Kyle Dexter (kgdexter@gmail.com, +44 (0) 131 248 2964) and/or Dr Tim Baker (T.R.Baker@leeds.ac.uk +44 (0)113 343 8352).

A job description and person specification can be downloaded from [www.rbge.org.uk/about-us/vacancies](http://www.rbge.org.uk/about-us/vacancies) To apply, please send a covering letter explaining your suitability for the post and a CV as well as a completed equal opportunities questionnaire to the HR Team at The Royal Botanic Garden Edinburgh, 20a Inverleith Row, Edinburgh, EH3 3LR or by e-mail to [recruitment@rbge.org.uk](mailto:recruitment@rbge.org.uk). Applications should be received no later than Monday, 17 December 2012.

If you have not heard from us by 31 January 2013, please assume your application has been unsuccessful. No recruitment agencies please.

– The Royal Botanic Garden Edinburgh is a Charity registered in Scotland (No SC007983)

Gillian Cooper <[G.Cooper@rbge.ac.uk](mailto:G.Cooper@rbge.ac.uk)>

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## Lehigh University Genomics Speciation

A postdoctoral position is available in the laboratory of Dr. Amber M. Rice, in the Department of Biological Sciences at Lehigh University (Bethlehem, Pennsylvania, USA). The postdoc will be expected to lead several population genomics projects aimed at investigating the genetics underlying local adaptation, character displacement, and reproductive isolation in populations of spadefoot toads. The successful applicant will also have the opportunity to develop their own projects, provided the projects overlap with the lab's research goals. The ideal candidate will have experience in applying next generation sequencing technologies (e.g., RADseq) to natural systems, basic experience in bioinformatics, and will have successfully written and published articles in scientific journals.

The Rice lab utilizes population genetics, population genomics, and field work on wild populations to address questions related to speciation and population divergence. More information on research in the Rice lab can be found at <http://www.lehigh.edu/~inbios/-faculty/Rice.html>. Information about the Department of Biological Sciences at Lehigh University can be found at <http://www.lehigh.edu/~inbios/index.html>. To apply for the position, please send a CV and a cover letter describing your background and research interests to Amber Rice (contact information below). Please also arrange to have two letters of recommendation sent directly to Amber Rice either by email or postal mail.

Amber Rice Department of Biological Sciences Lehigh University 111 Research Drive, B217 Bethlehem, PA 18015

amr511@lehigh.edu

The position will remain open until filled by a suitable candidate, but all applications received by December 31, 2012 will be given full consideration. Current PhD candidates intending to finish their degree requirements by spring 2013 are encouraged to apply. The position will run for two years, with opportunities to extend the position depending on funding availability. Salary will be based on the standard NIH scale.

Questions about the position may be directed to Amber Rice at

amr511@lehigh.edu

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### LouisianaStateU EvolutionaryBiology

A postdoctoral fellowship is available in the lab of Jake Esselstyn at Louisiana State University beginning Fall 2013. The position description below describes a general field of research. The particular project to be pursued by the successful applicant is flexible, but should fit within the broad context described in the position description. To apply, visit the LSU jobs site (link below). Please contact me (esselstyn@lsu.edu) with any questions or to discuss potential projects.

POSTDOCTORAL RESEARCHER Biological Sciences College of Science Louisiana State University

Responsibilities: Investigate processes of species, ecological, and morphological diversification through the collection and analysis of new data from the field and laboratory. Responsible for performing cutting-edge research on phylogenetic relationships, species limits, biogeography, and community assembly of mammals. Responsibilities will include the collection of new data in the lab and field, supervision of students and a technician, experimental design, and publication of results.

Required Qualifications: Ph.D. in Biological Sciences or related discipline. Additional Qualifications Desired: Experience with analyses of diversification, adaptive radiation, community assembly, population genetics, and geographic information systems.

Work will be conducted in the laboratory of Dr. Jake Esselstyn at Louisiana State University; for more

information please contact Dr. Esselstyn at [esselstyn@lsu.edu](mailto:esselstyn@lsu.edu). An offer of employment is contingent on a satisfactory pre-employment background check. Application deadline is January 18, 2013, or until a candidate is selected. Position will begin in August 2013. Apply online and view a more detailed ad at: <https://lsusystemcareers.lsu.edu> Position #023670

LSU IS AN EQUAL OPPORTUNITY/EQUAL ACCESS EMPLOYER

Quick link at ad URL: <https://lsusystemcareers.lsu.edu/applicants/Central?quickFind=55295> Jake Esselstyn Biology Department McMaster University Life Sciences Building, Room 428 Hamilton ON L8S 4K1 Canada

phone: 905.525.9140 ext. 26994 fax: 905.522.6066 [http://www.biology.mcmaster.ca/faculty/evans/jake\\_esselstyn/](http://www.biology.mcmaster.ca/faculty/evans/jake_esselstyn/) Jake Esselstyn <jessel@MCMASTER.CA>

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### Lyon France MouseEvolution

POST-DOCTORAL POSITION: MOUSE MOLAR EVOLUTION AND DEVELOPMENT IGFL, Lyon, France

In the *Mus* genus, some mice feature a “prestyle” (kind of ridge) on the anterior part of their first upper molar: this has been observed repeatedly in island populations, as well as in several laboratory strains, and correlates with a large body size. Our lab is involved in a collaborative project aiming at deciphering the processes beyond this remarkable case of parallel teeth evolution.

A post-doctoral fellow will be recruited to take charge of the evo-devo aspects of this work. In particular, she/he will look at the embryonic origin of this prestyle in lab strains selected for large body size and in strains established from wild-trapped mice. She/he will notably test a model proposed in Renaud et al. (Plos One 6(5):e18951 2011), whereby the evolution of the prestyle may involve a variation in the degree of incorporation of an abortive tooth bud found at the anterior edge of the developing first molar.

The candidate will demonstrate high motivation and the ability to independently manage aspects of the project determined to be her/his responsibility, while interacting with a collaborative group. A good general background in developmental biology/morphogenesis is essential. Good knowledge of evolutionary developmen-

tal biology and/or a previous experience with a rodent model would be an asset. Ideally, the candidate will have skills in staining and imaging methods (e.g. immunostainings, confocal microscopy) and some training with dissecting/manipulating embryos under a stereomicroscope.

A 18-months position (ANR grant funded) is on offer, and the candidate will be provided assistance to find follow funding. Expected starting date: between January 2013 and September 2013.

The Molecular Zoology group is part of the Institute for Functional Genomics of Lyon. We have been interested in rodent molar development and evolution since 2004. In September 2012, we moved to a newly built and fully equipped building in Lyon. The institute hosts international teams and largely uses English for internal communication. <http://igfl.ens-lyon.fr> Contact: CV and at least 2 referee contacts can be sent to:

sophie.pantalacci@ens-lyon.fr

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## NetherlandsInstituteEcology EcoEvolutionaryDynamics

### LONG-TERM POST-DOC POSITION IN POPULATION / EVOLUTIONARY ECOLOGY

Department of Animal Ecology – Netherlands Institute of Ecology

**JOB DESCRIPTION:** This post-doc position is part of a new research group that studies how individuals and populations respond to environmental variability. The post-doc will analyze existing long-term datasets on birds and develop and apply theoretical models to study the eco-evolutionary dynamics of trait change and population change in the wild. The project aims to understand how individuals respond (microevolution, plasticity, demographic change) to extreme climatic events –such as flooding of nesting sites— and whether the response will be fast enough for populations to keep up with climate change. The post-doc will interact with other group members and collaborators working on field-based projects; a limited amount of fieldwork may be part of the project.

**REQUIREMENTS:** We are looking for an independent, highly motivated and creative person with good social skills. Prerequisites are (1) a recent PhD in population, behavioural or evolutionary ecology, (2) a high-quality publication record, (3) excellent skills in mathematical

and statistical modelling, and (4) an interest in both evolutionary and ecological processes and how they interact. Experience with long-term datasets and fieldwork on birds is a bonus. Applicants should be willing to start early 2013.

**APPOINTMENT:** The appointment will be on a temporary basis for a maximum of almost 4 years, ending 1-1-2017. Salary depends on training and work experience. The maximum gross monthly salary coming with a full-time appointment will amount to EUR3.755,00 (scale 10 of the Collective Agreement for Dutch Universities). In addition we offer an 8% holiday pay, an end-of-year bonus, and extensive package of fringe benefits.

**LOCATION:** The Netherlands Institute of Ecology (NIOO) is a top research institute of the Royal Netherlands Academy of Arts and Sciences and focuses on fundamental and strategic research. The Department of Animal Ecology consists of various research groups studying the behavioural, evolutionary and/or population ecology of birds. NIOO is located in the university town of Wageningen, situated close to all major cities in the Netherlands. The vibrant town offers a living environment surrounded by beautiful scenery, plenty of entertainment, bars, sports, and cultural activities.

**INFORMATION:** Additional information about this position (vacancy number AnE-012716) is available upon request from Dr. Martijn van de Pol ([martijn.vandepol@anu.edu.au](mailto:martijn.vandepol@anu.edu.au)). More information about the NIOO and the department can be found on [www.nioo.knaw.nl](http://www.nioo.knaw.nl). **APPLICATIONS:** Please send your application including a cover letter detailing your motivation for and expectations from this position, your CV including a summary of your past research, and contact information for three references to [vacature@nioo.knaw.nl](mailto:vacature@nioo.knaw.nl)

**CLOSING DATE:** 13 January 2013, interviews will be early February.

Martijn van de Pol

[martijn.vandepol@anu.edu.au](mailto:martijn.vandepol@anu.edu.au)

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## NorthernArizonaU BacterialGenomics

Postdoctoral Scholar in Bacterial Genomics Northern Arizona University, Job ID: 600047



**JOB DESCRIPTION:** The Center for Microbial Genetics and Genomics at Northern Arizona University seeks a Postdoctoral Scholar to perform comparative genomics on *Clostridium botulinum*, the bacterium responsible for botulism. Research will be conducted under the guidance of Dr. Jeff Foster (<http://www.mggen.nau.edu/jfoster>). The Center for Microbial Genetics and Genomics is a large (60+ employees), state-of-the-art academic research facility, focusing largely on genomics of bacterial pathogens. Work on this project would include genetic and genomic analyses from a large number of *C. botulinum* isolates, with a focus on bioinformatics using Illumina sequences, phylogenetic analyses, and potentially microbiological lab work. This position MAY require working in a BSL3 environment growing and extracting DNA from *C. botulinum*, but is not required. Maintaining a positive attitude in a team-based workplace is essential.

**MINIMUM QUALIFICATIONS:** PhD in Biology, Computer Science or related field with demonstrated expertise in microbial genomics.

**PREFERRED QUALIFICATIONS:** \*Experience in bacterial genomics. \*Knowledge of next-generation sequencing and analysis, especially from Illumina platforms. \*Knowledge of basic microbiology, particularly lateral gene transfer in bacteria. \*Availability to start by January 2, 2013 \*A record of publication \*Experience with collaborative interdisciplinary research

**SALARY:** \$50,000 per year for two years, plus benefits

**GENERAL:** This position has been identified as a safety/security sensitive position. Therefore, per AZ Revised Statute, Northern Arizona University requires satisfactory results for the following: a criminal background investigation, employment history investigation, degree verification (in some cases) and fingerprinting. This position may require an acceptable Department of Justice Select Agent Program Security Risk Assessment. \*Work location: The Postdoctoral Scholar must work full-time at the Flagstaff Mountain Campus \*Relocation expenses of up to \$2,500 will be available in accordance with university policy. \*Northern Arizona University is an EEO/AA employer.

**DEADLINE:** To ensure full consideration, applications should be received by December 15, 2012.

**APPLICATION:** To apply and for the official nitty gritty details see staff openings at NAU Human Resources, Job ID 600047, posted on 11/06/2012:

[https://www.peoplesoft.nau.edu/psp/ps90prta/EMPLOYEE/HRMS/c/HRS\\_HRAM.HRS\\_CE.GBL?Page=HRS\\_CE\\_JOB\\_DTL&Action=A&JobOpeningId=](https://www.peoplesoft.nau.edu/psp/ps90prta/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_CE.GBL?Page=HRS_CE_JOB_DTL&Action=A&JobOpeningId=600047&SiteId=1&PostingSeq=1)

[600047&SiteId=1&PostingSeq=1](https://www.peoplesoft.nau.edu/psp/ps90prta/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_CE.GBL?Page=HRS_CE_JOB_DTL&Action=A&JobOpeningId=600047&SiteId=1&PostingSeq=1) No need to fill in all of the past job portions of the NAU application or silly things like your high school, awards, job training, name of your first pet, etc. If it is in your CV, we'll see it. All we really need is your basic contact information plus a cover letter with a BRIEF description of research interests, CV, and contact information for at least 3 references uploaded into the NAU Human Resources system as one pdf file.

For additional information contact: Jeff Foster, [jeff.foster@nau.edu](mailto:jeff.foster@nau.edu)

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## NorthernArizonaU BatPopulationGenetics

Postdoctoral Scholar in Bat Population Genetics at Northern Arizona University

**JOB DESCRIPTION:** The School of Forestry seeks a Post-Doctoral Scholar to conduct work on population genetics of Arizona bat populations in relation to wind power development. The Post-Doctoral Scholar will work under the mentorship of Dr. Carol Chambers in Forestry and Dr. Jeff Foster in Biological Sciences. Molecular genetic approaches to investigate scientifically intractable species, such as bats, have recently come of age, and provide an effective means to understand basic ecology and populations. This project will dovetail novel genetic analyses for estimating bat population sizes and migration routes with GIS-based landscape genetic and species distribution models, thereby generating more realistic mitigation thresholds for wind energy developers. We will focus on two species, the uncommon spotted bat (*Euderma maculatum*) and the common Arizona myotis (*Myotis occultus*). The Post-Doctoral Scholar will use the following skills: 1. minimally-invasive genetic sampling, 2. effective population size estimation, 3. ancient DNA techniques, and 4. landscape genetic methods.

**MINIMUM QUALIFICATIONS:** PhD in Biology or related field with expertise in molecular genetic approaches.

**PREFERRED QUALIFICATIONS:** Candidates with experience in all or many of these areas will be given preference: \*Experience with minimally invasive and ancient DNA sampling, including DNA extractions from sources such as fecal samples, museum samples, and cheek swabs/saliva. \*Experience capturing and

handling bats, including current rabies vaccination. \*Experience in mammalian genetics. \*Experience in molecular genetic techniques, including PCR, Sanger sequencing, fragment analysis and microsatellites. \*Experience in population genetic analyses. \*Experience in landscape genetic analyses. \*Availability to start by January 2, 2013 \*A record of publication \*Experience with collaborative interdisciplinary research

GENERAL INFO: \*A criminal and employment history background investigation will be performed prior to employment offer. \*Work location: The Postdoctoral Scholar must work full-time at the Flagstaff Mountain Campus \*Appointment Period: Two calendar years commencing on the date of appointment. \*Relocation expenses of up to \$2,500 will be available in accordance with university policy. \*Northern Arizona University is an EEO/AA employer.

SALARY: \$50,000 per year for two years, plus benefits

APPLICATION: To apply, submit an application at <http://hr.nau.edu/node/2797> (click on Careers@NAU... find jobs posted Nov 6, and click on Job ID 600049) by December 6. The application will require a letter of interest detailing qualifications for the position, your curriculum vitae, and contact information for 3 professional references (name, institution, email address, phone number). For more information, contact Carol Chambers (info below).

Carol Chambers Professor, School of Forestry, Northern Arizona University, Flagstaff AZ 86011-5018 USA Phone: 928-523-0014 E-mail: Carol.Chambers@nau.edu

Jeff.Foster@nau.edu

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## NorthernArizonaU BurkholderiaPlagueGenomics

Postdoctoral Scholar in Bacterial Genomics Northern Arizona University, Job ID: 600045

JOB DESCRIPTION: The Center for Microbial Genetics and Genomics at Northern Arizona University seeks a Postdoctoral Scholar to perform comparative genomics on *Burkholderia pseudomallei*, the bacterium responsible for melioidosis, and *Yersinia pestis*, the bacterium responsible for plague. Research will be conducted under the guidance of Dr. Dave Wagner, with additional guidance from Dr. Greg Caporaso. The Center for Microbial Genetics and Genomics is a large (60+

employees), state-of-the-art academic research facility, focusing largely on genomics of bacterial pathogens. Work on this project will include genetic and genomic analyses of a large number of *Burkholderia* and *Y. pestis* isolates, with a focus on bioinformatics using Illumina sequences, phylogenetic analyses, and, potentially, microbiological lab work. Maintaining a positive attitude in a team-based workplace is essential.

MINIMUM QUALIFICATIONS: PhD in Biology, Computer Science or related field with demonstrated expertise in microbial genomics.

PREFERRED QUALIFICATIONS: \*Experience in bacterial genomics. \*Knowledge of next-generation sequencing and analysis, especially from Illumina platforms. \*Knowledge of basic microbiology, particularly lateral gene transfer in bacteria. \*Availability to start by January 2, 2013 \*A record of publication \*Experience with collaborative interdisciplinary research

SALARY: \$50,000 per year for two years, plus benefits

GENERAL: This position has been identified as a safety/security sensitive position. Therefore, per AZ Revised Statute, Northern Arizona University requires satisfactory results for the following: a criminal background investigation, employment history investigation, degree verification (in some cases) and fingerprinting. This position may require an acceptable Department of Justice Select Agent Program Security Risk Assessment. \*Work location: The Postdoctoral Scholar must work full-time at the Flagstaff Mountain Campus \*Relocation expenses of up to \$2,500 will be available in accordance with university policy. \*Northern Arizona University is an EEO/AA employer.

DEADLINE: To ensure full consideration, applications should be received by December 15, 2012.

APPLICATION: To apply, and for additional details, see staff openings at NAU Human Resources, Job ID 600045, posted on 11/06/2012:

[https://www.peoplesoft.nau.edu/psp/-ps90prta/EMPLOYEE/HRMS/c/-HRS\\_HRAM.HRS\\_CE.GBL?Page=-HRS\\_CE\\_JOB\\_DTL&Action=A&JobOpeningId=-600047&SiteId=1&PostingSeq=1](https://www.peoplesoft.nau.edu/psp/-ps90prta/EMPLOYEE/HRMS/c/-HRS_HRAM.HRS_CE.GBL?Page=-HRS_CE_JOB_DTL&Action=A&JobOpeningId=-600047&SiteId=1&PostingSeq=1) Along with the application, please provide a current CV, a cover letter with a BRIEF description of research interests, and contact information for at least 3 references uploaded into the NAU Human Resources system as one pdf file.

For additional information contact: Dave Wagner,

Dave.Wagner@nau.edu

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## NorthernArizonaU MicrobialGenomics

A post-doctoral scholar position is available to work with Drs. Talima Pearson, Gregory Caporaso and other members of the Center for Microbial Genetics and Genomics (MGGen) at Northern Arizona University. Please contact Talima Pearson for further information, but all applications should be made on on-line for Job ID 600046:

[https://www.peoplesoft.nau.edu/psp/-ps90prta/EMPLOYEE/HRMS/c/-HRS\\_HRAM.HRS\\_CE.GBL?Page=-HRS\\_CE\\_HM\\_PRE&Action=A&SiteId=1](https://www.peoplesoft.nau.edu/psp/-ps90prta/EMPLOYEE/HRMS/c/-HRS_HRAM.HRS_CE.GBL?Page=-HRS_CE_HM_PRE&Action=A&SiteId=1) Job description: This position will entail the development and implementation of techniques for sensitive and specific strain-level identification of microorganisms from complex communities using techniques such as identification of clade-specific DNA signatures of bacteria at various phylogenetic levels, development of assays for high-throughput and thorough characterization of samples, or development of more accurate bioinformatics tools for taxonomic assignment of metagenomic sequence reads. These tools will be used to generate data from a variety of projects ranging from microbial communities, population analyses, and individual strain characterization. The successful applicant will be expected to write manuscripts to publish results from these and previously collected datasets. The postdoc will also aid in grant writing. Funding for this position is available for 2 years with the possibility of continuation contingent on funding. This position includes a salary of \$50,000/year and modest funds to support research and travel.

Required qualifications: 1. A PhD in Biology or a related field. 2. A strong background in bioinformatics and molecular genetics. 3. Experience working on the unix/linux/mac command line. 4. Experience with python, perl, java, C or a similar language.

Preferred qualifications: 1. Experience working on the Amazon Web Services cloud and working with bioinformatics tools including QIIME, MG-RAST, BLAT, and HMMER. 2. Familiarity with public sequence databases and experience working with large data files (e.g., greater than 10GB in size). 3. Experience working with next-generation sequence data (especially Illumina). 4. Experience in developing and running bioinformatics pipelines for genomic comparisons.

5. Familiarity and experience with real time PCR technologies and primer design. 6. Experience mentoring undergraduate students in research. 7. Availability to start by January 1, 2013. 8. A strong record of publication. 9. Experience with collaborative interdisciplinary research.

Research projects: The successful postdoc will be involved in ongoing research projects that include, but are not limited to: 1. Characterizing microbial communities associated with pathogenic *Leptospira* species using 16S rRNA metagenomic surveys. 2. Phylogeographic and evolutionary characterization of *Bacillus anthracis* and *Coxiella burnetii*. 3. Population dynamics and generation of genetic diversity in bacterial pathogens.

GENERAL INFORMATION: As an employer in the state of Arizona, NAU is required to participate in the federal E-Verify program that assists employers with verifying new employees' right to work in the United States.

Northern Arizona University is a committed Equal Opportunity/Affirmative Action Institution. Women, minorities, veterans and individuals with disabilities are encouraged to apply. NAU is responsive to the needs of dual career couples.

Talima Pearson, Ph.D. Assistant Research Professor, Dept. of Biological Sciences Assistant Director, Center for Microbial Genetics and Genomics Northern Arizona University Flagstaff, AZ 86011. USA office (928) 523-4290 fax (928) 523-4015 [www.mggen.nau.edu/tpearson](http://www.mggen.nau.edu/tpearson) Talima.Pearson@nau.edu

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## NorthernIllinoisU MicrobialEvolutionaryBiol

A postdoctoral research position is available in the lab of Wesley Swingley at Northern Illinois University in DeKalb, IL for a period of up to 2.5 years. Details are listed below and on the university website at <http://www.hr.niu.edu/Employment/-JobDetail.cfm?Job=8358>. Northern Illinois University is seeking to fill a postdoctoral position available with anticipated start date of January 2, 2013. The successful applicant will perform research funded by the NASA Exobiology and Evolutionary Biology program titled, 'Exploration of 'biological dark matter' in geothermal spring.' <https://astrobiology.nasa.gov/articles/2011-11/04/studying-biologys-dark-matter/>. This project is

a coordinated research effort through four universities with a potential for further collaboration and on-site visits as well as conference travel.

**Research Description:** Research will focus primarily on the bioinformatic analysis of single-cell genomic and metagenomic DNA sequences. Metabolic reconstruction of uncultured Archaeal and Bacterial taxa will be performed through the adaptation and development of advanced bioinformatic techniques.

The Department of Biological Sciences at NIU provides opportunities for collaboration with a diverse array of researchers in all fields of biology. For further information and description of the Northern Illinois University campus and the town of DeKalb, IL please see the project URL above, Dr. Swingley's site at <http://www.bios.niu.edu/swingley/swingley.shtml> and the NIU homepage at <http://www.niu.edu/index.shtml>. **REQUIRED SKILLS** A Ph.D. in Biology with emphasis on Microbial Ecology or related field. A general working knowledge of microbial metabolism. Preferred candidates will have familiarity with bioinformatic techniques and scripting languages such as Perl, Java or SQL.

**MATERIALS** Apply electronically to: [swingleypostdoc@niu.edu](mailto:swingleypostdoc@niu.edu). Applications should include: cover letter, CV and three current letters of recommendation. Questions should be directed to Dr. Wes Swingley at [wswingley@niu.edu](mailto:wswingley@niu.edu).

**Deadline:** Review of applications will begin November 9, 2012 and continue until the position is filled.

In compliance with the Illinois Campus Security Act, before an offer of employment is made, the university will conduct a pre-employment background investigation, which includes a criminal background check.

NIU values diversity in its faculty, staff and student body. We strongly encourage applications from candidates who can serve as role models to our diverse student population.

In accordance with applicable statutes and regulations, NIU is an equal opportunity employer and does not discriminate on the basis of race, color, national origin, ancestry, sex, religion, age, physical and mental disability, marital status, veteran status, sexual orientation, gender identity, gender expression, political affiliation, or any other factor unrelated to professional qualifications, and will comply with all applicable federal and state statutes, regulations and orders pertaining to nondiscrimination, equal opportunity and affirmative action. NIU recognizes Dual Career issues.

[wswingley@msn.com](mailto:wswingley@msn.com)

## OxfordU 6 PathogenGenomics

We are seeking exceptional, creative, quantitatively minded scientists to join our multidisciplinary team of researchers using population genomics to understand the evolution and transmission of human pathogens. We are seeking to appoint a number of promising young researchers to extend our existing strengths in the areas of phylogenomics, statistical genetics and bioinformatics.

Based in the Nuffield Department of Medicine, we are studying a range of bacterial and viral pathogens including tuberculosis, MRSA, *Clostridium difficile* and norovirus. Our research interests include within-host evolution, the genetic basis of virulence, transmission dynamics and outbreak investigation via real-time genomics.

A major translational goal of our project is to exploit the transformative effect of population genomics on bacteriology to improve routine clinical practice in public health and microbiology laboratories.

Our research is supported by the UKCRC Modernising Medical Microbiology Consortium, the Health Innovation Challenge Fund, the NHS National Institute for Health Research and the Oxford Biomedical Research Centre, and pursued in collaboration with clinical colleagues in Leeds, Birmingham and Brighton, the Health Protection Agency and the WTSI.

The positions are:

Population/Statistical Geneticist (three posts):  
[https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq\\_jobspec\\_version\\_4.jobspec?p\\_id=105437](https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq_jobspec_version_4.jobspec?p_id=105437)

[https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq\\_jobspec\\_version\\_4.jobspec?p\\_id=105456](https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq_jobspec_version_4.jobspec?p_id=105456)

Computational Bioscientist/Bioinformatician (two posts): [https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq\\_jobspec\\_version\\_4.jobspec?p\\_id=104655](https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq_jobspec_version_4.jobspec?p_id=104655) [https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq\\_jobspec\\_version\\_4.jobspec?p\\_id=105424](https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq_jobspec_version_4.jobspec?p_id=105424)

Medical Statistician (one post): [https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq\\_jobspec\\_version\\_4.jobspec?p\\_id=105441](https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq_jobspec_version_4.jobspec?p_id=105441)

For examples of recent papers see: <http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2812%2970277-3/fulltext> <http://www.pnas.org/content/109/12/4550.full> <http://www.pnas.org/content/109/12/4550.full>



bmjopen.bmj.com/content/2/3/e001124.full.pdf+html  
<http://www.nature.com/nrg/journal/v13/n9/pdf/-nrg3226.pdf> <http://www.plospathogens.org/article/info%3Adoi%2F10.1371%2Fjournal.ppat.1002874>

For more information visit: <http://www.modmedmicro.ac.uk>  
<http://www.oxfordmartin.ox.ac.uk/projects/view/127>

Prof. Derrick Crook and Dr. Danny Wilson Nuffield Department of Medicine University of Oxford

[daniel.wilson@ndm.ox.ac.uk](mailto:daniel.wilson@ndm.ox.ac.uk)

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## OxfordU PopulationGenetics

A prestigious James Martin Fellowship funded by the Oxford Martin School is available in my pathogen genomics research group for a highly motivated evolutionary geneticist interested in developing cutting edge population genetics/phylogenetics methods for the analysis of high-throughput whole genome sequencing data to better understand the evolution and epidemiology of the major pathogens HIV and Hepatitis C Virus.

The position, which is part of the Curing Chronic Viral Infections project, is fully funded for three years and is affiliated with the Institute for Emerging Infections, the Modernising Medical Microbiology consortium, the Peter Medawar Building for Pathogen Research and the Nuffield Department of Medicine. The ideal candidate will have a track record in statistical or computational genetics and experience of programming in a language such as C++ or Java.

This project represents a collaboration with high profile investigators at the University of Oxford including Ellie Barnes, John Frater, Paul Klenerman, Angela McLean, Rodney Phillips and Oliver Pybus. My group also has strong links to those of Derrick Crook and Peter Donnelly.

For examples of the group's recent work, see <http://www.danielwilson.me.uk/publications.html>. Full details can be found on the University of Oxford Recruitment website ([https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq\\_jobspec\\_version\\_4.jobspec?p\\_id=105241](https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq_jobspec_version_4.jobspec?p_id=105241)). Please send any informal enquiries, with a CV, to me by email. The deadline for applications is 12 noon on 27th November 2012.

For more information visit: <http://www.danielwilson.me.uk>  
<http://www.oxfordmartin.ox.ac.uk/projects/view/127> <http://www.modmedmicro.ac.uk>

[/www.modmedmicro.ac.uk](http://www.modmedmicro.ac.uk) – Dr. Danny Wilson  
 Fellow in Genomics Nuffield Department of Medicine  
 University of Oxford

[daniel.wilson@ndm.ox.ac.uk](mailto:daniel.wilson@ndm.ox.ac.uk)

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## PalackyU CzechRepublic EvolutionaryEcology

Postdoc position available in my lab (Palacky University, Czech Republic).

### POSTDOC IN EVOLUTIONARY ECOLOGY

Vladimir Remes, Dept of Zoology and Lab of Ornithology, Palacky University, Czech Republic is seeking a highly motivated, productive and cooperative postdoctoral researcher to study ecology and evolution of life-history & sexually selected traits, functional diversity, and distribution in birds. Please, see <http://www.zoologie.upol.cz/remes> for more information about our current projects.

**RESPONSIBILITIES** The successful applicant will conduct ecological, statistical and phylogenetic analyses of our datasets from ongoing comparative projects. In addition, s/he will develop independent projects within our field of interest. S/he will also mentor advanced students and participate in teaching.

**QUALIFICATION AND SKILLS** Essential - Ph.D. in evolutionary biology, ecology or zoology (obtained after 28 March 2008) - Strong publication record in high-quality journals in the area of evolutionary biology, ecology, conservation biology or ornithology (especially evolution and ecology of biodiversity) - Fluency in English

Desirable - Demonstrated knowledge of comparative and phylogenetic methods, quantitative methods in biodiversity studies, GIS and spatial statistics - Programming in R language

**SALARY** The salary is 570,000 CZK (Czech Crowns, ca Euro 22,500) per annum and is ca. twice the average salary in the country. The appointment is for 30 months (if started 1 January 2013).

**APPLICATION PROCEDURE** For informal enquiries and application, email your CV (including list of publications), names and e-mails of two references and a cover letter stating your previous work, qualification and motivation to Assoc. Prof. Vladimir Remes at [vladimir.remes@upol.cz](mailto:vladimir.remes@upol.cz). Attach pdf of two of your best



papers and a copy of your PhD diploma. Please, state "Postdoc" in the subject of your e-mail.

**APPLICATION DEADLINE AND STARTING DATE**  
Apply before 20 December 2012. The starting date is negotiable, but the position is to be filled as soon as possible (funds are available since January 2013).

Vladimir Remes Department of Zoology and Laboratory of Ornithology Palacky University Tr. Svobody 26 77146 Olomouc Czech Republic email: vladimir.remes@upol.cz web: [www.zoologie.upol.cz/~remes](http://www.zoologie.upol.cz/~remes) Vladimir Remes <vladimir.remes@upol.cz>

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## PotsdamU EvolutionaryBiology

Research Scientist position (TVL13) in Evolutionary Biology at Potsdam University

A Research Scientist position (TVEL 13) is available at the Unit of Evolutionary Biology/Systematic Zoology at the University of Potsdam, starting February 1st 2013. The position will be available for 3 years, with the possibility of prolongation for a total duration up to 6 years.

The Unit of Evolutionary Biology/Systematic Biology has a strong focus on population genetic and speciation research, involving various taxonomic groups and a suite of molecular, morphological, and behavioural approaches (see

<http://www.uni-potsdam.de/index.php?id=21862> for recent work). The Unit runs a state-of-the-art molecular evolutionary laboratory.

The successful applicant is expected to run his/her own research program (including attraction of third-party funding) as well as to scientifically interact with other group members.

The position includes a teaching duty of 4 hours/week in zoology/evolutionary biology for undergraduates and graduates. Teaching can be generally performed in English, but the willingness to acquire German language skills for undergraduate teaching would be preferential.

Applicants must hold a university doctoral degree in biology or a related discipline. Familiarity with modern molecular genetic and genomics techniques (including Next Generation Sequencing) as well as in genomic data analysis is preferable.

The University of Potsdam is an equal opportunity em-

ployer. If equally qualified, disabled applicants will be preferably considered. The University of Potsdam aims at increasing the number of female researchers and encourages qualified females to apply.

Potsdam is a beautiful city in close vicinity to the German capital of Berlin. Potsdam University takes an effort to assist its members in family-related issues and has repeatedly been awarded the total e-quality award.

Please send your application by email (preferably in a single pdf) before 30th of November 2012 to: Prof. Dr. Ralph Tiedemann, University of Potsdam, Institute of Biochemistry and Biology, Evolutionary Biology/Systematic Zoology, Karl-Liebknecht-Str. 24-25, Haus 26, D-14476 Potsdam, Germany, Email: tiedeman@uni-potsdam.de

Prof. Dr. Ralph Tiedemann Unit of Evolutionary Biology/Systematic Zoology Institute of Biochemistry and Biology University of Potsdam Karl-Liebknecht-Str. 24-25, Haus 26 D-14476 Potsdam Germany Tel: +49-331-977-5249, -5253 (secretary) Fax: +49-331-977-5070 Email tiedeman@uni-potsdam.de [www.uni-potsdam.de/ibb/evolution](http://www.uni-potsdam.de/ibb/evolution) Ralph Tiedemann <tiedeman@uni-potsdam.de>

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## RutgersU FungalPathogenPopGenomics

RutgersU\_FungalPathogenPopGenomics

We are seeking a Post-Doctoral Research Associate to contribute to research of the boxwood blight pathosystem. The incumbent will: (1) Design and validate an isothermal molecular diagnostic assay for the boxwood blight fungus *Calonectria pseudonaviculata*; and (2) Utilize comparative RAD-Seq genome datasets to analyze genetic diversity across a global *C. pseudonaviculata* sample; and (3) Contribute to the training of student interns. The incumbent will be part of a multistate collaborative research initiative aimed at mitigating the effect of boxwood blight disease in the U.S.

The position will be physically located on the campus of the USDA-ARS Henry A. Wallace Beltsville Agricultural Research Complex in Beltsville, MD, the world's largest and most diverse agricultural research center, located just 16 miles north of the U.S. capitol city of Washington, DC.

\*Qualifications\* Ph.D. in plant pathology, mycology, evolutionary biology or related field is required. Candi-

dates must be willing to take a leading role in mentoring student interns, and interacting with other team members working on various components of boxwood blight research efforts. Demonstrated ability to conduct experiments independently, produce quality research output, a strong publication record and excellent verbal communication skills are required.

**\*Terms of Appointment\*** Salary is \$50,000 per annum, plus Rutgers University benefits. Funds are guaranteed for one year. An additional year is contingent on performance and funding. Position is available starting immediately, and review of applications will continue until a suitable candidate is found.

Email curriculum vitae, a brief description of research interests and career goals and contact information for three reference to: Brad Hillman (hillman@aesop.rutgers.edu) and Jo Anne Crouch (joanne.crouch@ars.usda.gov).

Rutgers University is an equal opportunity, affirmative action educator and employer. Applications from women and minorities are encouraged.

Jo Anne Crouch, Ph.D. Research Molecular Biologist Systematic Mycology & Microbiology Lab USDA-ARS 10300 Baltimore Avenue, Bldg 10A, Room 227 Beltsville, MD 20705 Cell: (609) 933-5496 Phone: (301) 504-5331 joanne.crouch@ars.usda.gov

JoAnne.Crouch@ARS.USDA.GOV

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## Spain PlantVirusCoevolution

### POSTDOCTORAL POSITION AVAILABLE

In Plant-Virus Interaction and Co-Evolution

Research topics: Within the broad field of the evolution of plant-virus interactions \*the post-doctoral scientist to be recruited will participate in defining a specific programme of research that should be related to one of the following subjects: 1) Ecology of virus emergence, 2) Population genetics of plant-virus interactions, 3) Genetics and dynamics of plant colonisation by viruses.  
\*

**Funding:** Candidate and host group will apply jointly to the Spanish Juan de la Cierva Programme (MINECO-JDC), BOE October 24, 2012 (<http://www.boe.es/boe/dias/2012/10/24/pdfs/BOE-A-2012-13213.pdf>).

**Requisites:** Experience in virus evolution or/and pop-

ulation genetics of plants or/and evolutionary biology of host-parasite interactions.

**\*INTERESTED CANDIDATES PLEASE CONTACT\***

Prof. **\*FERNANDO GARCÍA-ARENAL** \*fernando.garciaarenal@upm.es

**BEFORE \*NOVEMBER 20<sup>th</sup> \* 2012**

For further information about the group: [http://www.cbgp.upm.es/plant\\_virus.php](http://www.cbgp.upm.es/plant_virus.php)

Recent publications of the group related to the above-specified topics: \* \*

\* \* \* \*

Pagán I. /et al/. (2008). Host responses in life-history traits and tolerance to virus infection in *Arabidopsis thaliana*. *PLoS Pathogens* *4*:e1000134

González-Jara P. /et al/. (2009). Multiplicity of infection of a plant virus varies during colonization of its eukaryotic host. *Journal of Virology* *83*:7487-7494.

Pagán I. /et al/. (2009). Differential tolerance to direct and indirect density-dependent costs of viral infection in *Arabidopsis thaliana*. *PLoS Pathogens* *5*:e1000531.

Pagán I. /et al/. (2010). *Arabidopsis thaliana* as a model for the study of plant-virus co-evolution. *Philosophical Transactions of the Royal Society B* *365*:1983-1995.

Fraile A /et al/. (2011). Rapid genetic diversification and high fitness penalties associated with pathogenicity evolution in a plant virus\*. *Molecular Biology and Evolution* *28*: 1425-1437.

Pagán /etal/. (2012). Effects of biodiversity changes in disease risk: Exploring disease emergence in a plant-virus system. *PLoS Pathogens* *8*:e1002796.

**\*For additional information on CBGP, please visit <http://www.cbgp.upm.es> fernando garcia arenal <fernando.garciaarenal@upm.es>**

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## SydneyU ViralEvolution

POSTDOCTORAL RESEARCH ASSOCIATE - VIRUS EVOLUTION (2x POSITIONS) FACULTY OF SCIENCE SCHOOL OF BIOLOGICAL SCIENCES REFERENCE NO. 1318/0812

The University of Sydney is Australia's first University with an outstanding global reputation for academic and research excellence. It employs over 7500 permanent staff supporting over 49,000 students. The University's School of Biological Sciences has over 30 academic staff members who are active in teaching, research, and have outstanding international reputations. The interests of the academic staff span molecular biology; genetics; cell biology; physiology; behaviour; biodiversity; ecology and evolution of Australian plants and animals; and student-learning in biology. The practical applications of this expertise include conservation and management of natural resources; biotechnology; bioinformatics; disease control; and teaching and learning procedures and resources.

We have two postdoctoral research positions available to work with a new research program on various aspects of virus evolution, emergence and epidemiology being established by Professor Edward C. Holmes (NHMRC Australia Fellow). Particular areas of research interest include the (i) molecular evolution and epidemiology of pathogenic viruses, and (ii) the evolutionary biology of emerging viruses, with a particular emphasis on determining the general adaptive and ecological mechanisms that underpin successful cross-species virus transmission. You will also be expected to take part in collaborative projects with other research groups in Australia and overseas and will have the opportunity to produce and contribute to scientific research publications and to take on responsibility for graduate student supervision where appropriate. The position is full-time fixed term for two years subject to the completion of a satisfactory probation period for new appointees; further offers may be available subject to funding, need and performance. Membership of a University approved superannuation scheme is a condition of employment for new appointees.

Remuneration package: up to \$99K including base salary level A, leave loading and up to 17% superannuation. Some support towards relocation and visa sponsorship will be available for the successful appointee if required.

All applications must be submitted via the University of Sydney careers website. Visit [sydney.edu.au/positions](http://sydney.edu.au/positions) and search by the reference number for more information and to apply.

CLOSING DATE: 6 December 2012 (11:30pm Sydney time)

The University is an Equal Opportunity employer committed to equity, diversity and social inclusion. Applications from equity target groups and women are encouraged.

[edward.holmes@sydney.edu.au](mailto:edward.holmes@sydney.edu.au)

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## TulaneU Phylogenomics Systematics

A postdoctoral research associate position is available in the Derryberry lab ([elizabethderryberry.tulane.edu](http://elizabethderryberry.tulane.edu)) in the Department of Ecology and Evolutionary Biology at Tulane University. This position is part of NSF funded research on the systematics of the largely Neotropical radiation of suboscines (Aves: Tyranni). This research involves faculty from five partner institutions (LSU, AMNH, Smithsonian, KU, and MPEG), so the successful candidate will be joining a highly collaborative and productive research team.

The postdoctoral associate will be expected to contribute to (1) generating a species-level phylogeny of the 1000+ suboscine species using genomic approaches and (2) subsequent analyses intended to improve understanding of diversification in large radiations. The ideal candidate has experience in generating, assembling, and analyzing next-generation sequence data. Prior experience working on suboscines is also desirable, but not required. The Derryberry lab also has a strong interest in the tempo and mode of behavioral evolution, so candidates with an interest in exploring these types of questions in a phylogenetic context are strongly encouraged to apply. A strong publication record is preferred.

An initial appointment will be for one year, with continuation for at least one additional year dependent upon performance. A start date by February 2013 or earlier is preferred. Salary will be commensurate with experience and qualifications. Send via email attachment a letter of application, curriculum vitae, statement of research interests, and names and addresses of three references to Dr. Elizabeth Derryberry at [ederrybe@tulane.edu](mailto:ederrybe@tulane.edu). Tulane University is an Affirmative Action/Equal Employment Opportunity Employer. Women and minorities are encouraged to apply.

– Elizabeth Derryberry, Ph.D. Assistant Professor Department of Ecology & Evolutionary Biology Tulane University New Orleans, LA 70118 504-862-8285 (office) 504-862-8706 (fax) <http://elizabethderryberry.tulane.edu> [ederrybe@tulane.edu](mailto:ederrybe@tulane.edu)

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## UBritishColumbia Biodiversity

Postdoctoral Fellows Fellowship Opportunity The next application deadline is January 14, 2013. As a part of our NSERC CREATE training program in biodiversity research, we seek applicants for a 2-year postdoctoral fellowship in the U.B.C. Biodiversity Research Centre ([www.biodiversity.ubc.ca](http://www.biodiversity.ubc.ca)). The Centre is made up of over 50 faculty members with interests in ecology, evolution, systematics, biodiversity and conservation. Preference will be given to candidates with bold ideas, demonstrated research ability, and strong communication skills. The successful candidate will be expected to conduct original research on core problems in biodiversity, foster interactions within the Centre, run a seminar series, and organize a retreat. Postdoctoral fellows funded by the Biodiversity Research Centre typically interact with several lab groups. Candidates are welcome to contact potential collaborating labs in the Centre to inquire about current and potential research activities, but it is not necessary to apply to work with a specific faculty member.

Starting date, 1 September 2013. Salary \$43,000 per yr. Research stipend: \$7,000 per yr. Send curriculum vitae, three letters of reference, and a statement of overall scientific goals and interests (approximately 2 pages) to the address below. Applications and Reference letters will be accepted electronically; reference letters must be sent directly by the referee. Search Chair, Biodiversity Research Centre, U.B.C., 6270 University Blvd., Vancouver, B.C., Canada V6T 1Z4. (Fax 604-822-2416, e-mail [biodiversity.centre@ubc.ca](mailto:biodiversity.centre@ubc.ca)). Closing date for application, 14 January 2013.

The University of British Columbia hires on the basis of merit and is committed to employment equity. We encourage all qualified candidates to apply.

Penelope (Lebby) Balakshin Administrator Biodiversity Research Centre Tel: 604-822-0862 Cell: 604-802-6330

Lebby Balakshin <[admin@biodiversity.ubc.ca](mailto:admin@biodiversity.ubc.ca)>

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## UCollegeLondon TheoEvolution

Research Fellowship in Early Eukaryotic Evolution  
2020 Science Programme University College London

A 24-month (with possible extension) Early Career postdoctoral research fellowship is available to work with Professor Andrew Pomiankowski and Dr Nick Lane in CoMPLEX (Centre for Mathematics and Physics in the Life Sciences and Experimental Biology) and the Department of Genetics, Evolution and Environment, University College London.

This project will explore events leading from the origins of living systems through to the emergence of complex eukaryotic life using mathematical and computational modelling. The project will be co-supervised by Professor Andrew Pomiankowski and Dr Nick Lane. Potential topics include: possible origins of natural selection on genetically encoded metabolism in primordial environments; the coevolution of parasitic replicators - the ancestors of viruses - alongside true cells; the costs and benefits of multicellularity related to different modes of feeding (phagocytosis vs. osmotrophy) in which there is scope for cooperation and cheating over 'common goods'; the evolution of mating types and true sexes in multicellular organisms coincident with the development of germ/soma differentiation; the transfer of mitochondrial genes to the eukaryotic nucleus and consequent loss of mitochondrial genes due to sexual conflict over gene expression.

The 2020 Science programme is a joint collaboration between UCL, Oxford University and Microsoft Research Cambridge, now into its second year. It is focused on producing a new generation of highly computational natural scientists and tool builders able to apply novel approaches to tackle fundamental problems in natural science. The programme is funded by the EPSRC in association with Microsoft Research.

Suitable candidates will be highly motivated researchers with a PhD in a relevant area of science, such as: mathematical or computational biology, computational neuroscience, computer science or biology. Research experience of mathematical or computational modelling of complex natural systems is essential, as well as the ability to conduct and complete research projects, as witnessed by published peer-reviewed work. The post-holders are expected to be exceptional early-stage scientists who will apply for further research fellowship funding during the period of the award. Applicants will be expected to demonstrate experience in the modelling and analysis of complex natural systems appropriate to the individual projects (e.g. evolutionary genetic analyses, chemical kinetics, systems biology). Experience of analysing and incorporating experimental data into computational models, and proficiency in

programming on higher end computing resources would be beneficial.

See : [www.2020science.net](http://www.2020science.net) < <http://www.2020science.net> > [www.ucl.ac.uk/gee](http://www.ucl.ac.uk/gee) < <http://www.ucl.ac.uk/gee> > [www.ucl.ac.uk/complex](http://www.ucl.ac.uk/complex) < <http://www.ucl.ac.uk/complex> >

Closing Date: 28 Nov 2012, 5pm A job description and person specification can be accessed at [www.2020science.net](http://www.2020science.net) or at [www.jobs.ac.uk](http://www.jobs.ac.uk) (search term complex) General queries regarding the application process, please contact Mrs Abi Espie, [a.espie@ucl.ac.uk](mailto:a.espie@ucl.ac.uk), (Tel: +44 20 7679 4325). Informal enquiries regarding the vacancy can be made to [a.pomiankowski@ucl.ac.uk](mailto:a.pomiankowski@ucl.ac.uk) or [nick.lane@ucl.ac.uk](mailto:nick.lane@ucl.ac.uk)

[a.pomiankowski@ucl.ac.uk](mailto:a.pomiankowski@ucl.ac.uk)

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### UCollege Dublin MolEvolutionAgeing

Postdoctoral Position: Molecular Evolution of Exceptional Ageing, University College Dublin

Ageing is the gradual and irreversible breakdown of living systems associated with the advancement of time, which leads to an increase in vulnerability and eventual mortality. It is considered as one of the most familiar but least well-understood processes in biology, with hundreds of theories developed about why and how we age. Despite recent advances in ageing research, the intrinsic complexity of the ageing process has prevented a full understanding of this process, therefore, ageing remains a grand challenge in contemporary biology. The new European Research Council funded research team that Dr. Teeling is gathering will tackle this challenge by uncovering the molecular mechanisms of halted ageing in a unique model system, the bats. We will couple state of the art-field biology with cutting-edge next generation comparative genomic and transcriptomic studies to address this challenge.

A postdoctoral position for up to five years is available in the Teeling Laboratory.

The postdoc will be expected to:

Create the algorithms and pipelines needed to identify and download the vast amount of ageing related genomic data across mammals Analyse these data using an evolutionary, phylogenetics and network approach Oversee de novo transcriptomic assembly and analyses

of population level transcriptomes from long-lived wild bats. Integrate all molecular data generated to uncover the causal mechanisms of halted ageing in bats. Interact and help supervise other members of the team.

Mandatory Requirements:

PhD in Comparative Genomics and or Comparative Transcriptomics Experience in assembling Next Generation Sequencing data particularly whole transcriptomes Experience in developing / utilising novel bioinformatic search pipelines and algorithms for the analyses of comparative genome data An understanding of molecular evolution Experience with phylogenetic analyses and methodologies An understanding/ experience with network analyses for genomic and/or other data A demonstrated commitment to research and publications

Desirable:

Experience and a knowledge of mammalian evolution The wet laboratory generation of Next Generation sequencing data.

A full description of the job specification, eligibility and application process are detailed on the University College Dublin Vacancies website: REF 005512

<http://www.ucd.ie/hr/jobvacancies/> All applications must be through the UCD website listed above

Closing date: 18th Dec 2012

For informal enquires please contact: [emma.teeling@ucd.ie](mailto:emma.teeling@ucd.ie)

Prof. Emma Teeling, University College Dublin, Ireland

<http://batlab.ucd.ie/> Emma Teeling  
<[Emma.Teeling@ucd.ie](mailto:Emma.Teeling@ucd.ie)>

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### UHaifa InsectEvolutionaryPhysio

University of Haifa- Oranim, Israel: Postdoctoral position in Insect Evolutionary Physiology

A 24-month (with possible extension) funded postdoctoral position is currently available in the laboratory of Dr. Eran Gefen, Department of Biology and Environment, University of Haifa- Oranim, Israel (<http://research.haifa.ac.il/~biology/Eran/Eran.html>). The position is part of a collaborative project with the laboratory of Prof. Amir Ayali, at the Department of Zoology, Tel Aviv University (<http://www.tau.ac.il/~ayali/>)



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The overall goal of the study is to understand the role of the central nervous system in adaptive variation in gas exchange patterns in insects, using grasshoppers and locusts as a model. The postdoc will be involved in laboratory experiments, as well as in field collections and maintenance of laboratory reared stocks. The position also includes opportunities for development of independent projects.

Applicants should have a Ph.D. by the time of appointment. Preference will be given to highly motivated individuals interested in insect ecophysiology and with previous experience in respirometry. The position start date is negotiable, preferably before January 2013. Interested candidates should submit a letter of interest, curriculum vitae, and the names and e-mail addresses of three (3) references to gefene@research.haifa.ac.il.

Best regards,

Eran

– Eran Gefen, Ph.D. Lecturer Department of Biology and Environment University of Haifa- Oranim Tivon 36006 Israel

Webpage: <http://research.haifa.ac.il/~biology/Eran/-Eran.html> Tel: +972-4-9838837 (office) +972-54-5669590 (cellular) Fax: +972-4-9539608

The great tragedy of science - the slaying of a beautiful hypothesis by an ugly fact. (Thomas H. Huxley)

Eran Gefen <gefene@research.haifa.ac.il>

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## UJyvaskyla MultilevelSelection

Post-Doc: Multilevel Selection and the Evolution of Human Behavior

University of Jyväskylä, Finland

**JOB DESCRIPTION:** A postdoctoral position is available in a project studying the origin and implications of group structure in human social behavior and cultural change. Questions like: What maintains within-group cooperation in social dilemma situations? have been researched extensively, both theoretically and empirically. However, most of this research considers processes in isolated, homogenous groups. In reality, human social interactions take place in an environment where there are multiple levels of organizational hierarchy, and where there

is heterogeneity among individuals and groups. The central tenet of current research project is that in order to understand the evolutionary origins and the day-to-day processes of human social behavior and culture, the multiple levels of human organizational hierarchy must be given explicit consideration. The applicant will be involved with design and execution of computer-mediated decision experiments to study how the interplay of between- and within-group interactions affects conflict and cooperation in human groups. The research project also involves a development of theory to complement the empirical studies, and theoretically oriented researchers are strongly encouraged to apply. The successful applicant is expected to play a key role in developing research within the research topic. See <http://rspb.royalsocietypublishing.org/content/276/1655/355> and <http://rspb.royalsocietypublishing.org/content/278/1723/3428> for previous published work in the group.

**DURATION:** The successful applicant can start the project in January 2013, but later starting dates are also negotiable. The position is first filled for two years, but can be extended up to five years.

**SALARY:** 37,000 - 41,000 per annum, depending on qualifications. Healthcare included.

**MINIMUM QUALIFICATIONS:** PhD in Biology, Mathematics, IT, Economics, or a related field. The applicant must possess a thorough understanding of evolutionary concepts. Excellent written and good oral English skills are required.

**PREFERRED QUALIFICATIONS:** Good skills in experimental design and in statistical analysis of experimental data. Experience in programming and/or mathematical modelling is a definite plus. **THE PLACE & THE PEOPLE:** The position is at the Department of Ecology and Evolutionary Biology at the University of Jyväskylä, Finland. To quote a recent international evaluation: “This is a very happy, collaborative and successful department with highly motivated and enthusiastic members of uniform high quality.” The postdoc will join a group led by Dr. Mikael Puurtinen (Academy Research Fellow 2013-2017), which at the moment consists of the PI and two PhD students. The applicant will also become a member of the Centre of Excellence in Biological Interactions (<https://www.jyu.fi/bioenv/en/divisions/coe-interactions>), which offers excellent networking possibilities among top scientists.

**DEADLINE:** To ensure full consideration, applications should be received by December 15, 2012.

**APPLICATION:** In the application, include a state-

ment of research interests (max 1 page), CV, and contact details for three references. Send the application by email to [mikael.puurтинен@jyu.fi](mailto:mikael.puurтинен@jyu.fi).

INFORMAL QUERIES are welcome, send email to [mikael.puurтинен@jyu.fi](mailto:mikael.puurтинен@jyu.fi).

[mikael.puurтинен@jyu.fi](mailto:mikael.puurтинен@jyu.fi)

55182 218-726-7738

[kupdegra@d.umn.edu](mailto:kupdegra@d.umn.edu)

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## UMinnesota BaselineSeedBank

Project Baseline, a national initiative to create a seed bank for the study of evolution, is seeking a full-time Postdoctoral Associate in the Department of Biology at the University of Minnesota Duluth to participate in a collaborative project to create a new resource for detecting evolutionary change in plants. The appointment will initially be for one year and may be renewed for a total of up to 36 months. The base salary is \$37,333 and includes healthcare and other benefits. The anticipated start date is February 4, 2013.

Project Baseline: The goal of this project is to create a nationwide seed bank of wild populations to be preserved for the next 10-50 years at the National Germplasm Conservation Lab in Fort Collins, CO. This resource will enable assessments of both rapid and long-term responses to climate change and facilitate investigation of the genetic basis of adaptation. We will also create a GIS database of population and environmental information that will be useful in a wide variety of ecological and conservation applications. For more information on the project, see Franks et al. 2008, The resurrection initiative: Storing ancestral genotypes to capture evolution in action. *BioScience* 58: 870-873.

This individual will conduct research that provides further development of his/her career skills and/or allows the individual opportunities to learn new research techniques necessary to fully participate in the project. Training & mentoring will be under the direction of Dr. Julie Etterson.

To view the full posting and apply for the position, go to: <https://employment.umn.edu/applicants/jsp/-shared/position/JobDetails.css.jsp?postingId=581592> Or, navigate to the University of Minnesota Job Site at: <https://employment.umn.edu/applicants/jsp/-shared/search/SearchResults.css.jsp> and search for Requisition # 177277

– Karen Updegraff University of Minnesota, Duluth Department of Biology 1035 Kirby Drive Duluth, MN

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## UMontreal PopulationMedicalGenomics

Postdocs: Population and Medical Genomics, University of Montreal

Postdoctoral positions are available in the genomics laboratory at the University of Montreal of Philip Awadalla (<http://www.philip-awadallalab.org/>). Researchers will be involved in the development of methods and collection/analysis of data generated in our ongoing studies of human genomics and disease.

The successful candidates will be trained in population/statistical genetics, genomics, or have strong computational or statistical skills. Postdoctoral research scientists can work on interesting projects of their choosing related to the labs' general research interests, or our current projects.

Possible/related projects include:

- 1) Next-generation tools and development of model and non-model based methods to study the role of common and rare genetic variants responsible for variation in a number of human traits or childhood diseases (cancer, immunodeficiencies, heart malformations, etc.).
- 2) Genomics applications for studying the critical co-regulatory factors associated with humans and malaria.
- 3) Molecular and statistical genomics projects examining the severity of sickle-cell disease in Africa and North America.
- 4) Genomic epidemiology program to study cardio-metabolic and molecular phenotypes taken from participants of a longitudinal Quebec cohort of 37,000 participants, aged 40-69 at time of recruitment - CARTaGENE ([www.cartagene.qc.ca](http://www.cartagene.qc.ca)). CARTaGENE is an infrastructure for population genomics research and the resource is built to contribute to the development of better diagnosis, treatment and disease prevention programs.

Interested individuals with a Phd should please write to Philip Awadalla [philip.awadalla@umontreal.ca](mailto:philip.awadalla@umontreal.ca) [awadallp@gmail.com](mailto:awadallp@gmail.com)

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## UNebraska Evolutionary Genetics FlowerColor

POSTDOCTORAL POSITION IN EVOLUTIONARY GENETICS OF FLOWER COLOR, SCHOOL OF BIOLOGICAL SCIENCES, UNIVERSITY OF NEBRASKA-LINCOLN

A postdoctoral position is available to participate in a NSF-funded project focusing on the evolutionary mechanisms underlying flower color variation above and below the species level. This project will test the hypothesis that convergent transitions to white flowers above the species level involve a predictable subset of the mutations that generate white flower mutants within populations. An integrated suite of transcriptomic, biochemical and statistical comparative analyses will be applied to address this hypothesis. The position requires a strong interest in evolutionary genetics. Some experience in molecular genetics, plant biochemistry (including high-performance liquid chromatography) and/or analysis of next-generation sequence data is preferred. Creativity, self-motivation, and strong writing skills are also highly valued.

The Smith Lab ([www.iochroma.info](http://www.iochroma.info)) in School of Biological Sciences at UNL offers a diverse and interactive environment for research in plant evolutionary biology. We share close ties with other evolutionary biology and plant science labs on campus, and we benefit from shared facilities, such as the bioinformatics core research facility and the core facility for applied genomics and ecology. Lincoln, Nebraska boasts an outstanding quality of life that includes a vibrant downtown with lively music and art scene and a collection of over 120 parks and 130 miles of bike trails, plus a low cost of living.

To apply for this position, please send a brief letter of interest (1-2 paragraphs), a CV, and the names and contact information for three references to Stacey D. Smith, [sdsmith@unl.edu](mailto:sdsmith@unl.edu) [1]. The position is available for 1 year with the possibility of renewal for up to two additional years depending on research progress. Review of applications will begin on December 15, 2012 and will continue until the position is filled.

—

Stacey D. Smith

314 Manter Hall School of Biological Sciences Univer-

sity of Nebraska Lincoln, NE 68588-0118 phone with voicemail: (402) 370-6749 email: [sdsmith@unl.edu](mailto:sdsmith@unl.edu) website: <http://www.iochroma.info/> [sds21@duke.edu](mailto:sds21@duke.edu)

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## UOxford ViralEvolution

3yr post-doctoral research position: evolutionary and computational biology of chronic viral infection

Prof Oliver Pybus (University of Oxford) is looking for a computational biologist to study the evolutionary dynamics of HIV and hepatitis infection within infected individuals, and to analyse the genetic diversity of the resulting immune responses.

The closing date for applications is 28th November 2012.

<http://www.jobs.ac.uk/job/AFJ872/james-martin-research-fellow/> [oliver.pybus@zoo.ox.ac.uk](mailto:oliver.pybus@zoo.ox.ac.uk) +44 (0)1865 271274 <http://evolve.zoo.ox.ac.uk> Oliver Pybus <[oliver.pybus@zoo.ox.ac.uk](mailto:oliver.pybus@zoo.ox.ac.uk)>

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## USDA Maryland RustFungusEvolutionSystematics

USDA-ARS. RustFungus\_Evolution\_Systematics

Postdoctoral Researcher, Evolution and Systematics of Rust Fungi

We are seeking applications for a Post-Doctoral Researcher to take the lead on molecular systematic investigations of rust fungi (*Puccinia* sp.) associated with warm-season (C4) cereals and grasses that impact U.S. agricultural productivity, including those that cause disease in bioenergy grasses and major food crops. At present, 141 different *Puccinia* species are thought to cause disease in C4 grasses, with as many as 41 different *Puccinia* species described from individual host genera. Many of these rust-causing species are thought to infect multiple hosts - up to eight different host genera in some cases. However, current identifications are almost exclusively based on a few morphological traits and unlikely to reflect the true diversity of species present.

Basic responsibilities include the generation of molecular data for phylogeny reconstruction (including the de-

velopment of new markers) to determine evolutionary relatedness, host range, co-evolution and distribution of rust fungi on C4 grasses in the United States; morphological characterizations; development of molecular diagnostic tools for economically important taxa; data analysis, presentation, and publication; field work for the collection of specimens; and training and supervision of students.

The incumbent will work under the guidance of Dr. Lisa Castlebury (<http://www.ars.usda.gov/pandp/people/people.htm?personid=3D10294>) at the Systematic Mycology & Microbiology Laboratories of the USDA-ARS, Beltsville, Maryland, USA. In addition to state-of-the-art molecular resources and extensive microscopic facilities, the department is also home of the U.S. National Fungus Collections, the largest collection of preserved fungi in the western hemisphere, where >4000 specimens of C4-infecting rust fungi are available for study. The department is physically located on the campus of the USDA-ARS Henry A. Wallace Beltsville Agricultural Research Complex, the world's largest and most diverse agricultural research center, located just 16 miles north of the U.S. capitol city of Washington, D.C.

**QUALIFICATIONS** This position requires a recent (within 4 years) Ph.D. in mycology, plant pathology, botany, microbiology or a closely related field that has equipped the applicant with the necessary knowledge, skills and abilities to perform the duties and responsibilities of the position. Experience working with fungi and/or plants is preferred, however, individuals with demonstrated expertise in molecular systematics of other organismal systems will be considered. The ideal candidate will be intellectually creative and able to work independently, with a strong background in molecular phylogenetics, and an excellent publication record.

**APPOINTMENT TERMS & APPLICATION INSTRUCTIONS** This is a two-year appointment, at the GS-11 level (starting salary \$62,467). Visit the following website for instructions on how to apply for the position: <http://www.usajobs.gov/GetJob/ViewDetails/-315949200>. Informal inquiries are welcome: Dr. Lisa Castlebury, [lisa.castlebury@ars.usda.gov](mailto:lisa.castlebury@ars.usda.gov)

Applications for this position will be accepted from both US Citizens and Foreign Nationals who meet both Appropriations Law and Immigration Law requirements found under "Foreign Nationals Eligible for Federal Employment" at <http://www.afm.ars.usda.gov/hrd/EmployForeignNationals/index.htm>. The position is available immediately, and review of applications will continue until a suitable candidate is found.

Jo Anne Crouch, Ph.D. Research Molecular Biologist Systematic Mycology & Microbiology Lab USDA-ARS 10300 Baltimore Avenue, Bldg 10A, Room 227 Beltsville, MD 20705 Cell: (609) 933-5496 Phone: (301) 504-5331 [joanne.crouch@ars.usda.gov](mailto:joanne.crouch@ars.usda.gov)

[joannecrouch@yahoo.com](mailto:joannecrouch@yahoo.com)

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## USheffield EvolutionaryBiology

Vice Chancellor's Fellowships and Advanced Fellowships

see <http://www.leadingmindssheffield.com/> for details

Given that evolutionary biology is a major strength in Sheffield, we would be interested to hear from any suitably-qualified applicants.

– Roger K Butlin Professor of Evolutionary Biology

Animal and Plant Sciences The University of Sheffield  
Western Bank Sheffield S10 2TN UK

Tel. +44(0)114 2220097 FAX +44(0)114 2220002

Roger Butlin <[r.k.butlin@sheffield.ac.uk](mailto:r.k.butlin@sheffield.ac.uk)>

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## USydney 2 ToadEvolution

POSTDOCTORAL RESEARCH ASSOCIATES IN THE EVOLUTION AND ECOLOGY OF INVASIVE CANE TOADS (2x POSITIONS) SCHOOL OF BIOLOGICAL SCIENCES REFERENCE NO. 1614/0912

. Enhance your research profile by joining a high-profile well-funded project . Become part of a world-class research team using a powerful model system to study evolution operating at ecological timescales . Full-time, fixed term 3-4 years; remuneration package: \$92K p.a., further offers may be possible subject to funding and need

The University of Sydney is Australia's first university with an outstanding global reputation for academic and research excellence. It employs over 7500 permanent staff supporting over 49,000 students.

The School of Biological Sciences is one of the largest in Australia with research strengths in many areas

of mathematics and statistics. The school attracts a strong body of excellent students as well as Australian Research Council (ARC) grants, fellowships, and other competitive external funding.

Applications are sought for two Postdoctoral Research Associate positions in the evolution and ecology of invasive cane toads that are funded by an ARC Laureate Fellowship “Using biological invasions to understand evolutionary processes” held by Richard Shine.

The project exploits the unique logistical opportunities offered by the cane toad’s Australian invasion to pose and test a suite of hypotheses about evolutionary-ecological processes. In particular, why has the rate of dispersal of invasion-front toads increased so rapidly over this relatively brief period? What are the relative roles of spatial sorting and natural selection in driving that range-edge acceleration? How and why do cane toads at the invasion front differ from those in long-colonised areas in traits such as cognitive ability, behavioural syndromes, dispersal tactics, immunobiology, locomotor ability, morphology and phenotypic plasticity? The project not only will compare such traits between toads from invasion-front versus long-colonized areas, but also link those changes to concurrent research on the genetic divergences that have accumulated during the toads’ Australian invasion.

This is an opportunity to conduct research in a highly productive research team, on a project that has gathered substantial international recognition. You will spend most of your time working out of the University’s Tropical Ecology Research Facility at Middle Point, in a bushland setting 65km east of the city of Darwin in the Northern Territory. The field station has accommodation, office and laboratory facilities, and four-wheel-drive vehicles. However, the research also will require extensive travel in order to collect toads from across the breadth of the Australian tropics. Teaching is not a requirement.

You will have: . PhD degree in biology (or be close to completing one) . sound knowledge of advanced techniques and demonstrated capability of research in at least one of the following areas: analyses of morphology, physiology, performance, behaviour, genetics and/or ecology of free-ranging animals . demonstrated ability to conduct high-quality research either independently or as part of a research team, published research as sole author or in collaboration, excellent written and verbal communication skills.

Experience in conducting fieldwork in remote areas, and in working with multidisciplinary teams, will be highly regarded.

The positions are full-time fixed-term for three to four years subject to completion of a satisfactory probation and confirmation period for new appointees. Further offers may be available subject to funding, need and performance. Successful applicants will need to become members of a University approved superannuation scheme.

Remuneration package: \$92K p.a. including \$78K p.a. base salary, leave loading and up to 17% superannuation. Some support towards relocation and visa sponsorship will be available for the successful appointees if required.

All applications must be submitted via the University of Sydney careers website. Visit [sydney.edu.au/positions](http://sydney.edu.au/positions) and search by the reference number for more information and to apply.

CLOSING DATE: 13 January 2013 (11:30pm Sydney time)

The University is an Equal Opportunity employer committed to equity, diversity and social inclusion. Applications from equity target groups and women are encouraged.

© The University of Sydney

Recruitment Admin <[sr.adminpaulinabrianna@sydney.edu.au](mailto:sr.adminpaulinabrianna@sydney.edu.au)>

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## UVirginia MLBS EvolutionFellowships

Mountain Lake Biological Station announces Early-Career Fellowships

The University of Virginia’s MLBS is excited to offer a limited number of fellowships to support station and residency costs for researchers to explore new projects or collect preliminary data. This is a rare opportunity to make an extended stay of up to 2 months at one of North America’s premier field stations at no cost to the researcher. Preference will be given to individuals and projects with the potential to develop into long-term research activities at the Station. MLBS welcomes researchers from any discipline that can benefit from the Station experience and facilities. We especially encourage applications from individuals in the postdoctoral or early faculty phases of their careers, but will not exclude other individuals from consideration.

Interested individuals should submit a single pdf file including CV and a 2-3 pp proposal outlining the



proposed research to mlbs@virginia.edu. Review of proposals will begin February 20, 2013. For more information about the fellowship program, research opportunities or Mountain Lake Biological Station (mlbs.org), please contact the Director - Butch Brodie (bbrodie@virginia.edu).

mlbs@virginia.edu

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## UZurich Biodemography

There is a postdoc opportunity in my research group < <http://www.ieu.uzh.ch/research/ecology/-population.html> > at the University of Zurich to investigate the links between phenotypic trait and population dynamics in changing environments.

Further details of the position can be found here: [http://www.ieu.uzh.ch/staff/positions/-Postdoc\\_Ozgul.2012.01.pdf](http://www.ieu.uzh.ch/staff/positions/-Postdoc_Ozgul.2012.01.pdf) I will be grateful if you could post this on EvolDir. The prospective candidates are welcome to contact me with any questions.

All the best, Arpat Ozgul

– Assistant Professor of Population Ecology

Institute of Evolutionary Biology and Environmental Studies | University of Zurich Office: 34-J-24 | Tel: +41 (0)44 63 \*54746\* | arpat.ozgul@ieu.uzh.ch | arpat.net

Arpat Ozgul <arpat.ozgul@ieu.uzh.ch>

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## UmeaU TheoreticalStudiesSpeciation

Postdoctoral Position (two years) in Theoretical Studies of Reverse Speciation at Umeå University

A post-doc position is available for a research project that aims to understand reverse speciation. The project is an interdisciplinary collaboration in computational science between Jörgen Ripa, Evolutionary Ecology, Lund University, Richard Svanbäck, Ecology and Genetics/Limnology, Uppsala University, and Åke Brännström, Department of Mathematics and Mathematical Statistics, Umeå University. The position is

funded by eSENCE - The e-Science Collaboration, see [www.essenceofscience.se](http://www.essenceofscience.se). You will theoretically investigate the conditions under which evolution can create one species out of two, how long time this process requires, and how it could be identified empirically. An important part of your work will be to simulate and analyze individual-based ecological models using high-performance computers.

You should have documented experience of individual-based modeling, especially in the subject area of ecology. Excellent skills in programming, and in the English language, are required. Experience of simulations on high-performance computers and of interdisciplinary research projects are desirable.

The appointment is full-time for 24 months at the Department of Mathematics and Mathematical Statistics. The appointed person is expected to work on-site at Umeå University's interdisciplinary research environment IceLab ([www.org.umu.se/icelab/english/](http://www.org.umu.se/icelab/english/)) and to participate actively in the daily activities at the research environment. A moderate amount of travelling, in particular to Lund and Uppsala, will be part of the position. The appointment will start at February 1, 2013, or as agreed upon with the applicant.

For more information, please contact Senior Lecturer Åke Brännström, +46-(0)90-786 78 62, ake.brannstrom@math.umu.se

Read the full announcement and how to apply at:

[http://www8.umu.se/umu/aktuellt/arkiv/-lediga\\_tjanster/315-935-12.html](http://www8.umu.se/umu/aktuellt/arkiv/-lediga_tjanster/315-935-12.html)

Richard Svanbäck Department of Ecology and Genetics, Limnology Norbyvägen 18D SE-752 36 Uppsala Sweden

email: richard.svanback@ebc.uu.se homepage: [www.anst.uu.se/risva021/](http://www.anst.uu.se/risva021/) richard.svanback@ebc.uu.se

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## Umea Sweden Bioinformatics

Post-doc in bioinformatics Sweden

SLU Sweden seeks a highly motivated researcher for a 2 year post-doc in bioinformatics on wild animal model systems. The successful candidate will have a strong background in evolutionary or ecological genetics, computational analysis of next-generation sequencing (NGS) data, and proficiency in relational database design and management. The position is placed

in the Molecular Ecology Research Group < <http://www.slu.se/wfe/merg> > (SLU Umeå). Additional support will be provided by the Computational Genetics Group < <http://www.computationalgenetics.se> > (SLU Uppsala). Ongoing research at the department uses genetic techniques to address a wide range of questions in conservation, ecology and evolution. Together with Scilife < <http://www.scilifelab.se> > in Stockholm/Uppsala we are currently expanding our capacity for genetic analyses of our most important model species (e.g. moose, salmon, trout, lion, brown bear) by high throughput sequencing, genotyping-by-sequencing and SNP chip development. The successful candidate is expected to fully engage in this work, which could include individual research, programming, primary and coauthoring proposals and papers. The acquisition of additional third-party funding may allow independent expansion of the model systems or research questions addressed.

Review of the applications will begin on January 3, 2013 and continue until the position is filled. Please submit curriculum vitae, a description of research interests and two letters of reference via email to [registrator@slu.se](mailto:registrator@slu.se).

For further information please contact: Ass. Prof. Göran Spong ([goran.spong@slu.se](mailto:goran.spong@slu.se)) or Prof. Örjan Carlborg ([orjan.carlborg@slu.se](mailto:orjan.carlborg@slu.se)).

Göran Spong Associate Professor | Molecular Ecology Research Group < <http://www.slu.se/wfe/merg> > | Wildlife, Fish, & Environmental Studies | SLU | 90183 Umeå | Sweden

Göran Spong <[Goran.Spong@slu.se](mailto:Goran.Spong@slu.se)>

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## UppsalaU 2 FlycatcherSpeciationGenomics

Flycatcher speciation genomics

2 postdoc positions at the Evolutionary Biology Centre, Uppsala University in the group of Prof Hans Ellegren (see end of message for web page)

Each position is for two years with the possibility of extension for two more years

Advances in large-scale genomics open new opportunities in speciation research. It allows us to address questions such as the genes underlying the process of speciation, the character of genomic divergence during speciation, and speciation-with-gene-flow. Flycatchers of

the genus *Ficedula* offer an excellent model system for studies of these and related questions (see e.g. *Nature* 387:589-592, 411:45-50, *Science* 318:95-97). We have recently sequenced and de novo assembled the flycatcher genome (at 85x coverage and with a scaffold N50 of 7.3 Mb) and performed genome-wide re-sequencing of multiple individuals (each at 5x coverage) of the two closely related species, collared flycatcher and pied flycatcher (*Nature*, in press; doi:10.1038/nature11584). By this we have identified a number of 'divergence islands', many of which are associated with centromeres and telomeres, potentially indicating a role for meiotic drive in species divergence. We are now seeking new postdocs to join this long-term project in which coming research will use data from whole-genome re-sequencing of multiple populations (sympatric as well as allopatric) and species, from a 50K SNP array (genotyping in pedigrees and population samples) and from the flycatcher transcriptome and methylome. Genomic parameters that will be analyzed include, for example, recombination rates, linkage disequilibrium, expression divergence, and epigenetic modification. Successful candidates will have the possibility to choose among several possible directions of research, in dialogue with the host.

The venue for these positions, the Evolutionary Biology Centre, is situated in recently-built localities in central Uppsala. The working atmosphere is international with a regular recruitment of PhD students and postdocs from abroad. The Centre constitutes an exciting arena for multidisciplinary research in evolutionary biology in a broad sense, housing some 300 scientists and graduate students, and with research programs in, for example, ecology, genetics, genomics and developmental biology. The scientific environment with numerous seminars, journal clubs and social activities offer excellent possibilities for contacts and collaborations. A graduate school in 'The Genomics of Phenotypic Diversity in Natural Populations' (<http://www.ebc.uu.se/education/postgrad/gradschool/>) provides a framework for courses and other activities for PhD students. Local platforms for next-generation sequencing (<http://www.scilifelab.uu.se>) and high-performance computational analyses (<http://www.uppmax.uu.se>) ensure immediate access to state-of-the-art technology. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful and easy accessible surroundings conveniently situated close to Stockholm.

The positions, which are funded by a European Research Council Advanced Investigator Grant, are affiliated with the Department of Evolutionary Biology - an overview of the research activities in the environment

can be found at our web pages (<http://www.ebc.uu.se/-Research/IEG/evbiol/>). Thanks to a number of competitive grants recently obtained, the environment has expanded significantly and houses 8 independent research groups and about 20 PhD students, 20 post-docs, and some bioinformaticians. A common theme is that we address key questions in evolutionary biology, like speciation, local adaptation, life history evolution, genome and molecular evolution, using genomic approaches. Study organisms include natural bird and plant populations, *Neurospora*, *Drosophila*, zebra fish, domestic animals and humans. We have tight connections with several other research programs at the Evolutionary Biology Centre.

Suitable background to these positions is a PhD geared toward speciation genetics, population genetics or bioinformatics. Experience from bioinformatic analyses of next-generation sequencing data is of merit. Competition might be fierce so Informal inquiries and applications should be sent by email to [Hans.Ellegren@ebc.uu.se](mailto:Hans.Ellegren@ebc.uu.se). Applicants must provide a CV, a statement of research interests and the name and contact details of at least two references. The positions remain open until filled. Starting date is flexible.

Professor Hans Ellegren Department of Evolutionary Biology Evolutionary Biology Centre Uppsala University Norbyvägen 18D SE-752 36 Uppsala Sweden

LAB WEB PAGE:

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

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## Wageningen PlantEvolutionaryGenomics

A 3-year postdoc position is available in ecological genomics at the Terrestrial Ecology department of the Netherlands Institute of Ecology in Wageningen, The Netherlands. The project will focus on DNA methylation and gene expression variation within apomictic dandelion lineages, and is part of a research program on plant ecological epigenetics. Deadline for application is December 14, 2012.

Research description: We use apomictic dandelions to study causes and consequences of heritable methyla-

tion variation within genetically uniform lineages. For this project we are particularly interested in heritable epigenetic and transcriptome responses of exposure to novel natural environments. Seed material to address this question in ecologically relevant contexts is available from geographically widespread apomictic lineages, from native versus invasive populations and from reciprocal transplant field experiments. Current tools in our lab include RNA-seq and ms-AFLP and we are starting on bisulphite sequencing approaches. The postdoc project will involve RNA-seq for detection of differential gene expression and will be complemented with greenhouse experiments and DNA methylation analysis depending on the candidates interests and expertise.

Requirements: We are looking for a highly motivated and independent postdoc with good lab skills, experience in plant (epi)genetics or genomics research and the quantitative skills to tackle omics data analysis. It is essential that you have a keen interest in working interdisciplinary between ecology and genetics/genomics. We encourage candidates to outline specific research interests and approaches within the described project, we value candidates that complement our own expertise and that bring novel ideas or research tools to the lab.

Terms of appointment: The position will be for 3 years, with a 1 year evaluation period, and will be based at The Netherlands Institute of Ecology (NIOO-KNAW) in Wageningen, The Netherlands. Salary depends on training and work experience, the maximum gross monthly salary of a full-time appointment is 3.755,00 scale 10, Collective Agreement for Dutch Universities (CAO-Nederlandse Universiteiten), excluding 8% holiday pay and a year-end bonus. We offer an extensive package of fringe benefits.

For informal inquiries and more information on the project please contact Koen Verhoeven: [k.verhoeven@nioo.knaw.nl](mailto:k.verhoeven@nioo.knaw.nl), <https://-www.nioo.knaw.nl/users/kverhoeven>, or tel. +31-317-473624.

Applications: Please send your application including complete curriculum vitae, a description of research interests, and names of three references to [vacature@nioo.knaw.nl](mailto:vacature@nioo.knaw.nl). The closing date for application is 14 December 2012, with interviews planned 19-20 December. The position is available immediately and could start early 2013.

Dr. Koen Verhoeven Netherlands Institute of Ecology (NIOO-KNAW) Dept. Terrestrial Ecology tel: +31 (0)317 473624 email: [k.verhoeven@nioo.knaw.nl](mailto:k.verhoeven@nioo.knaw.nl) web: [www.nioo.knaw.nl/users/kverhoeven](http://www.nioo.knaw.nl/users/kverhoeven) “Verho-

even, Koen" <K.Verhoeven@nioo.knaw.nl>

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## YaleU VirusEvolution

A two-year postdoctoral position is available on or after May 1, 2013 under the supervision of Dr. Paul Turner in the Department of Ecology and Evolutionary Biology at Yale University (<http://www.yale.edu/-turner/>). The project examines molecular variation

in experimentally-evolved and natural populations of RNA viruses, especially when viruses are challenged with environmental change such as host shifts, immune pressures and novel temperatures. Experience with bioinformatics, metagenomics, deep sequencing, and/or next-generation sequencing is preferred but all strong candidates will be considered. Please direct inquiries to [paul.turner@yale.edu](mailto:paul.turner@yale.edu)

Paul E. Turner Chair of Ecology and Evolutionary Biology Yale University New Haven, CT 06520 (203) 432-5918 <http://www.yale.edu/turner/> "Turner, Paul" <[paul.turner@yale.edu](mailto:paul.turner@yale.edu)>

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## Barcelona QuantCladistics Jun3-7

Registration is open for the workshop "QUANTITATIVE CLADISTICS AND USE OF TNT", June 3-7, 2013. Instructors: Dr. Goloboff and Dr. Szumik (Conicet, Argentine). More information:<http://www.transmittingscience.org/cladistics.htm> . The workshop will cover the basics of parsimony analysis and character optimization, tree-searches, diagnosing and summarizing results efficiently, and measuring group supports. It will have extensive hands-on exercises which will help participants get familiar with the main aspects of phylogenetic analysis using TNT. The workshop will make extensive use of TNT. There will also be a demonstration and some practice with GB>TNT, a program to create TNT matrices from GenBank data.

This workshop will be held in the Hostalets de Pierola (Barcelona, Spain) and are co-organized by Transmitting Science, Institut Català de Paleontologia M. Crusafont and the council of Hostalets de Pierola. Places are limited and will be covered by strict registration order.

Thank you in advances

With best regards

Soledad De Esteban Trivigno Area de Paleobiología Institut Català de Paleontologia Edifici ICP, Campus de la UAB 08193 Cerdanyola del Vallès Barcelona. Spain [www.icp.cat](http://www.icp.cat) Soledad Esteban <[soledad.esteban@icp.cat](mailto:soledad.esteban@icp.cat)>

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## Bodega California AppliedPhylogenetics Mar2-9

Final reminder

UC Davis

### WORKSHOP IN APPLIED PHYLOGENETICS

at Bodega Marine Laboratory, Bodega Bay, California  
March 2V9, 2013

Sponsored by the University of California, Davis and Bodega Marine Laboratory (additional financial support provided by the University of Rochester)

[http://bodegaphylo.wikispot.org/Front\\_Page](http://bodegaphylo.wikispot.org/Front_Page) Introduction Phylogenetic methods have revolutionized modern systematics and become indispensable tools in evolution, ecology and comparative biology, playing an increasingly important role in analyses of biological data at levels of organization ranging from molecules to ecological communities. The estimation of phylogenetic trees is now a formalized statistical problem with general agreement on the central issues and questions. A nearly standard set of topics is now taught as part of the curriculum at many colleges and universities. On the other hand, application of phylogenetic methods to novel problems outside systematics is an area of special excitement, innovation, and controversy, and perspectives vary widely.

This Spring, for the fourteenth consecutive year, we will teach a workshop for graduate students interested in applying phylogenetic methods to diverse topics in biology. The one-week course is an intensive exploration of problems to which modern phylogenetic approaches are being applied and the most current statistical tools and approaches that are used to solve those problems. We cover a range of topics in ecology, phylogenomics, functional morphology, macroevolution, speciation, and character evolution. The course starts with recent advances in phylogenetic methodology, and then focuses on methods and tools that can be brought to bear on these “applied” issues in the context of a given phylogeny.

The course will be held at the Bodega Marine Laboratory on the Northern California coast, which has on-site housing. Our newly increased bandwidth and access to computing clusters allows us to utilize computer-intensive approaches even in a one-week course. The course format will involve equal parts of lecture, discussion, and hands-on software training. One afternoon during the week will be left free for field trips to local natural areas.

Topics Covered \* Estimating, evaluating and interpreting phylogenetic trees \* Recent advances in Bayesian and Maximum-likelihood estimation of phylogeny \* Estimation of species trees, gene-tree/species-tree con-

flicts \* Divergence-time estimation from sequence data: relaxed clocks, fossil calibration \* Analysis of character evolution: maximum likelihood and Bayesian approaches, ancestral-state estimation, rates of trait evolution \* Analysis of morphological form, function of complex character systems \* Inference of diversification rates: detecting rate shifts, testing key innovation hypotheses \* Model specification issues: model selection, adequacy and uncertainty \* Diagnosing MCMC performance

Instructors for the 2013 workshop \* Carl Boettiger \* Gideon Bradburd \* Jeremy Brown \* Jonathan Eisen \* Rich Glor \* Tracy Heath \* Mark Holder \* John Huelsenbeck \* Luke Mahler \* Brian Moore \* Samantha Price \* Bruce Rannala \* Bob Thomson \* Peter Wainwright

Prerequisites Available housing limits course enrollment to ~30 students. Preference is given to doctoral candidates who are in the early to middle stages of their thesis research, and who have completed sufficient prerequisites (through previous coursework or research experience) to provide some familiarity with phylogenetic methods. Unfortunately, because of limits on class size, postdocs and faculty are discouraged from applying.

Admission and Fees Students will be admitted based on academic qualifications and appropriateness of research interests. The course fee is \$650. This includes room and board at BML for duration of the course (arriving March 2, leaving March 9) and transportation from Davis to

Application Deadline Applications are due by November 16, 2012. Please send a completed application form and one letter of recommendation from your major advisor. Applications should be sent via email as PDFs to [gbradburd@ucdavis.edu](mailto:gbradburd@ucdavis.edu). Students will be notified via e-mail by December 1, 2013 of acceptance.

Application Forms and Information Visit the Bodega website to for additional information and to download an application form: [http://bodegaphylo.wikispot.org/2013\\_Workshop](http://bodegaphylo.wikispot.org/2013_Workshop) Send all application materials to:

Gideon Bradburd Department of Evolution and Ecology 5343 Storer Hall University of California Davis Davis, CA 95616 email: [gbradburd@ucdavis.edu](mailto:gbradburd@ucdavis.edu)

“Brian R. Moore” <[brianmoore@ucdavis.edu](mailto:brianmoore@ucdavis.edu)>



[publicationslist.org/r.papa](http://publicationslist.org/r.papa)  
<roberto.papa@entecra.it>

Roberto Papa

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**Foggia Italy**  
**Plant Evolutionary Genetics**  
**Apr15-19**

Dear Colleagues,

this is the first announcement for the Course on  
METABOLOMICS AND PLANT BREEDING

15-19th April, 2013. Foggia, Italy

This course will provide a first section that offers a general overview of metabolomics and its applications to plant science, and a second part that will consider the various applications to plant breeding and plant genetics. The course is targeted for young scientists who are interested in plant breeding.

The course will cover the following topics:

Metabolomics in Plants Sciences - Plant Breeding -  
Plant Evolutionary Genetics.

Speakers:

Emidio Albertini (University of Perugia, ITA)

Romina Beleggia (Cereal Research Centre, Agricultural  
Research Council, ITA)

Nicola Cimino (Agilent Technologies)

Alisdair R. Fernie (Max-Planck Institute of Molecular  
Plant Physiology, DE)

Daniel J. Kliebenstein (University of California, Davis,  
USA)

Zoran Nikoloski (University of Potsdam and Max-  
Planck Institute of Molecular Plant Physiology, DE)

Roberto Papa (Cereal Research Centre, Agricultural  
Research Council, ITA)

Peter Shewry (Rothamsted Research, UK)

The deadline for submission of applications is 28th De-  
cember, 2012

More information at: <http://www.cerealresearchcentre.it>  
Prof. Roberto Papa  
Director of the CRA-CER Cereal Research Cen-  
tre, CRA-CER Agricultural Research Council  
(CRA) S.S. 16, km 675, 71122 FOGGIA tel:  
+39-0881-742972 Fax: +39-0881-713150 mobile:  
+39-3393921616 Email: roberto.papa@entecra.it  
<http://www.cerealresearchcentre.it> <http://>

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**Lisbon Evolution Mar11-15**

2nd CALL FOR STUDENTS: 1st International Winter  
School on Evolution

March 11th - 15th, 2013 | Ciência Viva Knowledge  
Pavilion, Lisbon, Portugal

Website: <http://evolutionschool.fc.ul.pt> We are happy  
to inform you that registration is now open for the 1st  
International Winter School on Evolution. Courses are  
open to international Master, PhD and Post-doctoral  
students in the exact, life, human and sociocultural evo-  
lutionary sciences.

About the courses

>From Monday to Friday, parallel sessions are orga-  
nized whereby visiting staff provide a 10-hour course  
(2 hours a day) on critical aspects of biological and so-  
ciocultural evolution. The courses are centered around  
the following modules.

Module 1: Macroevoluton and the Major Evolutionary  
Transitions Courses are taught by: Bruce Lieberman,  
Folmer Bokma, Eörs Szathmáry.

Module 2: Language Evolution Courses are taught by  
William Croft, Mónica Tamariz, Daniel Dor.

Module 3: Symbiogenesis, Lateral Gene Transfer  
and Viroolution Courses are taught by Douglas Zook,  
William Martin, Michael Arnold.

All courses are taught at a level accessible to Mas-  
ter, PhD and post-doctoral students in the exact, life,  
human and sociocultural evolutionary sciences. Stu-  
dents of evolutionary biology, microbiology, paleontol-  
ogy, evolutionary linguistics, evolutionary anthropol-  
ogy, and philosophy of biology will especially benefit  
from these courses.

Students will be provided a mandatory reading list  
which will form the basis of lectures and discussions.  
There are neither examinations nor paper assignments.

REGISTRATION FEE

350 euro for the whole week, regardless the number of  
courses you choose.

HOW TO ENROLL

You can enroll for a specific module (therefore follow-

ing a 30-hour course on the subject) or you may choose three courses of your specific interest. Places are limited, we therefore advise you to enroll as quickly as possible.

About the Winter School

The School is organized by the Applied Evolutionary Epistemology Lab of the Centre for Philosophy of Science of the University of Lisbon, in collaboration with *Ciência Viva* and with the support of the John Templeton Foundation.

DOWNLOAD OUR POSTER

<http://evolutionschool.fc.ul.pt/winter/docs/winter.pdf>

SUBSCRIBE TO THE WINTER SCHOOL MAILINGLIST

<http://eepurl.com/n2ELH> Websites

<http://evolutionschool.fc.ul.pt>, <http://appeel.fc.ul.pt>  
[appeelannouncements@fc.ul.pt](mailto:appeelannouncements@fc.ul.pt)

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## Lyon Comparative Genomics Jan21-Feb1

European Course “Comparative Genomics” 2013

Organizers: Jean-Nicolas Volff (ENS Lyon), Céline Brochier (University Lyon 1)

Since 2008, we organize the European course entitled “Comparative Genomics” for Master and PhD students from the Ecole Normale Supérieure of Lyon and from other European universities.

This year the course will be held from 21 January - 1 February 2013 at the Ecole Normale Supérieure de Lyon (France, <http://www.ens-lyon.fr>). The course aims at initiating students to Comparative Genomics, a young and fast-evolving scientific field with a growing impact on science and societies.

The course covers ten major topics of comparative genomics with an emphasis on recent major discoveries and innovating concepts/approaches in the fields of biology, ecology, medicine and biotechnologies. Each topic is presented by two internationally reputed scientists with complementary views/approaches. The two lectures are followed by a round table with the students and the two speakers.

The program and registration form are available at:

[http://lbbe-dmz.univ-lyon1.fr/spip\\_cg/](http://lbbe-dmz.univ-lyon1.fr/spip_cg/) Jean-Nicolas

Volff and Céline Brochier

| Céline Brochier-Armanet | | Laboratoire de Biométrie et Biologie Evolutive - UMR CNRS 5558 | Université Lyon 1, 43 Bd du 11 Novembre 1918 | 69622 Villeurbanne, France

| Tel: 33 (0)4 26 23 44 76 | Mail: [celine.brochier-armanet@univ-lyon1.fr](mailto:celine.brochier-armanet@univ-lyon1.fr)

| Web page: <http://www.frangun.org> | LIVRE: <http://www.springer.com/life+sciences/bioinformatics/book/978-2-287-99047-2> Céline Brochier  
[<celine.brochier-armanet@univ-lyon1.fr>](mailto:celine.brochier-armanet@univ-lyon1.fr)

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## Lyon Paleontology Feb4-15

European Course of Paleontology in Lyon

We are happy to open the registration for European Course on Paleontology in Lyon (France). The course is based on conferences spreading out from February 4 to February 15, 2013.

Various research domains such as aspects of early life evolution, Dinosaurs, Primates, or Evo-Devo will be discussed. Lecturers are selected on the basis on their work and competences concerning the retained topics. These topics will thus be presented by leaders of these areas. Every day, two lecturers of the same field will present their research and participate together to a round-table discussion with the students.

This year program will be announced soon (<http://biologie.ens-lyon.fr/masterbiosciences/presentation-des-ue-1/les-ue-europe/ue-paleontology/>), here is the list of some of the lecturers: Xing Xu (IVPP, Beijing), Charles Wellman (University of Sheffield), Marcelo Sanchez Villagra (University of Zurich), Jukka Jernvall (University of Helsinki), Philippe Janvier (National Natural History Museum, Paris), Martin Sander (University of Bonn), Jean-Sébastien Steyer (National Natural History Museum, Paris), Gareth Fraser (University of Sheffield), Jean Vannier (University of Lyon1), and Francis Albaredo (ENS Lyon).

All Students are welcome to this course, which will be held in English (up to 30 participants). Registration is free.

To register, please send an email to Cyril Charles ([Cyril.Charles@ens-lyon.fr](mailto:Cyril.Charles@ens-lyon.fr)) or Laurent Viriot ([Laurent.Viriot@ens-lyon.fr](mailto:Laurent.Viriot@ens-lyon.fr)) with your current status (Master or PhD student) and the name of your

research Institute. Please also indicate if you want to take the exam at the end of the course.

Cyril Charles

Cyril Charles <cyril.charles@ens-lyon.fr>

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## Oeiras Portugal BioinformaticsPopBiol

Oeiras, Portugal

Course Announcement

IB12A Introductory Bioinformatics

<http://gtpb.igc.gulbenkian.pt/bicourses/IB12A> with David P. Judge, Phil Cunningham and Pedro Fernandes

IMPORTANT DATES for this Course Deadline for applications: November 30th 2012 Latest notification of acceptance: December 3rd 2012 Course date: December 10th - 14th 2012

Candidates with adequate profile will be accepted in the next 72 hours after the application until we reach 20 participants.

Overview

The course sets out to introduce an extensive range of computing facilities vital for molecular biological research. This will be achieved primarily through “hands on” exercises based around an investigation of a well documented human disease. How information can be obtained both by analysis of raw sequence data and by interrogation of information resources will be demonstrated. In order to enable the participants to perform sequence analysis on short read sequences, we will provide a short tutorial on NGS data analysis for beginners.

Objectives

The course is a user course. How to use the various tools is thus the prime objective. However, where it is useful, the operation of the programs will be discussed as far as is required. Participants will know how to set up the programs in an informed fashion, and to fully understand the output generated. On completion of this 5 day long training, they will also know how to implement this methodology elsewhere, using public domain software and data resources.

The course will provide participants with an awareness

of a wide range of bioinformatics tools and sufficient experience to use those tools in basic investigations. Target Audience

This course is intended for those wishing to investigate how they might begin to exploit the ever expanding abundance of computing resources for molecular biologists. Course Pre-requisites

Basic understanding of molecular biology and no particular computing expertise will be assumed.

Thank you for your interest! (deadline for applications Nov 30th)

Pedro Fernandes GTPB Coordinator

– Pedro Fernandes Instituto Gulbenkian de Ciência Apartado 14 2781-901 OEIRAS Tel +351 21 4407912 <http://gtpb.igc.gulbenkian.pt> —

Oeiras, P9rtugal

BFB12 Biostatistical Foundations in Bioinformatics

IMPORTANT DATES for BFB12 Deadline for applications: November 17th 2012 <————— Latest Notification of Acceptance: November 18th 2012 Course date: December 3rd - December 7th 2012

With Lisete Sousa and Carina Silva-Fortes

We are proud to announce the third edition of our Foundations course in BioStatistics.

Led by the firm hand of two Statisticians that have their research work centered in the Life Sciences, participants go through a comprehensive set of short lectures and guided hands-on exercises. The course revisits concepts bottom-up from probability to classification, using an exclusive set of bioinformatics examples. It is a five day opportunity to put statistics back in shape, to acquire confidence in methods and to learn how to write small scripts using open source software (R).

\*Course description:\*

This is one of our “Foundations” type courses, providing a systematic and detailed review of fundamental concepts and techniques used in Bioinformatics. Many analytical and inferential methods, regardless of their novelty, have their niches of application all over the place in Bioinformatics. Newer techniques such as the ones employed in high throughput data analysis are not different in this respect. We will be looking at statistical methods, digging into their inner workings, wearing the skins of professional statisticians. Attendees can expect to attend a thorough set of lectures that will reveal the conceptual frameworks that are needed to understand the methods, and extensive hands-on practice, exclusively based on biological examples.

\*Target Audience\* Everybody using Bioinformatics methods is implicitly using statistical methods. Most people have had one or more semester courses in Statistics in their graduate education. For many, Statistics happened in their lives a long a time ago, and that makes it difficult to go back and manipulate the concepts with full confidence. Moreover, proper judgement of the results often calls for a deeper level of understanding than what is required to solve scholarly exercises.

Attending this course is a chance of revisiting subjects like experimental design, hypothesis testing, inference and prediction in an intensive and systematic way. We will look into particular areas such as Bayesian Inference, Hidden Markov Chains and Multivariate methods with the attitude, eyes and brains of a statistician that

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

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## Oeiras Portugal PopulationStructure Dec17-19

IGC, Oeiras, Portugal

Course Announcement

IPSI12 Introduction to Population Structure Inference with Lounès Chikhi and Vitor Sousa

IMPORTANT DATES for this Course Deadline for applications: November 30th 2012 Latest notification of acceptance: December 5th 2012 Course date: December 17th - 19th 2012

Candidates with adequate profile will be accepted in the next 72 hours after the application until we reach 20 participants.

<http://gtpb.igc.gulbenkian.pt/bicourses/IPSI12/>  
Overview

Genetic data are increasingly used by ecologists and evolutionary biologists in general. It has thus become important for many biologists with different levels of experience to produce and analyse genetic data. In this short course we shall try to take a practical approach to the analysis of genetic data, but we will also provide some of the theoretical background required to under-

stand the outputs of the software used. This course will be organised so as to mix sessions where important notions are introduced with practicals where freely available software will be used. While this will not be the focus of the course, we will also discuss genealogical (coalescent-based) simulation methods and those based on forward-in-time simulations. Altogether this will allow to discuss the potentialities and limitations of the tools available to the community.

In this three-day course we will introduce the main concepts that underlie many of the population structured models that are frequently used in population genetics. We will focus on the importance of demographic history (e.g. effective sizes and migration patterns) in shaping genetic data. We will go through the basic notions that are central to population genetics, insisting particularly on the statistics used to measure genetic diversity and population differentiation. The course will also cover a short introduction to coalescent theory, Bayesian inference in population genetics and data simulation, as they are connected to what makes landscape genetics today on the basis of multilocus data.

Most theory will be put into practice in practical sessions, analyzing real and/or simulated datasets. In these sessions, we will

(i) look at measures of genetic diversity and differentiation using GENETIX; (ii) use methods to detect population structure as implemented in the programs GENECLASS2 and STRUCTURE; (iii) use geneland to detect genetic clusters using spatial information on the sampling locations of individuals, and (iv) learn how to perform coalescent simulations of genetic data (using SPAMs and ms).

Thank you for your interest! (deadline for applications Nov 30th)

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Upcoming Training Courses in GTPB: <http://gtpb.igc.gulbenkian.pt/bicourses/BFB12> <http://gtpb.igc.gulbenkian.pt/bicourses/IB12A> <http://gtpb.igc.gulbenkian.pt/bicourses/IPSI12> – Pedro Fernandes Instituto Gulbenkian de Ciência Apartado 14 2781-901 OEIRAS Tel +351 21 4407912 <http://gtpb.igc.gulbenkian.pt> Pedro Fernandes <[pfern@igc.gulbenkian.pt](mailto:pfern@igc.gulbenkian.pt)>

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## UCopenhagen Panama TropicalEvolution

\*University of Copenhagen Graduate Course: Tropical Behavioural Ecology and Evolution in Panama\*

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\*Course summary: \*

The course will provide an overview of the patterns and processes that determine tropical biodiversity and of the evolutionary ecology of key invertebrate model systems. The program is designed for graduate students at all levels and includes a three week preparation phase in Copenhagen (online for graduate students elsewhere), where students will prepare and discuss literature, and a personal field project proposal (in the STRI short-term fellowship format) with instructors to ensure scientific interest and feasibility. Once in Panama (May 2013), students will focus on personal research projects which will be supervised by the instructors to maximize the probability of obtaining publishable results. A small group project designed by course instructors or STRI scientists will expose students to specific research techniques and study organisms as well as promote collaborative research. Students will read, review, and discuss the work of their peers, attend lectures/tutorials and excursions throughout the stay in Panama. A final report in manuscript form will be submitted 16 days after the field component in Panama (June 12th). Students will have the opportunity to interact with STRI researchers and become familiar with infrastructural aspects of tropical research in behavioural ecology and evolution at the world renowned Smithsonian Tropical Research Institute.

\*Registration period: \*Nov. 1st -March 8th

Space is limited to 16 Ph.D. and M.Sc. students therefore an application procedure is necessary. Personal motivation and submission of the required permit paperwork will be part of the admission criteria in case the course becomes oversubscribed. General observation permits are provided but Ph.D. students are encouraged to apply for personal permits before Jan. 1st to allow collection and exportation of specimens relevant for vouchersing and research.

\*Course dates: \*

\* \*April 6th-29th (online preparation and proposal

writing)

May 2nd to 27th (field course in Gamboa, Panama)

June 12th (final paper due, oral exams for M.Sc. students enrolled at the University of Copenhagen will take place June 21st in Denmark)

\* \*

\*Fees: \*

\* \*This 15 ECTS course is subsidized by the Centre for Social Evolution at the University of Copenhagen ([\\*http://socialevolution.ku.dk/\\*](http://socialevolution.ku.dk/)) but will still carry a fee of Dkr 9000 (1200 or \$1485) for the 26 day field component in Panama. Expenses for transportation in Panama (trucks, boats and charter buses), accommodations, and meals will be covered but students will arrange to pay their flights and personal research permits. Small stipends may be awarded to qualified Panamanian students.

\* \*

\*For more information and how to apply for the course please go to:\*

<http://www1.bio.ku.dk/english/research/oe/cse/-kursur> and <http://megalomyrmex.com/Teaching.html>

It is essential that you also contact Rachele Adams personally at [\\*rmmadams@gmail.com\\*](mailto:rmmadams@gmail.com) for further information on admission procedures.

\*Main instructors and organizers:\*

-Dr. Rachele M. M. Adams, CSE University of Copenhagen and Smithsonian Institution Postdoctoral Fellow

-Dr. Jacobus J Boomsma, Professor, CSE University of Copenhagen, STRI Senior Research Associate

-Dr. Jonathan Z. Shik, North Carolina State University Postdoctoral Fellow

- Rachele M.M. Adams Ph.D. Postdoctoral Fellow  
Centre for Social Evolution Department of Biology University of Copenhagen Universitetsparken 15 DK-2100 Copenhagen, Denmark

Smithsonian Institution Molecular Evolution Fellow  
Department of Entomology Smithsonian Institution PO Box 37012 NHB, MRC 188, Rm. CE-518 Washington, DC 20013-7012 Tel.: 202-633-1002 (Office)

E-mail addresses: [RAdams@bio.ku.dk](mailto:RAdams@bio.ku.dk) [rmmadams@gmail.com](mailto:rmmadams@gmail.com)

Websites: <http://www1.bio.ku.dk/english/research/oe/cse/personer/rachele/> <http://entomology.si.edu/StaffPages/AdamsRMM.html>  
<http://www.megalomyrmex.com> Rachele Adams

<[rmmadams@gmail.com](mailto:rmmadams@gmail.com)>



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## Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from ‘blackballed’ addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notification of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that ‘on vacation’, etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail’s your code can be temporarily changed to 000000.

To send messages to the EvolDir direct them to the email `evolDir@evol.biology.McMaster.CA`. Do not include encoded attachments and do not send it as Word files, as HTML files, as L<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.