
E v o l D i r

February 1, 2013

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

Foreword

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

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

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



Foreword	1
Conferences	2
GradStudentPositions	15
Jobs	42
Other	67
PostDocs	84
WorkshopsCourses	128
Instructions	138
Afterword	139

Conferences

Chicago SMBE2013 Jul7-11 RegistrationOpen 2	Lisbon ESEB2013 Aug19-24 SexRoleEvolution 7
Cornwall UK EMPSEB 19 Sep3-7 EvolBiolRegistration 2	Lisbon EvolutionaryPatterns May27-29 7
Guarda Switzerland EvolBiol Jun22-29 3	Montpellier MathCompEvolBiol May27-31 8
Innsbruck AntEvolution Sep5-8 Registration 3	Montpellier Speciation2013 May27-29 9
LakeComo Italy GenomeEvolution Jun27-Jul5 4	Paris EvolutionCancer Mar18 10
Lisbon ESEB2013 Aug19-24 Deception 4	Portugal EcologicalSpeciation Apr29-30 10
Lisbon ESEB2013 Aug19-24 EvolBiolInChina 5	Portugal Speciation Apr29-30 11
Lisbon ESEB2013 Aug19-24 EvolutionaryConservation 5	PrincetonU OriginOfLife Jan21-24 11
Lisbon ESEB2013 Aug19-24 GenomeEvolution 6	Romania EvolutionSocialInsects Mar14-18 12
Lisbon ESEB2013 Aug19-24 NonGeneticInheritance 6	Roscoff France EvolutionAndCancer Nov2-6 12
	Roscoff France Sex GeneticSystems May22-26 13

Chicago SMBE2013 Jul7-11 RegistrationOpen

Registration & Abstract Submission NOW OPEN!

The 2013 SMBE Annual Meeting will take place July 7-11 in Chicago, IL at the Hyatt Regency Hotel and Conference Center. Registration and abstract submission is now open for members, non-members and students.

This meeting provides an excellent forum to network and share contributions made to the field of evolutionary and molecular biology. Registration rates are the following:

Member \$450 Member Post Doc \$400 Member Student \$375

Non-Member \$600 Non-Member Post Doc \$550 Non-Member Student \$450 Accompanying Person \$75

Take a moment to submit an abstract for an oral or poster presentation. Those not selected to present an oral presentation may be asked to present a poster presentation.

ABSTRACT SUBMISSION DEADLINE: MARCH 19, 2013

Register: <http://meetingcenters.org/->

<http://meetingcenters.org/-> Submit an Abstract: <https://meetingcenters.org/submit.aspx?meetingid=760>

Hotel Reservations: https://resweb.passkey.com/-Resweb.do?mode=welcome_gi_new&groupID=8960229

SMBE Membership: <http://smbe2013.org/-2013/About/SMBE-Membership.aspx>

For questions pertaining to exhibits please contact: <mailto:secretariat@smbe2013.org>

Stefan R. Bradham Marketing & Business Development Manager Federation of American Societies for Experimental Biology (FASEB) Tel 301.634.7213 Email sbradham@FASEB.org Web www.FASEB.org "Bradham, Stefan" <sbradham@faseb.org>

Cornwall UK EMPSEB 19 Sep3-7 EvolBiolRegistration

EMPSEB 19 - REGISTRATION OPEN AND CALL FOR ABSTRACTS

Dear Colleagues, It is our pleasure to announce that the 19th European Meeting of PhD Students in Evolutionary Biology (EMPSEB) is to be held at the University of Exeter Cornwall Campus, UK, from the 3rd-7th September, 2013.

Registration is now open, and we will be welcoming applications from European PhD students at all stages of their research until March the 1st, 2013. Details about how to register can be found on the website: <http://www.empseb19.com> Registration cost: 350euro (Price includes transport to Cornwall from selected UK airports, accommodation, and meals for the duration of the conference)

Any enquiries should be directed to secretary@empseb19.com

EMPSEB in a nutshell: EMPSEB provides a platform for PhD students studying evolutionary biology to present their work and meet their peers from all over Europe. It takes place in a different European city each year, and is organised by the PhD students of the host country. The meeting is now an annual tradition that started 18 years ago with the first meeting being held in Zurich, Switzerland in 1995.

EMPSEB 19 will last for 5 days and will involve a variety of activities, discussions and excursions. Joining the participants will be a number of senior evolutionary scientists who have been invited to give plenary talks, run discussion groups, and provide expert guidance on starting a scientific career. Plenary speakers will provide constructive feedback on talks by PhD students, who are all required to give a short 10 minute presentation.

We would be very grateful if you could forward this message to anyone you think might be interested.

Follow us on Twitter & Facebook: <https://twitter.com/empseb19> <https://www.facebook.com/EMPSEB19>
 “Somers-Yeates, Robin”
 <rhs206@exeter.ac.uk>

Guarda Switzerland EvoBiol Jun22-29

Dear Friends, Colleagues, former Guarda participants

It my pleasure to announce this years Guarda workshop in Evolutionary Biology for master and PhD students. The main aim of the course is to develop the skills to produce an independent research project in evolutionary biology.

The course takes place 22. - 29. June 2013 in the Swiss mountain village Guarda. Faculty includes Stephen Stearns, Robert Trivers, Sebastian Bonhoeffer and Di-

eter Ebert (organizer).

The course is intended for master (or Diploma) students and early PhD students with a keen interest in evolutionary biology.

The web page with all the details can be found under: <http://www.evolution.unibas.ch/teaching/guarda/-index.htm> Application is open now. Deadline is March 1, 2013.

NEW: Read about the history of the Guarda workshop <http://www.evolution.unibas.ch/teaching/guarda/index.htm> Please communicate this information to interested students.

If you receive this email multiple times, please excuse me.

With best wishes,

dieter ebert

– Dieter Ebert Universität Basel, Zoologisches Institut, Evolutionary Biology Vesalgasse 1, CH-4051 Basel, Switzerland <http://evolution.unibas.ch/> Email: dieter.ebert@unibas.ch Tel. +41-(0)61-267 03 60 FAX +41-(0)61-267 03 62

dieter.ebert@unibas.ch

Innsbruck AntEvolution Sep5-8 Registration

Dear evoldir member,

Registration and abstract submission are now open for the 5th Central European Workshop of Myrmecology (CEWM). CEWM will be held in Innsbruck, Austria, on 5-8 September 2013 - click here <http://cewm2013.org/> for the meeting's website and here <http://cewm2013.org/03-reg.php> for registering!

The scope of CEWM is: All fields of ant research, including social evolution, behaviour, population biology, systematics and phylogeny, genomics, biogeography and faunistics, ecology, and conservation biology.

Together with our sponsor partners we are working towards a truly integrated, equal-opportunity meeting for the ant researcher community with regard to age and gender, as well as economic and geographic background of the participants.

Looking forward to seeing you in Innsbruck,

Warmest,

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

—

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://cewm2013.org> office@cewm2013.org

LakeComo Italy GenomeEvolution Jun27-Jul5

First announcement for the Workshop on Statistical Physics / Biology “Quantitative Laws of Genome Evolution” 27 June - 5 July 2013 Lake Como School of Advanced Studies in Complex Systems Villa del Grumello Como, Italy Registrations will open in February 2013 Scholarships will be available on a selection basis

For more information, contact:
ev.genome.workshop@gmail.com

Summary: Quantitative approaches to evolutionary genomics, systems biology, and ecology unravel several universal regularities connecting genome-scale observables, phenotypes and physiological traits. A current challenge for theoreticians is understanding how different universal features emerging empirically can be accounted for by simple mathematical models exploring quantitative laws at different levels, from physiology to evolutionary genomics. The scope of this workshop is to give an overview of the current state of this emerging field. The workshop will primarily target PhD students and postdocs with a physics or mathematics background, but the school is open to anyone with background in (evolutionary) genomics, (evolutionary) biology, bioinformatics, ecology, interested in quantitative work.

Sponsors: Centro Volta Lake Como School of Advanced Studies in Complex Systems iPoLS Network

Confirmed Speakers (the list is growing) Eugene Koonin (NCBS / NIH Bethesda) Luca Peliti (Naples, Statistical Mechanics, Evolutionary Biology) Olivier Tenaillon (Paris, Evolutionary Biology, Experiments

and Theory) Herve Isambert (Institut Curie, Paris) Amos Maritan (Univ Padua) Dominique Schneider (University of Grenoble) Sergei Maslov (Brookhaven National Laboratory) Joshua Weitz (GA Tech) Uberto Pozzoli (IRCCS Medea) Rosalind Allen (University of Edinburgh) Namiko Mitarai (NBI Copenhagen) Organizing

Committee: Marco Cosentino Lagomarsino (Chair, U -Pierre et Marie Curie, Paris) Uberto Pozzoli (IRCCS Eugenio Medea) Luigi Grassi (Univ Roma “La Sapienza”) Federico Bassetti (Univ Pavia)

Steering Committee: Joshua Weitz (GA Tech) Sergei Maslov (BNL Brookhaven) Dominique Schneider (University of Grenoble) Rosalind Allen (University of Edinburgh) Namiko Mitarai (NBI Copenhagen)

University of Insubria Committee: Vincenzo Gino Benza, Giulio Casati

jsweitz@gatech.edu

Lisbon ESEB2013 Aug19-24 Deception

Dear Colleagues,

If you have not already heard, registration is now open for the XIV Congress of the European Society for Evolutionary Biology (<https://www.eseb2013.com>), happening in Lisbon, Portugal, from the 19th - 24th August 2013. We are pleased to invite abstract submissions for oral and poster presentations until the 28th of February 2013, for the symposium entitled:

EVOLUTIONARY CONSEQUENCES OF DECEPTION

Invited speakers:

- Martin Stevens (University of Cambridge)
- Tom Sherratt (Carleton University)

Organisers:

- Carita Lindstedt-Kareksela (University of Jyväskylä)
- Mikael Mokkonen (University of Jyväskylä and Simon Fraser University)

Description: The ability to deceive oneself, conspecifics or individuals of other species is a fundamental aspect to many coevolutionary struggles. Brood parasites have the ability to produce eggs that exactly resemble the egg coloration of their host species, while alterna-

tive mating strategies employed by 'sneaker' individuals circumvent confrontation in intrasexual competition - these are just a few examples of widely known deceptive strategies in the animal kingdom. Deception allows individuals to gain an evolutionary advantage in reproduction and/or survival, such as through deceptive colour mimicry, predator-prey systems, sexually antagonistic encounters with a mate, parent-offspring interactions or competition over resources. Much of the existing research on deception has been fragmented into various topics with limited interaction, even though there are some common themes such as frequency dependent selection, manipulation of the receiver's sensory system, and the antagonistic coupling of the actor's benefits to costs of the recipient(s). Thus, our goals of this symposium are to unify researchers from different fields, as well as provide opportunities to present novel findings, questions, and different perspectives in an effort to better understand the costs and benefits of deception.

For submission of abstracts follow the instructions on the website at <https://www.eseb2013.com> We look forward to seeing you in Lisbon!

Mikael and Carita

Mikael Mokkonen <mikael.mokkonen@gmail.com>

Lisbon ESEB2013 Aug19-24 EvolBioInChina

During the XIV Congress of the European Society for Evolutionary Biology, Lisbon, 19-24 August 2013, there will be a symposium on:

Evolutionary Biology in China

organised by Roger Butlin and Kai Zeng, University of Sheffield.

The aim of the symposium is to provide a showcase for evolutionary research in China and to foster communication and collaboration between Chinese and European evolutionary biologists. The focus will be on evolutionary genetics.

Up to 8 openings for oral presentations (15 minutes) are available and there will also be a poster session associated with the symposium. To register and offer a contribution (talk or poster), please visit <http://www.eseb2013.com>, before the deadline of 28 February 2013. Potential contributors will be informed whether or not

their contribution has been accepted during March.

For more information, or for advice about obtaining a visa, please contact one of us. Roger Butlin - r.k.butlin@shef.ac.uk Kai Zeng - k.zeng@shef.ac.uk

r.k.butlin@sheffield.ac.uk

Lisbon ESEB2013 Aug19-24 EvolutionaryConservation

Dear colleagues,

Registration for the *ESEB Congress in Lisbon (19-24 August 2013)* is now open, and we are inviting submissions of contributed talks and posters to a symposium addressing advances in Evolutionary conservation.

Register and submit your abstracts through the congress website: <https://www.eseb2013.com/> Don't forget ***DEADLINE for submission is February 28th, 2013***

Evolutionary conservation: the applied side of evolutionary biology

Organizers: Christophe Eizaguirre (GEOMAR, Kiel, Germany) ceizaguirre@geomar.de Miguel Soares (GEOMAR, Kiel, Germany) msoares@geomar.de Victor Stiebens (GEOMAR, Kiel, Germany) vstiebens@geomar.de

Invited speakers: Prof. Louis Bernatchez <http://www.bio.ulaval.ca/louisbernatchez/presentation.htm>

Prof. Jacob Höglund <http://www.ebc.uu.se/Research/IEG/popbiol/People/Jacob.Hoglund/>

Prof. Simone Sommer <http://www.izw-berlin.de/welcome.html> Description: Conservation biology is one of the rare fields of biology where evolution has too often been neglected. The reason for this probably stems from the misconception that evolution does not act on an ecologically relevant time scale. Here, we aim to combine evolutionary and conservation biology.

The symposium spans a large range of fields and will be organized in three parts (1) Evolutionary theories (e.g. viability of small populations, pace of allele fixation, role of phenotypic plasticity etc) (2) Evolutionary constraints on small population sizes and impacts of conservation measures. (3) Next generation sequencing: genetic diversity, evolution and adaptive potential of endangered species.

The symposium will lead to a special issue in Evo-

The symposium will lead to a special issue in Evo-

lutionary Applications <http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291752-4571> which should be published in 2014.

For more details, please do not hesitate to contact us, Christophe Eizaguirre, Miguel Soares, Victor Stiebens

– Christophe Eizaguirre GEOMAR|Helmholtz Center for Ocean Research Evolutionary Ecology of Marine Fishes Duesternbrooker Weg 20 24105 Kiel,

Germany

Tel: +49 (0)431-600-4559 Fax: +49 (0)431-600-4553

Email: ceizaguirre@geomar.de <http://www.geomar.de/de/mitarbeiter/fb3/ev/ceizaguirre/>
<https://sites.google.com/site/christopheeizaguirre/>
<http://turtle-project.ifm-geomar.de/> Christophe Eizaguirre <ceizaguirre@geomar.de>

Lisbon ESEB2013 Aug19-24 GenomeEvolution

Dear colleague,

We would like to invite submission of abstracts to the symposium “Linking genome evolution at different time scales” to take place at the meeting of the European Society for Evolutionary Biology in Lisbon (23rd-26th June, 2012; <https://www.eseb2013.com/symposia>).

The deadline to submit an abstract is the 28th of February 2013, for more details please visit:

<https://www.eseb2013.com/talks> Symposium summary:

The inference of evolutionary forces, notably selection, from molecular data, has a long tradition in evolutionary biology. Studies usually focus either on interspecific or on intraspecific

data, and thus address disconnected questions. Thanks to advances in genomics and in computational biology, there is increasing interest in bridging the gap between these two fundamental scales of evolution. This symposium will provide exciting discussions and prospects to where next-generation sequencing data can lead us in the understanding of the selective forces acting during evolution.

Confirmed speakers: Patricia Beldade (Instituto Gulbenkian de Ciência, Lisbon), Laurent Excoffier (University of Bern)

If you have any question regarding this symposium please do not hesitate to contact us:

Nicolas Salamin (University of Lausanne, nicolas.salamin@unil.ch) Marc Robinson-Rechavi (University of Lausanne, marc.robinson-rechavi@unil.ch)

– Nicolas Salamin Department of Ecology and Evolution Biophore / office 3212 University of Lausanne 1015 Lausanne Switzerland

tel: +41 21 692 4154 fax: +41 21 692 4165 <http://www.unil.ch/phylo> Swiss Institute of Bioinformatics <http://www.isb-sib.ch/groups/lausanne/cpg-salamin.html> nicolas.salamin@unil.ch

Lisbon ESEB2013 Aug19-24 NonGeneticInheritance

Dear colleagues,

We are glad to invite you to submit abstracts for posters and talks for the NON GENETIC INHERITANCE session organized at ESEB 2013 (19th to the 24th of August in Lisbon, Portugal).

<https://www.eseb2013.com/> Registration is now opened and the deadline for abstract submission is 28th of February 2012.

Looking forward to receive your abstracts.

Best wishes from the organizers of the NGI session

Benoit Pujol < <http://www.edb-ups-tlse.fr/Pujol-Benoit.html> > and Katie Stopher < <http://wildevolution.biology.ed.ac.uk/jpemberton/-KatieStopher2.html> >

More details on the session here:

Invited speakers: Kevin Laland < <http://lalandlab.st-andrews.ac.uk/> > and Etienne Danchin < <http://www.edanchin.fr/spip.php?article22> >

Description: Evidence is accruing that epigenetic, developmental, parental, ecological and cultural inheritance mechanisms have a major impact on the evolution of phenotypic diversity. The aim of this symposium is to highlight novel results and synthesize our knowledge on the contribution of non-genetic inheritance to evolutionary processes. We will also explore the need for an extended theory of evolution where genes are not the only inheritance system.

Benoit PUJOL <benoit.pujol@univ-tlse3.fr>

– *Benoit PUJOL* French CNRS researcher CNRS Research Network Manager - Quantitative genetics in the wild

Lab. Evolution & Diversité Biologique (EDB) Office 22, Bat. 4R1, Université de Toulouse Paul Sabatier, 118 Route de Narbonne 31062 Toulouse Cedex 09 Tel: 0033(0)561 558 545 Mail: benoit.pujol@univ-tlse3.fr

Benoit PUJOL <benoit.pujol@univ-tlse3.fr>

Lisbon ESEB2013 Aug19-24 SexRoleEvolution

Dear Colleagues,

Registration is now open for the XIV Congress of the European Society for Evolutionary Biology (ESEB), to be held in Lisbon from the 19-24 of August 2013.

We are happy to announce the symposium:

NEW DIRECTIONS IN SEX ROLE RESEARCH

Invited speakers: 1. Professor Hanna Kokko, Australian National University, Canberra (http://biology.anu.edu.au/hanna_kokko/) Title of talk: “Do all interesting predictions of sexual selection theory really hold? ”

2. Professor Larry J Young, Emory University, Atlanta (http://www.yerkes.emory.edu/research/divisions/-behavioral_neuroscience/young_larry.html) Title of talk: “Neuropeptides, social bonding and sex roles”

Description: The evolution of sex roles is a core area in evolutionary biology linking life history and sexual selection theory to neuro-genomic causes of sex roles. Recent advances have provided fresh insights into sex roles in numerous marine and terrestrial animals. Our symposium focuses on current advances in this field, taking advantage of recent theoretical, experimental and phylogenetic analyses.

Symposium organisers: 1. Professor Tamas Szekely, University of Bath, Bath (<http://www.bath.ac.uk/bio-sci/biodiversity-lab/>) 2. Professor Michael Jennions, Australian National University, Canberra (<http://biology.anu.edu.au/Michael.Jennions/>)

To register and submit your abstract for this symposium, please follow the instructions on the congress website (<https://eseb2013.com/>).

We look forward to hearing from you, and hope to see you in Lisbon next year!

Tamas Szekely and Michael Jennions

Tamas Szekely, Dept of Biology and Biochemistry, University of Bath, Bath BA2 7AY, UK. +44 1225 383676 (phone), T.Szekely@bath.ac.uk (email)

Professor Michael Jennions, Research School of Biology, The Australian National University, Canberra, ACT 0200, Australia. +61 2 6125 3540 (phone), michael.jennions@anu.edu.au (email)

Professor Tamas Szekely Professor of Biodiversity Dept of Biology and Biochemistry, University of Bath, Bath BA2 7AY, UK 01225 383676 (phone), 01225 386779 (fax), T.Szekely@bath.ac.uk (email) <http://www.bath.ac.uk/bio-sci/biodiversity-lab/index.htm> <http://www.maiiconservation.org> Social Behaviour: Genes, Ecology and Evolution, 2010, Edited by Tamas Szekely, Allen J Moore & Jan Komdeur. Cambridge University Press, 2010 http://www.cambridge.org/gb/knowledge/isbn/item5708507/?site_locale=en_GB

Lisbon EvolutionaryPatterns May27-29

3RD 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 Atkinson, Alberto Bisin & Thierry Verdier, Andreas Bohn, Michael Bradie, Jorge Carneiro, Claudine Chaouiya, Mark Collard, Alex de Voogt, Frank Kressing & Matthias Krischel, André Levy, Margarida Matos, Telmo Pievani, Luis Mateus Rocha, Élio Sucena

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 euro | PhD and post-docs: 250 euro | Audience: 100 euro | Students: 50 euro

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>

AppEEL

Announcements

<appeelannouncements@fc.ul.pt>

Montpellier MathCompEvolBiol May27-31

Registration deadline January 31: MCEB 2013, focus on applications to health and medicine

MCEB - Mathematical and Computational Evolutionary Biology 27-31 May 2013 - South of France

Website: <http://www.lirmm.fr/mceb2013/> Pre-registration deadline: January 31

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 euro to 500 euro depending on the room type. PhDs and postdocs will benefit of the cheapest rooms.

Keynote speakers:

Sebastian Boenhoeffer (ETH Zürich, CH). Molecular and mathematical epidemiology of viruses.

Bastien Bousseau (University of California, Berkeley, US). Genome-scale phylogenomics.

Alexei Drummond (University of Auckland, NZ). Bayesian molecular epidemiology.

Ian Holmes (University of California, Berkeley, US). Phylogenetics grammars and heterogeneous space-time models.

Steven Kelk (Maastricht University, NL). Recent advances in rooted phylogenetic networks: the long road to explicit hypothesis generation.

Darren Martin (University of Cape Town, SA). Factors

influencing recombination in viruses.

Erick Matsen (Fred Hutchinson Cancer Research Center, Seattle, US). Phylogenetics and the human microbiome.

Tanja Stadler (ETH Zürich, CH). Phylogenetics in action - merging epidemiology and evolutionary biology.

Simon Tavaré (University of Cambridge, UK and University of Southern California, US). Cancer as an evolutionary process.

Gil McVean (University of Oxford, UK). Dissecting the genetic contribution to human disease.

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

Olivier Gascuel <gascuel@lirmm.fr>

Montpellier Speciation2013 May27-29

Dear colleagues,

We are pleased to announce that the second European Conference on Speciation Research (SPECIATION 2013) will be held in Montpellier, France, 27-29 May 2013.

This conference is part of the European Science Foundation's Research Networking Programme Frontiers of Speciation Research (FroSpects), which is funded by 18 of ESF's national member organisations.

This event will echo the first European conference dedicated to speciation research that took place at the IIASA Conference Center, Laxenburg, Austria in 2010. As a closure event of the FroSpects network on speciation research, this second conference aims to provide an update on the contemporary status of the field and future research prospects.

A major focus of the conference will be to facilitate bridge-building between the different approaches to speciation research and to promote connections among researchers in this field of research. To this aim, the conference will promote lectures surveying fields of contemporary speciation research and encourage contributions of an integrative as well as innovative nature. The presentations and discussions will cover topics including, but not limited to, speciation-with-gene-flow, macro-evolutionary patterns of diversification, species

cohesion and recognition, speciation models, the role of hybridisation and adaptive introgression in speciation, adaptive and ecological speciation, non-ecological speciation, genetics and genomics of speciation, behavioural drivers of speciation, experimental evolution, plasticity and learning, the interplay between sexual and natural selection.

The conference will be held in the historical School of Medicine in Montpellier, one of the oldest medical schools in Europe. It will feature 16 invited speakers (see the list below), as many contributed talks and some poster presentations.

Further details about the conference organisation, registration and application procedures, accommodation in Montpellier and travel directions will be posted in the coming weeks.

For any informal inquiries, please contact Carole Smadja by email: carole.smadja-at-univ-montp2.fr

Best Wishes,

Organisers: Isabelle Olivieri, Carole Smadja and Fadela Tamoune (Institut des Sciences de l'Évolution, Montpellier, France)

Co-organisers: Ulf Dieckmann (Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria) and Åke Brännström (Umeå University, Sweden), FroSpects chairs.

Scientific committee: the FroSpects Steering Committee (Åke Brännström, Sweden; Roger Butlin, United Kingdom; Ulf Dieckmann, Austria; Mats Gyllenberg, Finland; Maria Manuela-Coelho, Portugal; Géza Meszéna, Hungary; Axel Meyer, Germany; Isabelle Olivieri, France; Emilio Rolán-Alvarez, Spain; Glenn-Peter Sætre, Norway; Ole Seehausen, Switzerland; Skúli Skúlason, Iceland; Radka Storchová, Czech Republic; Jacek Szymura, Poland; Ioan Valeriu Ghira, Romania; Jacques van Alphen, The Netherlands)

Confirmed invited speakers: Stuart BAIRD, Associate Professor at the Research Centre for Biodiversity and Genetic Resources (CIBIO), University of Porto, Portugal Jenny BOUGHMAN, Associate Professor at Michigan State University, USA Åke BRANNSTROM, Associate Professor, Umeå University, Sweden Roger BUTLIN, Professor of Evolutionary Biology at the University of Sheffield UK Ulf DIECKMANN, Program Leader, Evolution and Ecology Program, International Institute for Applied Systems Analysis, Laxenburg, Austria Zach GOMPERT, Post-doctoral Research Associate, Texas State University, USA Astrid GROOT, Associate professor at the Institute for Biodiversity and Ecosystem Dynamics at the University of Amsterdam,

The Netherlands Robin HOPKINS, Post-doctoral Research Associate, Texas State University, USA Mark KIRKPATRICK, Professor of Evolutionary Biology, University of Texas at Austin, USA Martine MAAN, NWO Veni Fellow at the University of Groningen, The Netherlands Jim MALLET, Professor of Evolutionary Biology, Harvard University, USA Axel MEYER, Professor of Zoology and Evolutionary Biology at the Universität Konstanz, Germany Leonie MOYLE, Associate Professor of Biology, Indiana University, USA Patrik NOSIL, ERC fellow and Lecturer at the University of Sheffield, UK David PFENNIG, Professor, University of North Carolina at Chapel Hill, USA Jochen WOLF, researcher at the University of Uppsala, Sweden

– Dr. Carole Smadja CNRS research scientist Institute of Evolutionary Biology, Montpellier <http://www.carole-smadja.staff.shef.ac.uk/> – Institut des Sciences de l'Evolution cc065, Université Montpellier 2 34095 Montpellier France Phone: +33 (0)4 67 14 92 70

Paris EvolutionCancer Mar18

*Evolution and Cancer Conference - Paris, 18 March 2013

*A one day conference on "Evolution and Cancer" will take place in Paris at: Espace Saint Martin, 199bis rue Saint Martin, 75003 Paris. It is cosponsored by Cancéropôle and the CNRS research consortium on evolution and cancer (<http://www.darevcan.univ-montp2.fr/>).

The objective of the conference is to foster discussion evolutionary perspectives to understanding cancer emergence, progression and therapies. Invited speakers include: Robert Gatenby, Eduardo Moreno, Charles Swanton, Mel Greaves, Miroslav Radman, Kathleen Sprouffske, Jean-Jacques Kupiec, and Raphael Itzykson. The final conference programme will be posted shortly.

If you wish to attend, then please register at<http://canceropole.9ecolloque-2013.sgizmo.com/s3/> Scientific committee: Pr Eric Solary (Scientific Director of Cancéropôle IDF, and The Institut Gustave Roussy), Pr. Michael Hochberg (Director of DarEvCan)

For more information, please contact Pascale Gramain: pascale.gramain@canceropole-idf.fr

Michael Hochberg <mhochber@univ-montp2.fr>

Portugal EcologicalSpeciation Apr29-30

Portugal.Ecological_Speciation.Apr29-30

We are pleased to announce a conference on ADVANCES IN ECOLOGICAL SPECIATION (AES) organized by CIBIO (Research Centre in Biodiversity and Genetic Resources, University of Porto, Portugal).

The AES conference aims at joining researchers and students from all over the world to present and discuss cutting-edge ecological speciation research. We hope to provide an informal but stimulating scientific atmosphere which will promote strong interaction and brainstorming between students and more experienced researchers.

The conference will take place on the 29th and 30th of April of 2013, at CIBIO facilities in Vairao (near Porto), Portugal. It includes 5 invited plenary talks (see below), 16 oral communications (to be selected) and poster sessions covering the topics parallel adaptation, genomics of ecological speciation, adaptive radiations and hybridization, among others.

Confirmed Invited Speakers: Dolph Schluter (Biodiversity Research Centre and Zoology Department, University of British Columbia, Vancouver, Canada) Felicity Jones (Friedrich Miescher Laboratory of the Max Planck Society, Tübingen, Germany) Walter Salzburger (Zoological Institute, University of Basel, Switzerland) Sebastien Renaut (Botany Department, University of British Columbia, Vancouver, Canada) Roger Butlin (Department of Animal and Plant Sciences, University of Sheffield, UK)

A webpage with detailed information concerning the scientific programme, registration and abstract submission will become available soon. Until then, any questions regarding the conference can be sent to aes@cibio.up.pt.

We look forward to seeing you at Vairao, Portugal in April.

ORGANIZATION: Catarina PINHO / PopGen group, CIBIO Jose MELO-FERREIRA / PopGen group, CIBIO Juan GALINDO / University of Vigo Martim MELO / PopGen group, CIBIO Nuno FERRAND / PopGen group, CIBIO Rui FARIA / PopGen group, CIBIO

EMAIL: aes@cibio.up.pt
jmeloferreira@cibio.up.pt

CIBIO
rui.faria@upf.edu

Portugal Speciation Apr29-30

Portugal.Ecological.Speciation.Apr29-30

We are pleased to announce a conference on “Advances in Ecological Speciation” (AES) organized by CIBIO (Research Centre in Biodiversity and Genetic Resources, University of Porto, Portugal).

The AES conference aims at joining researchers and students from all over the world to present and discuss cutting-edge ecological speciation research. We hope to provide an informal but stimulating scientific atmosphere which will promote strong interaction and brainstorming between students and more experienced researchers.

The conference will take place on the 29th and 30th of April of 2013, at CIBIO facilities in Vairao (near Porto), Portugal. It includes 5 invited plenary talks (see below), 16 oral communications (to be selected) and poster sessions covering the topics parallel adaptation, genomics of ecological speciation, adaptive radiations and hybridization, among others.

Confirmed Invited Speakers: Dolph Schluter (Biodiversity Research Centre and Zoology Department, University of British Columbia, Vancouver, Canada) Felicity Jones (Friedrich Miescher Laboratory of the Max Planck Society, Tübingen, Germany) Walter Salzburger (Zoological Institute, University of Basel, Switzerland) Sebastien Renaut (Botany Department, University of British Columbia, Vancouver, Canada) Roger Butlin (Department of Animal and Plant Sciences, University of Sheffield, UK)

A webpage with detailed information concerning the scientific programme, registration and abstract submission will become available soon. Until then, any questions regarding the conference can be sent to aes@cibio.up.pt.

We look forward to seeing you at Vairao, Portugal in April.

ORGANIZATION: Catarina PINHO / PopGen group, CIBIO Jose MELO-FERREIRA / PopGen group, CIBIO Juan GALINDO / University of Vigo Martim MELO / PopGen group, CIBIO Nuno FERRAND / PopGen group, CIBIO Rui FARIA / PopGen group,

PrincetonU OriginOfLife Jan21-24

SMBE Satellite Workshop on the Origin of Life

21-24 January 2013

NAI and SMBE Satellite Workshop on the Origin of Life

21-24 January 2013

Princeton University Center for Theoretical Science

Organizers: Laura Landweber and Aaron Goldman

<http://www.pctp.princeton.edu/pcts/-Originoflife2013/Originoflife2013.html>

The last few decades have witnessed the burgeoning of many highly productive lines of investigation into abiogenesis and the early emergence of biological complexity. Planetary sciences and geochemistry have produced a short-list of well-studied settings where prebiotic chemistry may have led to the transition from non-living to living matter. Major advances in abiotic syntheses of important biomolecules have resulted in an improved understanding of the relative availabilities of proto-biomolecules. The continuing growth of bioinformatics databases has given computational biologists an unprecedented ability to reconstruct the properties of early organisms and ancient evolutionary histories. Synthetic biology now allows investigators to examine the boundaries of life’s genetic systems and minimal life in the laboratory. In general, the advance of astrobiology has expanded our understanding of habitability and life as cosmological phenomena. This workshop will integrate these themes, foster new local, national and international collaborations, and actively encourage scientists from within and outside the Princeton community to pursue studies of life’s origins. The workshop program will bring together researchers in these disparate subjects and subfields to address the questions of life’s origins in the astronomical, chemical, genetic, evolutionary, and information-theoretic contexts.

Registration is free, but space is limited. The Nassau Inn is the only hotel in walking distance from the venue. Please make hotel reservations ASAP to guarantee a room at the Nassau Inn, 609-921-7500, www.nassauinn.com, group name “Origins of Life-

PCTS". The cost is a total of \$151.20 per night (tax included). Cancellations or changes to reservations must be made in writing by 3 pm, 24 hours prior to the day of arrival to avoid being charged for any unused nights.

Information about lecture webcasts will also be made available on the website.

VISIT SMBE at www.smbe.org

smbeinfo@gmail.com

Romania EvolutionSocialInsects Mar14-18

*3rd Central European Meeting of the IUSSI *(International Union for the Study of Social Insects)

A unique opportunity for all Central European specialists, professors and students alike, interested in the study of social insects: the 3rd Meeting of the Central European Section of the International Union for the Study of Social Insects (IUSSI) will be held for the first time outside Germany, in the capital of Transylvania, in the multicultural, vivid city of Cluj-Napoca, Romania *between the 14th and 18th March, 2013*. The program consists of two days lectures and poster session, while the participants will have the opportunity to experience the unique Transylvanian landscape and rural settings during the third day trip. The preliminary program is available at <http://ceiussi2013.com/>. The conference will be housed by the renowned Babes,-Bolyai University of Cluj-Napoca.

In the frame of the conference, three invited speakers will present scientific novelties in social insect research: (1) Prof. Dr. Zoltán Barta (University of Debrecen, Hungary) will talk about the connections between Individual variation and social evolution, (2) Prof. Dr. Martin Beye (Heinrich Heine Universität Düsseldorf, Germany) will give a lecture on The other honeybee genome: the role of the group's genotype repertoire on behavior and gene regulation, (3) while Prof. Dr. Nico Blüthgen (Technische Universität Darmstadt, Germany) will offer insights into the Networks of interactions among social insect species: ants, bees and their resources.

The registration fee includes: abstract volume, conference bag, all meals (except breakfasts), welcome reception on 14th of March, drinks at the poster session, coffee and tea during breaks, Sunday trip's fee, and Farewell party. Registration fees are: (a) IUSSI

members: 130 EUR for students and 180 EUR for non-students; (b) non-IUSSI members: 140 EUR for students, 190 EUR for non-students Eastern European and 230 EUR for non-students Western European. *Registration deadline is 31st of January, while abstract upload deadline is 15th February. *

See you soon in Cluj!

Bálint Markó, PhD head of the organizing committee

Organizers Apáthy István Society Hungarian Department of Biology and Ecology (Babes,-Bolyai University)

Silvio Erler <erler.silvio@gmail.com>

Roscoff France EvolutionAndCancer 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 co-organized by Michael Hochberg (Montpellier, France) and Paul Ewald (Louisville, USA). Jacques Monod Conference website: 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, metastasis 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?

— / —

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>

Roscoff France Sex Genetic Systems May 22-26

Jacques Monod conference: Recent advances on the evolution of sex and genetic systems, Roscoff (Brittany), France, May 22-26 2013.

Organizers: Denis Roze (Roscoff, France), Tanja Schwander (Lausanne, Switzerland)

Conference website: http://www.cnrs.fr/insb/cjm/-cjmprog_e.html The last decade has seen important progress in our understanding of the causes and consequences of the evolution of genetic systems (the structure of the genetic material and its modes of transmission) both on theoretical and empirical grounds. This progress partly derives from the development of new methods and technologies such as genomics and bioinformatics, new statistical methods to explore macroevolutionary patterns, new biological systems for experimental evolution, or studies of the molecular basis of shifts in reproductive systems. At the same time, theoretical and population studies have continued to provide important insights. The goal of this conference is to bring together researchers using these different approaches to study various aspects of genetic systems, including the evolution of sex and recombination, inbreeding vs. outcrossing and the evolution of sexual dimorphism, in order to pinpoint important parameters that need to be measured and determine how new forms of data can be used to make progress on important, yet unsolved evolutionary questions.

The conference will be organized in six sessions:

Advantage of sex and recombination: recent developments on the evolutionary benefits of genetic mixing. Biology of sexual and asexual reproduction: phylogenetic distribution of sexual and asexual lineages; proximate mechanisms inducing shifts in reproductive systems. Evolution of inbreeding vs. outcrossing: theoretical and empirical work on the evolution of mating systems. Evolution of sexual differentiation: the evolution of separate sexes and sexual dimorphism. Evolution of sex chromosomes: genetic determination of sex in plants, animals and fungi Open session: other aspects of genetic system evolution

Invited speakers (provisional titles)

AGRAWAL Aneil (Toronto, Canada) Beneficial mutations and the evolution of intermediate selfing rates

BACHTROG Doris (Berkeley, USA) Transitions of sex chromosomes in Diptera

BARRETT Spencer (Toronto, Canada) The evolution of sex ratios in plant populations

BARTON Nick (Vienna, Austria) Can recombination be maintained by its adaptive benefits?

CASTAGNONE-SERENO Philippe (Sophia-Antipolis, France) Root-knot nematodes: ancient asexuals... or not?

CHARLESWORTH Brian (Edinburgh, United King-

dom) The evolution of sex and recombination

CHARLESWORTH Deborah (Edinburgh, United Kingdom) The evolution of plant sex chromosomes

DAVID Patrice (Montpellier, France) Natural and experimental evolution of facultative selfing in animals

DE VISSER Arjan (Wageningen, The Netherlands) Adaptation of sexual and asexual populations in rugged fitness landscapes

DELPH Lynda (Bloomington, USA) The genetics of sexual dimorphism in a dioecious plant

DUFAY Mathilde (Lille, France) Evolutionary dynamics of male sterility in flowering plants: do empirical data fit with theory?

GIRAUD Tatiana (Orsay, France) The evolution of sex, mating types, and sex chromosomes: the case of fungi

GLÉMIN Sylvain (Montpellier, France) Adaptation and maladaptation in selfing populations

HAAG Christoph (Montpellier, France) Evolution of partial genetic sex determination in *Daphnia*

JOHNSON Marc (Toronto, Canada) Evolutionary consequences of suppressed recombination and segregation in evening primroses

LENORMAND Thomas (Montpellier, France) Sex and hotspots

LIVELY Curt (Bloomington, USA) Running with the Red Queen: host-parasite coevolution and sex

LOGSDON John (Iowa City, USA) Molecular origins and evolution of meiosis: a sexy tree with old roots and kinky branches

MANK Judith (London, United Kingdom) Sex chromosomes, sex-specific selection and the evolution of sexual dimorphism

MARAIS Gabriel (Lyon, France) Evolution of X dosage compensation in mammals and plants

OTTO Sarah (Vancouver, Canada) On the evolution of sex and the advantage of recombination

PANNELL John (Lausanne, Switzerland) Evolutionary transitions between combined and separate sexes in plants

PERRIN Nicolas (Lausanne, Switzerland) The evolution of sex chromosomes: a perspective from amphibians

PORCHER Emmanuelle (Paris, France) Evolution of selfing rates in plant populations: the interplay of ecology and genetics

ROZE Denis (Roscoff, France) Selection for sex and re-

combination in diploid organisms

SCHÖN Isa (Brussels, Belgium) Causes and consequences of asexuality in non-marine ostracods

SCHWANDER Tanja (Lausanne, Switzerland) Mechanisms underlying transitions from sexual reproduction to parthenogenesis in animals

SHARBEL Tim (Gatersleben, Germany) Molecular

evolutionary approaches to elucidating the switch from sex to

— / —

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

GradStudentPositions

AlfredWegenerInst Coevolution	15	UEastAnglia FruitfliesLifeHistory	28
Antarctic SoilEvolution	16	UEastAnglia NeotropicalCatfish	29
AustralianNaltU UQueensland Biodiversity	17	UEastAnglia TelomeresSeychellesWarblers	30
IowaStateU TurtlePhylogenomics	17	UEdinburgh MHC evolution	31
LancasterU EvolutionAvianVocalizations	18	UExeter EvolutionFungalKillers	32
LundU AvianEvolutionaryEcol	19	UFlorida BarkBeetleEvolution	32
LundU BirdAdaptation	20	UFlorida BarkBeetleEvolution 2	32
MasseyU HumanPopulationGenetics	20	UHelsinki EvolutionaryBiol	33
MaxPlanckInst Ploen CoevolutionHostParasite	21	UJyvaskyla Finland ExperimentalEvolution	33
MaxPlanck Tuebingen Sticklebacks	93	ULouvainlaNeuve BehaviouralEvolution	34
MississippiState HeliconiusGenomics	23	UMaryland SpatialModelingVariation	35
MonashU MarineEvolutionaryBiology	23	UMuenster PlantEvolutionaryGenomics	35
StockholmU InsectEvolution	24	UOtago LimpetEvolution	36
TrentU ContemporaryEvolGenomics	102	UStirling ScotsPineEvolution	36
UAlaska Fairbanks ExtremophileEvolution	25	UUtah EvolutionDietarySpecialization	37
UBerne BacterialGenomicEvolution	25	UWesternSydney EvolutionLifeHistory	37
UBristol EvolutionaryEcologyIridescence	26	UppsalaU FungalEvolution	38
UCalifornia Merced EvolSystemsBioEndophyteGenomics	26	WageningenU ModelingBiologicalSystems	39
UChester EndangeredSpeciesGenetics	27	WageningenU SystemsBiology	40
UEastAnglia ButterflyThermalSensitivity	27	WesternKentuckyU EvolutionMorphology	41

AlfredWegenerInst Coevolution

The Alfred Wegener Institute for Polar and Marine Research (AWI), division of “Biosciences”, section “Coastal Ecology” at the Wadden Sea Station Sylt (Mathias Wegner) in cooperation with the department

of Marine Ecology & Evolution at the NIOZ, Texel (David Thielges) is seeking to appoint a

PhD candidate (f/m)

within the DFG priority program SPP 1399 “Host Parasite Coevolution”.

Description: The project “Co-evolution of invasive parasites with old and new host species along a gradient of ancient to recent sympatry” within the DFG priority program SPP1399 “Host Parasite co-evolution” will

use biological invasions of parasites as a background to understand co-evolutionary patterns. The invasion of two parasitic copepods of the genus *Mytilicola* (*M. intestinalis* and *M. orientalis*) into the North Sea via aquaculture activities represents a unique system where two closely related congeners evolved with new and old hosts along a gradient of ancient to recent sympatry. By following a transcriptomic approach of hosts (oysters and mussels) and parasites from native and invaded ranges in a cross experimental infection scheme, this system can be used to identify physiological responses on the transcriptional level as well as evolutionary responses selecting for certain genetic variants favoured during the invasion process. Practical work will include field trips to collaborators in the Netherlands, Portugal and Japan, field & laboratory infection experiments on Sylt, as well as molecular analysis of native and invasive populations.

The successful candidate will be based at the AWI Wadden Sea station in List/Sylt and can join the Helmholtz graduate school for Polar and Marine Research 'POLMAR' (www.polmar.awi.de). The Wadden Sea Station offers excellent experimental facilities and direct access to field sites in the national park "Schleswig-Holsteinisches Wattenmeer", which was recently awarded the status of a world heritage site. AWI housing (shared flat) is available at reasonable rates.

Requirements: Diploma/MSc degree in biology with fundamental understanding of ecological and evolutionary principles. Prior knowledge of experimental design, statistical analysis of large data sets, bioinformatics and some molecular and wet lab skills are a definite plus.

The position is funded for 3 years with a salary in accordance with the German TVöD payscale: salary group 13 (50% minimum). The starting date for the position is negotiable but needs to be filled as soon as possible.

Handicapped applicants with comparable qualifications will receive preferential status. Please see the notification on our homepage under [job_offers/jobs](#). AWI supports balanced work-life career development via a variety of schemes.

To apply for the position, please cite the code 114/D/Bio and send your application by February 15th, 2013, to: Alfred Wegener Institute for Polar- and Marine Research, Personnel Department, P.O. Box 12 01 61, 27515 Bremerhaven, Germany or by email (all documents merged into a single PDF file) to: [Petra.Breyer\(at\)awi.de](mailto:Petra.Breyer(at)awi.de)

For more information or questions regarding the project please contact Mathias Wegner at [Mathias.Wegner\(at\)awi.de](mailto:Mathias.Wegner(at)awi.de).

Mathias.Wegner@awi.de

Antarctic SoilEvolution

PhD Research on Evolutionary Ecology of Antarctic Soil Invertebrates

I am looking for a motivated and productive PhD student with an interest in evolutionary ecology to study an assorted array of topics associated with the evolutionary history and ecology of invertebrates of terrestrial Antarctica. The research is part of an ongoing NSF-funded project on terrestrial communities as part of the McMurdo Dry Valley Long-Term Ecological Research (MCM LTER) team.

Topics of investigation currently underway include: 1. Evolutionary and Ecological genomics 2. Community and Ecosystem Structure/Function/diversity and food web dynamics 3. Environmental niche modeling 4. Molecular systematics and evolution 5. Comparative Phylogeography

This position requires physically demanding annual fieldwork as well as computational and wet lab skills. Applicants should preferably have previous experience with population genetics, simulation modeling, invertebrate zoology, and next generation DNA sequence generation, analysis and data management. Training in molecular biology techniques and bioinformatics can be provided as needed, and non-standard candidates with a strong background in evolutionary and ecological theory with excellent writing and reasoning skills are especially encouraged to apply.

The PhD position will be based in the department of Biology at Brigham Young University. Graduate students admitted to the program receive guaranteed funding for up to 5 years of competitive salary and benefits. The candidate will interact extensively with other MCM LTER graduate students, postdocs, and principal investigators. The MCM LTER and BYU Department of Biology have a very strong history of publishing high impact papers and for positioning students in top career paths of their choice.

Brigham Young University is affiliated with and sponsored by The Church of Jesus Christ of Latter-Day Saints. All students are required to abide by the University's honor code and dress and grooming standards: <http://saas.byu.edu/catalog/2011-2012ucat/-GeneralInfo/HonorCode.php#HCOofficeInvovement> .It

is an equal opportunity employer, does not discriminate on the basis of race, color, gender, age, national origin, veteran status, or against qualified individuals with disabilities.

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

Information about the MCM LTER, BYU Department of Biology, and my research program can be found at:

<http://mcmlter.org> <http://biology.byu.edu> <http://adamslab.byu.edu> <http://lifesciences.byu.edu/~bja43>

To apply for this position, send the following documents (pdf format) to: Byron Adams: bjadams@byu.edu 1. A brief statement of research interests, qualifications and experience 2. A curriculum vitae, including a list of scientific publications 3. Email addresses for three people willing to provide a confidential letter of recommendation

Formal applications should be received by January 30, 2013, for matriculation in the fall (August) of 2013 (NOT January 15, as stated on the departmental website). Departmental admission and entry requirements can be found at: <http://biology.byu.edu/Majors/-GraduatePrograms/AdmissionEntry.aspx> Formal application is entirely electronic through the BYU graduate studies program: <http://graduatestudies.byu.edu>

Byron Adams Department of Biology Brigham Young University

byron_adams@byu.edu

mine the processes responsible for species generation and biodiversity maintenance. Study groups include the iconic eucalypts, Melaleuca, legumes and other plants, as well as gall-inducing scale insects that are associated with the plants, and other animals.

Student projects: 1. Develop the first-ever phylogeny relating all species of eucalypts (c. 800 species), by using next-generation genomic sequencing. 2. Develop a phylogeny for gall insects distributed across southern Australia. 3. Test comparative hypotheses re factors influencing diversity using biogeographic, ecological and diversification modelling.

Applicant requirements: We are seeking students with a strong academic background in biology or bioinformatics, and preferably with evidence of ability to write manuscripts for quality journals.

We are looking for up to three PhD students, to be based at either ANU or UQ. The research is funded but students will need to win a competitive scholarship. See < <http://biology.anu.edu.au/hdr/> > and < <http://www.biology.uq.edu.au/postgraduates> >

Further information about our research labs: < <http://biology.anu.edu.au/Mike.Crisp/> > < <http://www.biology.uq.edu.au/staff/lyn-cook> >

Mike Crisp Evolution, Ecology & Genetics, Building 116 Research School of Biology The Australian National University Canberra ACT 0200 Australia email: mike.crisp@anu.edu.au

Lyn Cook School of Biological Sciences The University of Queensland Brisbane, Qld, 4072, Australia phone: +61-(0)7-336 52070 email: l.cook@uq.edu.au

Mike.Crisp@anu.edu.au

Australian Natl U Queensland Biodiversity

Three PhD positions on Evolution of Australia's Globally Unique Biodiversity Hotspot

Supervisors: Prof Mike Crisp (The Australian National University, Canberra) Dr. Lyn Cook (The University of Queensland, Brisbane)

Research program: Australia has a globally recognised biodiversity hotspot, the southwest of Western Australia, but this unique flora is highly threatened. We will contrast this hotspot with the climatically and latitudinally comparable southeastern Australia to deter-

Iowa State U Turtle Phylogenomics

PhD Position on Phylogenomics and Sex Determination of Turtles.

A PhD position will be available in the Fall 2013 in the laboratory of Dr. Nicole Valenzuela at Iowa State University as part of an NSF-funded project to study the genome repatterning events responsible for changes in diploid number across turtles and their observed association with evolutionary transitions in sex determination. The project involves molecular cytogenetics, transcriptomics, bioinformatics and phylogenetics.

Prospective graduate students interested in evolutionary biology, sex determination, evo-devo, or chromosome evolution are invited to apply, and are encouraged to develop an independent research project within these areas. Students could join the EEB < <http://www.grad-college.iastate.edu/EEB/> >, IG < <http://www.genetics.iastate.edu/> > or BCB < <http://www.bcb.iastate.edu/> > graduate programs at ISU.

Interested candidates should contact Dr. Nicole Valenzuela at nvalenzu@iastate.edu.

The department of Ecology, Evolution, and Organismal Biology at Iowa State University is comprised of over 40 faculty, whose active research programs span many areas of E&E from classic biology to modern “-omic” approaches, and interactions with faculty in other departments and programs are extensive.

Iowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran.

Dr. Nicole Valenzuela Associate Professor 251 Bessey Hall Department of Ecology, Evolution and Organismal Biology Iowa State University Ames, IA 50011 URL: <http://www.public.iastate.edu/~nvalenzu/> Nicole Valenzuela <nvalenzu@iastate.edu>

LancasterU EvolutionAvianVocalizations

PhD OPPORTUNITY, Lancaster University

The Impact of Environmental Quality on Song in Male and Female Dippers (*Cinclus cinclus*)

Supervisor: Dr Stuart Sharp, Lancaster Environment Centre Start date: October 2013

Why is this project important? Bird song is among the most intensively studied forms of animal behaviour, but the diverse ways in which environmental change may impact on song and the consequences for avian ecology are only just starting to be appreciated. Singing is energetically costly, and song development is strongly influenced by the quality of environmental conditions experienced in early life (the nutritional stress hypothesis). Song structure and output are therefore indicators of male quality and, in some species, provide females with information about the level of paternal investment that

the singer is likely to make. Thus, living in habitats where food is scarce or contaminants have entered the food chain may affect male reproductive strategies and fitness via an impact on song structure and singing behaviour. These ideas have received surprisingly little attention, despite growing interest in the influence of environmental change on bird song. Furthermore, the effects of nutritional stress or environmental change on the song of females have never been studied, and female song in general is poorly understood. This project aims to address these gaps in our understanding of the relationship between environmental quality, song and fitness in both males and females.

The focus of the project The dipper is a bird of fast-flowing rivers and streams and a well-known indicator of the quality of riverine habitat, being highly sensitive to water pH and the accumulation of contaminants in invertebrate prey. Both male and female dippers sing throughout the year, and investment in offspring care is highly variable within and between individuals. This project will focus on a long-term study population of dippers in Yorkshire Dales National Park, combining field observations and experiments with acoustic analyses to investigate how variation in water quality impacts on song structure and singing behaviour in males and females, and to explore the relationship between song variation, parental investment and reproductive success.

What is in it for you? Gain invaluable fieldwork experience working with wild animals in one of the UKs most beautiful and diverse environments. Become an expert in sound recording and acoustic analysis (full training will be provided). Develop links with external organisations, including Yorkshire Dales National Park, the Centre for Ecology and Hydrology and the British Trust for Ornithology. Join an exciting research team working at the interface between animal ecology and environmental change in the large and vibrant Lancaster Environment Centre.

Who should apply? The ideal candidate will have a strong background in zoology (a first or upper second class degree or a Masters in an appropriate subject) and an enthusiasm for animal behaviour. A full driving license and previous fieldwork experience (preferably with wild birds) are essential, and applicants must be willing to work independently in a sometimes challenging environment. Some experience with sound recording/acoustic analysis and bird ringing would be advantageous. For further information or informal enquiries about the project, email Dr Sharp (s.sharp2@lancaster.ac.uk).

Studentship funding The studentships will provide

an annual stipend (£13,726 2013/14 [tax free]) and UK/EU tuition fees for 3 years and 6 months. A Research Training Support Grant (RTSG) is also provided (to be confirmed, was £9,700 in 2012/13 for the length of the studentship). Full studentships are available to UK and EU candidates who have been ordinarily resident in the UK throughout the 3-year period immediately preceding the date of an award. EU candidates who have not been ordinarily resident in the UK for the last 3 years are eligible for “tuition fees-only” awards (no maintenance grant). Unfortunately studentships are not available to non-UK/EU applicants.

Application process Please see www.findaphd.com or <http://www.lec.lancs.ac.uk/postgraduate/pgresearch/research-degree-opportunities.php> for details. Note the deadline for applications is midnight on 13th February 2013. The provisional interview dates are Tuesday 26th and Wednesday 27th February 2013.

“Sharp, Stuart” <s.sharp2@lancaster.ac.uk>

LundU AvianEvolutionaryEcol

Urban ecology: The impact of traffic-related pollution for genetic and non-genetic adaptation of detoxifying systems in wild birds

PhD studentship (4 years), Lund, Sweden Lund University/ Biological institution Supervisor: Dr Caroline Isaksson, Co-supervisor: Prof. Staffan Bensch

It is well known that humans living in areas with high levels of traffic-related pollution show increased incidence of oxidative stress related diseases such as cancers, pulmonary and cardio-vascular diseases. Previously it has been shown that birds living in polluted areas have elevated antioxidant responses, which may result from an increased oxidative stress. However, the underlying mechanisms that mediate this response and the consequences thereof at the individual- and population-level remain unknown. To investigate the fundamental mechanisms behind oxidative stress the present project will use an interdisciplinary research approach that combines physiology, molecular biology, toxicology, and evolutionary ecology using replicated urban/rural pairs of wild bird populations.

The studentship will be under the umbrella of the above project description but depending on the applicant’s interest and previous experiences, we will together tailor

a PhD plan within this framework. Thus, we seek a highly motivated and bright student with strong interest in evolutionary ecology. Previous experience with avian field work (ringing and blood sampling), molecular and/or physiological lab work is advantageous.

The fieldwork will mainly be based in southern Sweden (Scania), however, trips across Sweden and Europe is also planned. Field work will occur throughout the year, thus you need to be prepared for lots of physically demanding outdoor activities in good and bad weather. A driving license at the start of the position is essential as it will be required for the fieldwork starting in April 2013.

The student will be based at the Department of Biology Lund University (<http://www.biologi.lu.se/>). The department offers a stimulating international environment with weekly journal clubs, lab meetings and seminars with invited international and national speakers. The lab offers state-of-the-art equipment for molecular work and Lund University offers excellent infrastructure with regards to electronic journals, internet support, student support, and PhD courses. The working language is English.

This studentship is funded 50% by the Swedish research council (Vetenskapsrådet, VR) to Dr C Isaksson and 50% by the unit Evolutionary Ecology. Full funding is available for the project, but the student is encouraged and expected to also apply for smaller Swedish grants for conference attendance etc. Please send your CV, the name of two referees, and a concise cover letter of your research interests to: Caroline.Isaksson@biol.lu.se. For further information concerning the studentship, please contact Caroline Isaksson.

The deadline for the application is Friday the 15th of February. Interviews will be held in the end of February or in the beginning of March, and the position will be available as soon as possible.

Caroline Isaksson & Staffan Bensch

Dr Caroline Isaksson Associate Senior Lecturer Department of Biology Evolutionary Ecology Unit Lund University Sölvegatan 37 SE-223 62 Lund

Tele: +46 (0)46-2221780

Email: Caroline.Isaksson@biol.lu.se

<http://www.lu.se/life-history-and-functional-ecology/people/principal-investigators/caroline-isaksson>

caroline.isaksson@biol.lu.se

LundU BirdAdaptation

Urban ecology: The impact of traffic-related pollution for genetic and non-genetic adaptation of detoxifying systems in wild birds

PhD studentship (4 years), Lund, Sweden Lund University/ Biological institution Supervisor: Dr Caroline Isaksson, Co-supervisor: Prof. Staffan Bensch

It is well known that humans living in areas with high levels of traffic-related pollution show increased incidence of oxidative stress related diseases such as cancers, pulmonary and cardio-vascular diseases. Previously it has been shown that birds living in polluted areas have elevated antioxidant responses, which may result from an increased oxidative stress. However, the underlying mechanisms that mediate this response and the consequences thereof at the individual- and population-level remain unknown. To investigate the fundamental mechanisms behind oxidative stress the present project will use an interdisciplinary research approach that combines physiology, molecular biology, toxicology, and evolutionary ecology using replicated urban/rural pairs of wild bird populations.

The studentship will be under the umbrella of the above project description but depending on the applicant's interest and previous experiences, we will together tailor a PhD plan within this framework. Thus, we seek a highly motivated and bright student with strong interest in evolutionary ecology. Previous experience with avian field work (ringing and blood sampling), molecular and/or physiological lab work is advantageous.

The fieldwork will mainly be based in southern Sweden (Scania), however, trips across Sweden and Europe is also planned. Field work will occur throughout the year, thus you need to be prepared for lots of physically demanding outdoor activities in good and bad weather. A driving license at the start of the position is essential as it will be required for the fieldwork starting in April 2013.

The student will be based at the Department of Biology Lund University (<http://www.biologi.lu.se/>). The department offers a stimulating international environment with weekly journal clubs, lab meetings and seminars with invited international and national speakers. The lab offers state-of-the-art equipment for molecular work and Lund University offers excellent infrastructure with

regards to electronic journals, internet support, student support, and PhD courses. The working language is English.

This studentship is funded 50% by the Swedish research council (Vetenskapsrådet, VR) to Dr C Isaksson and 50% by the unit Evolutionary Ecology. Full funding is available for the project, but the student is encouraged and expected to also apply for smaller Swedish grants for conference attendance etc. Please send your CV, the name of two referees, and a concise cover letter of your research interests to: Caroline.Isaksson@biol.lu.se. For further information concerning the studentship, please contact Caroline Isaksson.

The deadline for the application is Friday the 15th of February. Interviews will be held in the end of February or in the beginning of March, and the position will be available as soon as possible.

Caroline Isaksson & Staffan Bensch

Dr Caroline Isaksson Associate Senior Lecturer Department of Biology Evolutionary Ecology Unit Lund University Sölvegatan 37 SE-223 62 Lund

Tele: +46 (0)46-2221780

Email: Caroline.Isaksson@biol.lu.se

<http://www.lu.se/life-history-and-functional-ecology/-people/principal-investigators/caroline-isaksson>

Caroline Isaksson <caroline.isaksson@biol.lu.se>

MasseyU HumanPopulationGenetics

PhD Scholarship in Human Population Genetics

I am looking for a motivated and productive PhD student to study the dynamics of small populations, especially their role during the settlement of the Indo-Pacific region. The successful candidate will develop population genetic models, and apply these to genetic and cultural anthropology data.

This computational position (no wet lab component) requires solid quantitative skills, preferably including experience with population genetics, simulation modeling or statistics. Some skills in scripting and/or programming would be useful. Training in biology and anthropology can be provided as needed, and candidates with relevant, but non-standard, quantitative research backgrounds are strongly encouraged to apply. Candidates must already hold a Masters or Bachelors degree with Honors.

A generous tax-free stipend and payment of all tuition fees 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. 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 the 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 Computational Biology Research Group (<http://massey.genomicus.com/>) and Massey University (<http://massey.ac.nz/>) is available online.

To apply for this position, send the following documents (in PDF format) to Assoc Prof Murray Cox <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 15 February 2013.

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

“Cox, Murray” <M.P.Cox@massey.ac.nz>

MaxPlanckInst Ploen CoevolutionHostParasite

MaxPlanck Ploen.host-parasite coevolution

PhD position at the Max Planck Institute for Evolutionary Biology, Department of Evolutionary Ecology, Ploen (Germany) within the DFG priority program SPP 1399 “Host Parasite Coevolution” (see [\[ieb.uni-muenster.de/spp/\]\(http://ieb.uni-muenster.de/spp/\)\).](http://-</p></div><div data-bbox=)

We invite highly motivated students with a background in Evolutionary Biology/Parasitology to apply for a PhD position at the MPI for Evolutionary Biology. The applicant should have a Diplom/Master in Biology (or its equivalent). Ideally the candidate should have experience in molecular genetics, statistical analysis and bioinformatics, as well as a strong interest in host parasite coevolution.

The ability to successfully work in a team is expected, as the candidate will collaborate with a team working on immunogenetics, immunology, population genetics, parasitology, and behavioural ecology, both in the lab and in the field. More information about the department's research interests can be found under: <http://www.evolbio.mpg.de/15664/evolutionaryecology> Description of the project: The project deals with the molecular basis of host-parasite interactions between the three-spined stickleback (*Gasterosteus aculeatus*) and its highly specific tapeworm parasite *Schistocephalus solidus*. We have found remarkable differences in virulence between populations of the parasite, particularly in laboratory cross-infections where allopatric host-parasite combinations exhibit very different infection phenotypes. This experimental system provides excellent possibilities to investigate the molecular basis of host-parasite interactions and how parasite virulence is regulated. A comparative transcriptomic approach revealed differences in expression of genes involved in immune evasion strategies of the parasite. However, under natural conditions individual tapeworms usually share their hosts with several other parasites, leading to intra- and inter-specific competition within a host individual.

The successful candidate will work on the molecular mechanisms of such parasite-parasite interactions and its consequences on the host's immune functions. He/she will design and perform laboratory infection experiments, conduct transcriptomic studies on both hosts and parasites, and carry out bioinformatic analysis of the obtained data. Since the ultimate goal of the project is to understand the ecological factors determining the evolution of parasite virulence in nature, there will also be field studies in Germany and Norway. The project is part of a close collaboration with Dr. Jörn Scharsack (University of Münster, fish immunology) and Prof. Thorsten Reusch/David Haase (GEOMAR - Helmholtz Centre for Ocean Research in Kiel, bioinformatic support). Furthermore, the candidate can enroll in the 'International Max Planck Research School for Evolutionary Biology' (see <http://imprs.evolbio.mpg.de/>).

The MPI for Evolutionary Biology is located in Ploen, in Northern Germany. It is in the middle of a scenic lake district, with a high recreational value, and it is close to the shores of the Baltic Sea. The institute offers a stimulating research environment focusing on evolutionary biology and provides state-of-the-art laboratories and equipment, including facilities for genome analysis. English is the working language in the lab so we encourage Germans, as well as foreign students, to apply. Moreover, the Max Planck Society is an equal opportunity employer and encourages female scientists and scientists with disabilities to apply.

To apply, please send your CV containing a short research statement and list of publications (if available), and addresses of up to three references by email to <kalbe(at)evolbio.mpg.de> or <samonte(at)evolbio.mpg.de> by March 1st, 2013.

Dr. Martin Kalbe Max Planck Institute for Evolutionary Biology Department of Evolutionary Ecology Parasitology Group August-Thienemann-Strasse 2 D-24306 Ploen, Germany

Phon: +49-(0)4522 763 256 email: kalbe@evolbio.mpg.de

Martin Kalbe <kalbe@evolbio.mpg.de>

MaxPlanck Tuebingen Sticklebacks

Graduate positions are available in the new lab of Dr Felicity Jones at the Friedrich Miescher Laboratory of Max Planck Society, Tuebingen, Germany.

Threespine stickleback fish have recently emerged to be an excellent evolutionary model organism (Jones et al Nature; Chan et al 2010 Science). In the Jones Lab we are launching a comprehensive research program to functionally dissect the molecular mechanisms underlying adaptive divergence and speciation. We have previously identified at kilobase resolution a set of loci underlying repeated divergence between marine and freshwater stickleback species-pairs (Jones et al 2012 Nature). These loci are predominantly non-coding and fall within regions of low recombination rate (including inversions), suggesting both regulatory changes and the recombination landscape are important in adaptive evolution and speciation. Using transgenics gain-of-function assays via Tol2 transposon, and loss-of-function via zinc-finger nuclease/TALEN we aim to functionally dissect speciation loci to determine how

regulatory evolution affects phenotype, fitness and contributes to adaptive divergence. We will also investigate molecular mechanisms that shape recombination landscape and hotspots across the genome and how this contributes to the maintenance of adaptive suites of loci (“supergenes”) in contact zones between divergent species. We will continue to expand our rich dataset of whole genome sequencing, expression analysis and genetic mapping to identify the molecular basis of reproductive isolation between replicate stickleback species-pairs.

We seek highly motivated PhD applicants with experience in molecular genetics, transgenics, developmental, quantitative, computational biology and/or population genomics.

The FML is located on the Max Planck Campus in Tuebingen and offers an international environment, with English as the working language. We are part of a dynamic and interactive group of labs researching various aspects of adaptation and evolutionary genetics, with the aim of linking molecular changes to organismal phenotypes. These include the Chan Lab (genetics of adaptation in mice), Jekely Lab (neurobiology and behavior of marine zooplankton), the Weigel Lab (adaptive genetic variation in arabidopsis and guppy fish), the Sommer group (evolutionary genomics of free-living nematodes), Krause group (evolutionary genetics and ancient DNA - University of Tuebingen). Tuebingen boasts one of Germany’s top universities and a vibrant cultural life with easy connections to major European cities.

Applicants of all nationalities are encouraged to apply. Please send cover letter, CV and contact information for three to referees Felicity Jones (fcjones@tuebingen.mpg.de).

Jones FC, et al. (2012) The genomic basis of adaptive evolution in threespine sticklebacks. *Nature* 484, 55-61. Jones FC, et al. (2012) A genome-wide genotyping array reveals patterns of global and species-pair divergence in threespine stickleback. *Current Biology* 22, 83-90. Chan YF, et al. (2010) Adaptive evolution of pelvic reduction in sticklebacks by recurrent deletion of a Pitx1 enhancer. *Science* 327 (5963), 302-305.

For further information on the Jones Lab see: <http://www.fml.tuebingen.mpg.de/jones-group.html> For further information on MaxPlanck PhD programs - International PhD Program in the Biological Sciences: <http://phd.eb.tuebingen.mpg.de/faculty-jones.html> International Max Planck Research School “From Molecules to Organisms”: <http://www.imprs.tuebingen.mpg.de/de/research/faculty-and-projects.html> Dr. Felicity Jones

Max Planck Research Group Leader Friedrich Miescher
Laboratory of the Max Planck Society Spemannstrasse
39 72076 Tuebingen Germany Ph +49 (0)7071 601 840
jones.floss@gmail.com

MississippiState HeliconiusGenomics

Graduate Student Positions

Graduate student positions are available to join an NSF funded project studying the genomics of adaptation and speciation in *Heliconius* butterflies in the Counterman Lab at Mississippi State University. Research in the lab takes an integrative approach to studying the ecological pressures, developmental pathways and genomic architecture that underlie the origin of novel adaptive traits and new species in natural populations. Students in the lab are encouraged to develop independent research projects that involve combinations of fieldwork, genomics, behavioral assays and/or laboratory experiments.

The Counterman Lab is located in the Department of Biological Sciences at Mississippi State University. The department has a vibrant and productive ecology and evolution group and our lab has strong collaborations with groups in the Biochemistry, Molecular Biology and Entomology Departments. Newly renovated labs offer ample space for molecular and organismal biology, with butterfly rearing chambers and greenhouses available in the same building.

Students will have opportunities to work closely with collaborators at the Smithsonian Tropical Research Institute in Gamboa, Panama and the University of Puerto Rico-Rio Piedras.

Students from Latin-American countries and other underrepresented groups are especially encouraged to apply.

Those interested in applying or learning more about the positions should contact Dr. Brian Counterman at: bcouterman@biology.msstate.edu

More information about the Counterman Lab can be found here: <http://countermanlab.biology.msstate.edu/> Application instructions and information about the Graduate Program in Biological Sciences at MSU can be found here: <http://biology.msstate.edu/degrees/graduate/> –

Brian A. Counterman

Assistant Professor Department of Biological Sciences
Mississippi State University 311 Harned
Hall Mississippi State, MS 39762 bcouterman@biology.msstate.edu 662.325.4824 countermanlab.biology.msstate.edu

bcouterman@biology.msstate.edu

MonashU MarineEvolutionaryBiology

2 PhD positions available: the ecology and/or evolutionary biology of sessile marine invertebrates < <http://meeg.org/2012/01/09/phd-positions-available/> >

Two fully-funded PhD stipends are available to students interested in working on the evolutionary ecology of sessile marine invertebrates in Dr Dustin Marshall's group (www.meeg.org). The specifics of the project will joint collaboration between student and supervisor.

The stipends include all course fees plus ~\$25,000 AUD per annum tax-free (the equivalent of approx. \$33,000 before tax) with no teaching requirements for 3.5 years (the length of a Ph.D. in Australia).

I can guarantee funding of project costs and research support including the costs of attending at least one conference per year.

Project start dates can be any time in 2013.

Interested students should send their CVs, a brief statement of their interests and the contact details of two referees to dustin.marshall@monash.edu

To be eligible, applicants must have completed at least one year of post-graduate research in ecology or evolution.

Preference will be given to those with strong quantitative skills and publications in international journals.

– Dr. Dustin Marshall School of Biological Sciences Monash University Melbourne Australia 3800 www.meeg.org Dustin Marshall <dustin.marshall@monash.edu>

StockholmU InsectEvolution

Available: a PhD-position in Ecology at Stockholm University, the Department of Ecology, Environment and Plant Sciences

Insect ecology: Searching for food in complex environments

Project description Ecological and evolutionary interactions between consumer and resource organisms can be modified by the presence of neighboring organisms. Such neighborhood effects are known from many systems and are common in plant-insect systems, where plant neighbors may affect the strength of interactions between the plant and insect herbivores or between herbivores and their natural enemies. The aim here is to develop and test theory on consumer responses to mixed resource patches; where non-hosts or alternative hosts may affect the probability of attack on a specific resource. The basis for the studies is theory that translates information about the physiological and behavioral processes involved in host search to probabilities of finding and consuming hosts in mixed patches. The thesis work will involve studies of insects that use olfactory cues for host finding, including both behavioural and physiological studies. The work may also involve model studies on insect search.

Further information: <http://www.su.se/emb/english/about-us/vacancies/phd-position-in-ecology-1.120389> or contact: peter.hamback@su.se

Peter Hambäck <Peter.Hamback@su.se>

TrentU ContemporaryEvolGenomics

PhD or Postdoctoral Fellow Opportunity: Genomic research on contemporary evolution in natural populations in response to rapid changes in selective pressures. Infectious diseases are critically important in species adaptation, evolution, and persistence. However, climatic changes are altering disease dynamics in northern species by promoting the invasion of novel diseases and disease vectors. The capacity of northern species to adapt to these rapid changes is largely un-

clear, thereby threatening their persistence. One approach for understanding adaptation to disease is to examine the correlation between the geographic distribution of host immunogenetic variation and of disease variants relative to demographic parameters such as gene flow that also influence the distribution of adaptive and non-adaptive genetic variation. I am seeking a student/post doc to take an adaptive landscape genomics approach to investigate contemporary evolution and demographic constraints on local adaptation among co-evolved and naïve disease vectors. These questions are of practical relevance given pronounced climatic changes associated with changing infectious disease dynamics and northward movements of pathogens and invasive species. This research will be performed using our in-house genomics facility that includes next generation sequencing.

The successful candidate will also be encouraged to develop/explore independent research within the framework of existing funding. Research will be conducted within a collaborative team that includes the Ontario Ministry of Natural Resources and Natural Resources DNA Profiling and Forensic Centre (www.nrdpfc.ca). Applicants should hold a MSc or PhD in Landscape or Population Genetics, or a related area. All candidates should submit a letter of application and research interest, curriculum vitae, and names and contact information for three referees. The position will commence either May or September 2013. Ideally, applications will be submitted by Feb 15, 2013, however, they will be accepted until a suitable candidate has been found.

Dr. C. J. Kyle, Associate Professor, Natural Resources DNA Profiling and Forensics Centre Forensic Science Department, DNA Building, Trent University 2140 East Bank Drive, Peterborough, ON, K9J 7B8 Tel. 705-748-1011 ext 7055 Fax. 705-748-1132 christopherkyle@trentu.ca http://web.nrdpfc.ca/bios/dr_chriskyle.html Additional Information: The Natural Resources DNA Profiling and Forensic Centre (NRDPFC) is located within the new DNA building of Trent University (Peterborough, Ontario, Canada). We have separate genomic DNA and DNA cloning laboratories for molecular work and an automation laboratory for high throughput sample preparation and DNA analyses. Our facility also includes access to a bio-containment Level II lab for processing potentially infectious tissues and an Indigenous Pathogen Containment Level III (IPCL 3) laboratory that is certified for several indigenous pathogens, including the rabies virus. The NRDPFC also houses the DNA Wildlife Forensics Laboratory that processes DNA evidence for several wildlife agencies as well as several police services that require non-human DNA profiling. The

NRDPFC includes a custom Laboratory Information Management System (LIMS), 2 high capacity DNA sequencers (3730 ABI DNA analyzers), a next generation pyrosequencer (454 GS Junior) that enables genome sequencing as well and transcriptome analysis; and 2 real time PCR systems (Taqman, ABI Prism 7900 and Open Array, Biotrove) for gene expression analysis.

christopherkyle@trentu.ca

UAlaska Fairbanks Extremophile Evolution

Graduate student assistantship at the University of Alaska Fairbanks

A graduate student assistantship is available in the laboratory of Dr. Eric Collins at the University of Alaska Fairbanks (<http://www.eric.org>). Contact Dr. Collins (student-app@eric.org) to discuss the position in more detail. Please include a brief description of your research interests, experience, and academic preparations. Competitive applicants will have a strong academic background in the natural sciences, prior field or research experience, and a demonstrated interest in microbial ecology and evolution in cold environments. Applications for the graduate program in the School of Fisheries and Ocean Sciences (<http://www.sfos.uaf.edu/prospective/graduate>) will be reviewed beginning March 1.

**** Seasonal Synergy between Bacterial Osmoprotection and Algal Production in Sea Ice ****

Funding is available for an M.S. student to develop a thesis project investigating the evolutionary and biogeochemical roles of compatible solutes in sea ice microbial communities. The student will engage with a team of researchers at the University of Washington and the Greenland Climate Research Centre on the broader question of how biophysical processes (e.g. sea ice, primary production) influence the entry and fate of elements, greenhouse gases and contaminants in Arctic marine ecosystems. This is an interdisciplinary project that includes experts on sea ice, polar oceanography, biogeochemistry, microbial ecology, and genomics. The candidate will have the opportunity to engage with students and faculty across these disciplines. Field work for the project is based primarily in Nuuk, Greenland, with the potential for additional field work conducted on the R/V Siku-

liaq (<http://www.sfos.uaf.edu/sikulialq>). Prior experience with bioinformatics or computer programming are highly desirable, as is experience with NMR, mass spectrometry, or other methods of molecular identification. The research project is sponsored by National Science Foundation Award #1203262 (http://www.nsf.gov/awardsearch/showAward?AWD_ID=1203262).

Please see the following websites for more information about UAF (<http://www.uaf.edu>), the Institute of Marine Sciences (<http://www.ims.uaf.edu>), the UAF Graduate School (<http://www.uaf.edu/gradsch>), and Dr. Collins research (<http://www.sfos.uaf.edu/people/profile.php?uid=3198>). The University of Alaska Fairbanks is accredited by the Northwest Commission on Colleges and Universities. UAF is an affirmative action/equal opportunity employer and educational institution.

Eric Collins <rec3141@gmail.com>

UBerne Bacterial Genomic Evolution

PhD position in bacterial genomic evolution

A PhD position is available for 3 years at the University of Berne to investigate the effect of range expansions on the genomic diversity and fitness 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 highly motivated and talented 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 (e.g. R) will be a plus.

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 environ-

ment. It is affiliated to the Swiss Institute of Bioinformatics and to several doctoral schools offering further education for PhD students. Berne is ideally located in the middle of Switzerland and Europe, and provides rich cultural and outdoor activities.

Please send before January 31st 2013, 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 in March 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> Laurent Excoffier <laurent.excoffier@iee.unibe.ch>

UBristol EvolutionaryEcologyIridescence

PhD Opportunity at the University of Bristol

Dazzled and Disrupted: Iridescence as defence

Iridescence (a form of structural colour where the hue changes according to the angle of viewing) is extremely widespread, both in mechanisms of production and occurrence, in plant and animal kingdoms, however its adaptive advantage and the selective pressures leading to its occurrence are frequently unclear. In 1909, Thayer suggested that iridescence could act as a form of camouflage, however, this potential function has not been previously investigated.

This project will focus on the visual impact of the different structural forms of iridescence found in nature, each of which has different optical effects. Bio-mimicking structures produced synthetically will be used to determine the impact of different structural forms of iridescence on accurate visual identification of shape, speed, patterning and colour against a variety of backgrounds and light environments will be tested using behavioural

parameters in a variety of visual systems.

This project, supervised by Dr Heather Whitney and Professor Innes Cuthill in the School of Biological Sciences, University of Bristol, UK, is in competition with others for funding (UK and other EU applicants only), and the closing date for application is Friday 11th January, via this application portal: <http://www.bristol.ac.uk/swdtp/>. For more information, please email Heather Whitney (heather.whitney@bristol.ac.uk), enclosing a CV.

sean.rands@bristol.ac.uk

UCalifornia Merced EvolSystemsBioEndophyteGenomics

Applications are still being accepted for doctoral students in the Quantitative and Systems Biology graduate program at UC Merced.

Ardell Lab: Evolutionary Systems Biology of Translation and Gene Expression <http://compbio.ucmerced.edu/ardell> Frank Lab: Environmental Microbial Genomics <https://granada.ucmerced.edu/~cfrank/> Principal Investigators Ardell and Frank are looking for graduate students with deep biological interests combined with quantitative and programming skills to join their laboratories!

Projects in the Ardell Lab include:

- 1) Novel systems biology approaches to deep phylogenetic problems at and across the roots of the three domains of life
- 2) Systems biology to discover novel drug targets in eukaryotic pathogens
- 3) Mining genome diversity to engineer novel genetic codes for synthetic biology
- 4) Theory for the origins of translation and the evolvability of macromolecular interactions

Projects in the Frank Lab include:

- 1) Comparative genomics of nitrogen fixing endophytes of forest conifers
- 2) Comparative genomics of growth-promoting endophytes of forest conifers

Frank and Ardell especially welcome double applications from married couples or partners wishing to both pursue graduate education. The UC Merced campus offers an excellent daycare center and is thirty minutes from an outstanding new K-8 public charter school called Sierra Foothill Charter School. UC Merced is very close to recreational opportunities in California's

Sierra Range of Light, the Bay Area and California central coast.

Meritorious applicants (with good GRE scores and GPA) can expect generous benefits and incentives to enter the QSB program.

To apply, please visit <http://qsb.ucmerced.edu/grad-students/apply> David H. Ardell 5200 North Lake Road, School of Natural Sciences, University of California, Merced CA 95343 office: SE 228 // (209) 228-2953 // fax: (209) 228-4675 // <http://compbio.ucmerced.edu/ardell> dardell@ucmerced.edu

UChester EndangeredSpeciesGenetics

Endangered species genetics

We are seeking expressions of interest from individuals who wish to apply for a fully funded PhD studentship investigating the application of molecular tools to the management of breeding programmes for endangered species. The research will focus on African wild dogs and pygmy hippos but there is considerable scope for wider applications.

Applicants will be considered for nomination as a candidate for an International Postgraduate Research Scholarship (IPRS) tenable at the University of Western Australia: <http://www.scholarships.uwa.edu.au/future-students/postgrad/international>. If successful in their application for a scholarship, the PhD candidate will be co-supervised jointly by the University of Western Australia (Dr Monique Paris) and the University of Chester (UK) (Dr Paul O'Donoghue), with the student spending time at both institutions.

Given the precarious status of many in-situ large mammal populations, the need to establish long-term, viable breeding programmes in zoos, will become increasingly important. The goal of these breeding programmes is to maintain genetic diversity and reduce inbreeding over multiple generations. To help achieve this, studbooks are in place that provide breeding recommendations to ensure unrelated animals are paired together. However, to do this effectively, the genetic relatedness of the founders needs to be known. In reality this data is not available and so the default position is that all founders are assumed to be unrelated.

This PhD project will assess the founder relatedness in

the African wild dog and the pygmy hippo studbooks to test the validity of the assumption of zero relatedness amongst founders. The genetic relatedness of the contemporary population will also be established and, importantly, genetically under-represented individuals will be identified for gene banking. This is an exciting opportunity to make a significant impact on conservation of endangered species.

Successful candidates should have a strong background in genetics, or evolutionary biology. Experience with a wide range of molecular techniques is essential and a strong interest in conservation is desirable. It also a key requirement that the candidate has at least one scientific publication to ensure competitiveness for a scholarship.

Interested candidates should contact Dr Monique Paris (mparis@ibream.org) or Dr Paul O'Donoghue (p.odonoghue@chester.ac.uk) for further information.

Expressions of interest are invited until 20th January 2013.

Natalie Robinson <natalie.robinson@chester.ac.uk>

UEastAnglia ButterflyThermalSensitivity

A 3.5 year PhD project is available at the University of East Anglia, Norwich, UK investigating "Understanding thermal sensitivity of male fertility in butterflies". The successful applicant will be based in the research group of Prof. Matt Gage (m.gage@uea.ac.uk).

Applications must be received in full by 28th February 2013. Further details and information on how to apply can be found at <http://www.uea.ac.uk/study/-postgraduate/research-degrees/science/biological-sciences>. Project Description Male fertility is specifically fragile to increases in temperature that organisms often experience in the natural environment. This sensitivity has been well known for decades in homeotherms: adaptations that allow testicular cooling of 2 to 8°C below core body temperature in mammals, for example, are essential to allow normal male fertility, and experiments where gonadal or ambient temperatures were elevated revealed subsequent declines in male fertility (review in Setchell 1998).

This thermosensitivity of male fertility is now increasingly recognised in cold-blooded poikilotherms, whose physiology is more directly affected by environmental thermal change. In *Drosophila* fruitflies, for example,

it is the specific thermal sensitivity of male fertility that makes populations non-viable above 30°C as this is the threshold where males (not females) become sterile (David et al. 2005). Because of climate warming and increases in heatwave frequencies, we need to know what reproductive traits in males are damaged by heat, whether they can acclimate or 'harden' and recover, if local adaptation has evolved, and ultimately the consequences for population viability. This PhD project will address these questions in a group where good evidence for local extinction under climate warming exists: butterflies.

Using laboratory culturing and experimentation with temperate zone satyrid butterfly species, sourced from warmer and cooler natural regimes, the PhD will determine (1) the specific effects of heat stress on male reproductive function at different life stages under different thermal regimes, (2) whether temperature-adapted sub-populations within species exist, and (3) the extent and rate of acclimation and recovery of male fertility. We will measure form, function and number of eupyrene and apyrene sperm after thermal treatments at different life stages, in parallel with male behaviour, fertility and sperm competitiveness following experimental matings. Male reproductive effects will be measured in parallel with female effects (which for most species so far examined show much reduced sensitivity to equivalent heat stress). Once controlled experiments have isolated the details of hyperthermia on male reproductive function in the lab, we will take this information to the field, and measure natural fertility across spatial and temporal thermal ranges within species. At the project conclusion, we aim to have identified an important taxon: which fertility phenotypes are damaged by heat stress, how they are damaged, the developmental plasticity and ability of these phenotypes to recover, and ultimately whether this specifically sensitive individual male trait could explain why some butterfly populations have disappeared from their southern ranges.

The student will join an active, NERC-funded research environment, in which the supervisors focus on studying the evolution and ecology of animal reproduction in the lab and field (e.g. Wedell et al. 2002, Thomas et al. 2006, Michalczyk et al. 2011, see more about our groups and interests at www.uea.ac.uk/bio/People/Academic/-Matthew+Gage and www.uea.ac.uk/environmental-sciences/people/facstaff/francoa). Techniques applied will include butterfly rearing, mating and behaviour assays (in UEA's new Constant Environment Facility), microdissection, microscopy and image analysis (in UEA's excellent Bio-imaging suite), experimental design, fieldwork, project management and statistical

analysis, as well as all the core skills demanded by an exciting multidisciplinary PhD project.

References 1. David JR, Araripe LO, Chakir M, Legout H, Lemos B, Petavy G, Rohmer C, Joly D & Moreteau B (2005) Male sterility at extreme temperatures: a significant but neglected phenomenon for understanding *Drosophila* climatic adaptations. *Journal of Evolutionary Biology* 18, 838-846. 2. Michalczyk ©, Millard AL, Lumley AJ, Martin OY, Emerson BC, Chapman T & Gage MJG (2011) Inbreeding promotes female promiscuity. *Science* 333, 1739-1742. 3. Setchell BP (1998) Heat and the testis. *Reproduction* 114, 179-194.

— / —

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>

UEastAnglia FruitfliesLifeHistory

A 3.5 year PhD project is available at the University of East Anglia, Norwich, UK investigating "Evolutionary mismatches between life histories and environments". The successful applicant will be based in the research group of Prof. Tracey Chapman (tracey.chapman@uea.ac.uk)

Applications must be received in full by 28th February 2013. Further details and information on how to apply can be found at <http://www.uea.ac.uk/study/-postgraduate/research-degrees/science/biological-sciences>. Project Description When environments vary over time and space individuals can be mismatched' - in an environment to which they are not adapted. In the short term, individuals may show plastic responses, which can buffer deleterious effects. Given sufficient evolutionary time and selection, organisms will also adapt genetically. This project aims to explore these ideas in a novel conceptual framework developed from hominin evolution.

Modern human life histories were selected in a very different environment to that now experienced in industrialised countries. This very recent mismatch' may explain the rapid and continuing rise in obesity and type 2 diabetes. The thrifty genotype' hypothesis proposes that individuals selected in an environment of periodic food shortage will be efficient storing fat when food is plentiful. However, in environments in which food is

in continual excess, such a genotype is maladaptive. A second variation on this idea is plasticity to the prevailing environment (thrifty phenotype'). Here, during development, the likely quality of the environment into which the individual will emerge is assessed'. Thus traits such as insulin sensitivity are plastic and can be set' during development. However, if the environment changes rapidly, the organism is set for the wrong environment, with deleterious consequences.

These ideas have untapped potential and broad relevance for the ecological domain. The aim is to exploit this by investigating untested predictions of the thrifty phenotype and genotype hypotheses, using ecologically relevant manipulations of diet in the fruitfly model system. The main aims are:

1. To measure genetic variation in thrifty genotype'

This hypothesis proposes that increased efficiency of fat storage is advantageous when food supply is variable / scarce. The PI's lab created 3-fold replicated experimental evolution lines over 10 years ago in which food supply is either regular' or random'. The random lines experience periods of starvation and glut and should therefore be selected for high efficiency fat storage. Total lipid storage and circulating sugars levels will be quantified. The full life history (lifespan, reproductive output) of the random and regular regimes will also be characterised.

2. To measure genetic variation in the expression of thrifty phenotype'

In additional experimental evolution lines we have replicated regimes that experience good quality food during development, but emerge onto either a high or low quality adult diet. Hence low adult diet individuals are mismatched' over evolutionary time. We will conduct the tests above to determine the significance of these mismatches.

3. To measure the extent of plasticity in matching' of genotype to phenotype

The student will create proximate mismatches between developmental and adult environments by placing cohorts of wild type individuals on different larval and adult diets. This will show the extent of plasticity to mismatched environments. The full range of tests will be conducted as above.

Training: The student will enter UEA's personal and professional development programme. Through this they will gain personally tailored training in generic skills, career development and employability. Specific skills include analysing responses to experimental evolution, life history assays, biochemical tests of nutrient

levels and quantitative analyses.

References Fricke, C., Bretman A. & Chapman, T. (2009) Female nutritional status determines the magnitude and sign of responses to a male ejaculate signal in *Drosophila melanogaster*. *J. Evol Biol.* 23, 157-165. Barnes, A.I., Wigby, S., Boone, J., Partridge, L. & Chapman, T. (2008) Feeding, fecundity and lifespan in female *Drosophila melanogaster*. *Proc. R. Soc. B.* 275, 1675-1683. Fricke, C., Bretman, A. & Chapman, T. (2008) Adult male nutrition and reproductive success in *Drosophila melanogaster* *Evolution* 62, 3170-3177. Review papers: Flatt, T., and Schmidt, P.S. 2009. Integrating evolutionary and molecular genetics of aging. *Biochimica et Biophysica Acta.* 1970:951-962. Partridge, L., M. D. W. Piper, et al. (2005). Dietary restriction in *Drosophila*. *Mech AgeDev* 126: 938-950

Martin Taylor <nitram8@hotmail.com>

UEastAnglia NeotropicalCatfish

PhD position: Polyploidy and immunity in Neotropical catfishes.

A three year PhD project is available at the University of East Anglia, Norwich, UK investigating the role of polyploidy in immunity in Neotropical catfishes. The successful applicant will be based in the research group of Dr Martin Taylor (www.uea.ac.uk/~b141).

Project Description. Ancient whole genome duplications (WGDs) and the additional genetic resources resulting from them have played major roles in the evolution many eukaryotes. In vertebrates, there is strong evidence that two rounds of ancient WGD were followed by a third additional WGD in the teleost fishes - the fish specific genome duplication (FSGD). The role that WGD plays in the evolutionary success of recipient taxa and lineages has been hotly debated for many decades. However, while progress has been made in understanding the origins and mechanisms of the formation of polyploids in many groups, less attention has been devoted to the advantages and/or disadvantages of being a polyploid. This PhD project will investigate two related facets of individual fitness - immune gene diversity (the MHC) and macroparasite burden, in a group of neotropical catfishes (the Corydoradinae) that have undergone multiple WGDs, ranging from ancient paleopolyploid events (~40 mya) to relatively recent duplications (~1-2 mya). The Corydoradinae are widely over South America and comprise more than 170 described

species divided into 9 lineages. The group demonstrate multiple genome duplication events (polyploidy) and also exhibit complex mimetic colour pattern relationships¹. Using sympatric communities of species (which should theoretically be exposed to the same parasites) that vary in ploidy level, this project will: 1) use next generation sequencing to quantify MHC diversity in taxa that range from diploid to potentially 16x ploid; (2) quantify macroparasite burdens in multiple sympatric communities consisting of diploid and polyploid species (3) investigate the role of additional host-specific factors that may influence macroparasite burdens such as size, age, diet and population demographics. The successful applicant join the group of Dr Martin Taylor who has recently moved to UEA (see 2) and will receive training in next generation sequencing and associated bioinformatic analysis as well as more traditional techniques such as parasitology. There will also be opportunities for conducting fieldwork in South America with Brazilian collaborators.

References (1) Alexandrou, M., Oliveira, C, Maillard, M, McGill, R.A.R., Newton, J., Creer, S. and M. I. Taylor. (2011) Competition and phylogeny determine community structure in M?llerian co-mimics. *Nature* 469:84-88, 2011. DOI:10.1038/nature09660.

The successful applicant is likely to have some experience in techniques used in molecular ecology.

Applications must be received in full by 28th February 2013. Further details and information on how to apply can be found at <http://www.uea.ac.uk/study/postgraduate/research-degrees/science/biological-sciences> . Informal enquiries are welcome - contact Martin Taylor (martin.taylor@uea.ac.uk)

nitram8@hotmail.com

UEast Anglia TelomeresSeychellesWarblers

A 3.5 year PhD project is available at the University of East Anglia, Norwich, UK investigating "Telomeres as biomarkers of costs and quality in a wild population of Seychelles warblers". The successful applicant will be based in the research group of David Richardson (david.richardson@uea.ac.uk).

Applications must be received in full by 28th February 2013. Further details and information on how to apply can be found at <http://www.uea.ac.uk/study/>

[postgraduate/research-degrees/science/biological-sciences](http://www.uea.ac.uk/study/postgraduate/research-degrees/science/biological-sciences) . Project Description Every organism has a finite amount of resources it can use to survive and reproduce. Resources spent on one area, e.g. health, cannot be spent on another, e.g. reproduction. Consequently organisms must work out how best to spend their resources so as to maximise the benefits they gain. Such trade-offs are central to the evolution of different life-history strategies, i.e. why organisms differ in aspects such as size, reproduction rate and lifespan, a fundamental part of biology. The problem is that, although it is relatively easy to assess the benefit of investment in an area, to understand trade-offs we also need to know the costs. Unfortunately, measuring these has proved to be extremely difficult, especially in wild animals.

Telomeres are long, specialized regions of DNA which protect the ends of chromosomes and prevent the genes from getting damaged or mixed up when the cell replicates. However, a section of telomere is lost with each replication and when telomeres reach a critical short length the cell stops functioning. Accumulation of these dysfunctional cells in the bodies' tissues contributes to organismal senescence and mortality. Importantly the rate at which telomeres shorten is also greatly affected by oxidative stress - the organisms' inability to cope with the damaging waste particles of metabolism. Furthermore, oxidative stress/telomere shortening is influenced by life history and environmental stresses (e.g. accelerated growth or infection). Telomere shortening can, therefore, indicate the biological cost that such stresses exact on an individual and provide an important link between these and the aging process.

The student will use the unique Seychelles warbler (SW) system¹⁻³ to undertake a longitudinal study of telomeres in a wild population. The long-term study of an isolated island population means we have detailed information on the factors experienced by individuals each year, linked to annual blood samples taken from those individuals. We also have accurate measures of survival and reproductive success³. We recently developed a method to measure telomeres from blood samples⁴ and have shown that telomere shortening reflects biological ageing in the SW: telomere shortening with age differs between individuals and predicts survival and recruitment⁵. The proposed PhD will now investigate the relative costs of different stresses/experiences by relating annual telomere-shortening rate to the stresses they have faced in that year.

Experimental manipulations will allow them to hone in on specific factors, i.e. reproductive effort and helping behaviour. Importantly comparisons, not only be-

tween stresses, but also in respect to the age and life-history stage at which they are experienced, can be made. This will allow the student to compare how the costs and benefits of investment in different life-history components, or in dealing with environmental stresses, are traded off. Finally, the student will test the idea that individual variation in telomere shortening reflects an individual's ability to withstand these stresses and, therefore, provides an indicator of individual quality.

The student will be involved in all aspects of field and laboratory work and collaborate with an international team of researchers working on the SW.

References - Richardson DS, Komdeur J, Burke T. (2003) Altruism and infidelity in the Seychelles warbler. *Nature* 422, 581 - Richardson DS, Burke T, Komdeur J, von Schantz T (2005) MHC-based patterns of social and extra-pair mate choice in the Seychelles warbler. *Proc. Roy. Soc. B.* 272 (1564): 759-767 - Brouwer LB, Barr I, van de Poll M, Burke T, Komdeur J. & Richardson DS. (2010) MHC-dependent survival in a wild population: evidence for hidden genetic benefits gained through extra-pair fertilisations, *Molecular Ecology*, 19, 3444-3455. - Barrett ELB, Boner W, Mulder E, Monaghan P, Verhulst S, Richardson DS (2012) Absolute standards as a useful addition to the avian quantitative PCR telomere assay. *J. Avian Biology* 43:571-576 - Barrett ELB, Burke TA, Hammers M, Komdeur J, Richardson DS (2012) Telomere dynamics predict mortality in a life-long longitudinal wild study. *Molecular Ecology*

Martin Taylor <nitram8@hotmail.com>

UEdinburgh MHC evolution

PhD: Edinburgh MHC evolution in Soay sheep.

Interested candidates should email j.pemberton@ed.ac.uk without delay and certainly before 21st January, including a CV and contact details for two referees. The most likely funding sources are for UK candidates only (and they should have at least a 2.1 at first degree), but applications from *exceptional* non-UK students are also welcome.

Unravelling the disease and fitness consequences of MHC diversity in a uniquely well-characterised sheep population.

Prof. J.M. Pemberton (University of Edinburgh) & Dr. K. Ballingall (Moredun Research Institute)

The vertebrate major histocompatibility complex (MHC) is a genome region of exceptional complexity and allelic diversity with known roles in the immune response to pathogens and autoimmunity, yet the selective forces that promote this diversity are poorly understood and much argued about. For example, the exceptionally high levels of allelic diversity is variously explained by one or a combination of the following: frequency-dependent selection, heterozygote advantage, the accumulation of linked recessive deleterious mutations or mate choice [1,2].

This study will explore the evolution of the MHC over a 27-year period in the exceptionally well-characterised free-living, unmanaged Soay sheep population of St. Kilda [3], building on a previous study which demonstrated differences in the parasite resistance and fitness of individuals carrying different MHC class II DRB1 alleles [4]. We will apply sequence-based sheep MHC genotyping methods in use at the Moredun Institute [5] to genotype the polymorphic regions of the classical class II DR and DQ as well as the linked class I MHC loci. Available pedigree and SNP chip data will be used to assign alleles to haplotypes and if necessary haplotype-specific single nucleotide polymorphisms (SNP) and/or microsatellite markers will be used to allow rapid haplotype analysis within the wider sample collection.

Associations between alleles at individual loci, haplotypes or genotypes and fitness and phenotypic traits such as parasite burdens and immunological measures will be investigated, while accounting for genome-wide genetic similarity and inbreeding, in order to quantify selection on the MHC and investigate how allelic variation is maintained over time.

1. Piertney SB, Oliver MK (2006) The evolutionary ecology of the major histocompatibility complex. *Heredity* 96: 7-21.
2. van Oosterhout C (2009) A new theory of MHC evolution: beyond selection on the immune genes. *Proceedings of the Royal Society B-Biological Sciences* 276: 657-665.
3. Clutton-Brock TH, Pemberton JM, editors (2004) *Soay sheep: Dynamics and Selection in an island population*: Cambridge University Press.
4. Paterson S, Wilson K, Pemberton JM (1998) Major histocompatibility complex variation associated with juvenile survival and parasite resistance in a large unmanaged ungulate population (*Ovis aries* L.). *Proceedings of the National Academy of Sciences of the United States of America* 95: 3714-3719.
5. Ballingall KT, Tassi R (2010) Sequence-based genotyping of the sheep MHC class II DRB1 locus. *Immunogenetics* 62: 31-39.

Josephine Pemberton

Prof. J.M. Pemberton Institute of Evolutionary Biology
University of Edinburgh West Mains Road EH9
2LD

Tel: 0131 650 5505 Fax: 0131 650 6564 Web: [http://-
wildevolution.biology.ed.ac.uk/](http://wildevolution.biology.ed.ac.uk/)

– The University of Edinburgh is a charitable body,
registered in Scotland, with registration number
SC005336.

Josephine Pemberton <j.pemberton@ed.ac.uk>

UExeter EvolutionFungalKillers

PhD position: Evolutionary Ecology of Fungal Killers,
University of Exeter

We are looking to recruit a highly-motivated and dedicated student with a real interest in applying evolutionary biology to antimicrobial resistance and we are inviting applications for this BBSRC-funded PhD studentship to commence September 2013 at the University of Exeter supervised by Dr Ivana Gudelj and Prof. Ken Haynes.

Fungal diseases devastate human lives. Bloodstream infections are the second biggest killer of hospital patients with almost 50% of infections proving fatal, leading to 1.5 million patient deaths worldwide each year. However, fungal infections are not well-understood and there is much less public awareness than for diseases caused by bacterial and viral infections.

We therefore urgently need to understand how fungal pathogens evolve, adapt to different environments and become resistant to drugs. This is the research goal of a fully-funded PhD scholarship in Biosciences at the University of Exeter. The successful applicant will participate in a lively research environment where we combine mathematical modeling with an experimental evolutionary approach to build new theories and test them in the lab. We are looking for PhD students, either experimental or theoretical with a biological or a physics background, to join our interdisciplinary team in a unique environment where theoreticians and experimentalists share a common research vision.

We expect to apply diverse experimental and theoretical tools, from the molecular and genetic to the evolutionary and ecological, depending on the successful candidate and full training will be provided as appropriate.

You 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 Biology, Physics, Mathematics or a relevant subject. The studentship will cover a stipend for at least three years at the standard Research Council rate (currently £13,590 per annum for 2012-2013), research costs and tuition fees at the UK/EU rate for students who meet the residency requirements outlined by BBSRC (http://www.bbsrc.ac.uk/web/FILES/Guidelines/studentship_eligibility.pdf). Students from EU countries who do not meet the residency requirements may still be eligible for a fees-only award.

More information about the project and how to apply can be found at: <http://people.exeter.ac.uk/ig232/Positions.html> Closing date is 20th February 2013

“Gudelj, Ivana” <I.Gudelj@exeter.ac.uk>

UFlorida BarkBeetleEvolution

Several PhD or Masters student & postdoc positions available in bark beetle evolution, systematics & symbiology

Students seriously interested in any or all of the following should apply: * molecular phylogenetics * hi-tech morphological systematics * bark beetles, their ecology and evolution * symbioses among insects, fungi and bacteria * citizen science, science communication

Join our growing Forest Entomology and Symbiology team at the University of Florida on a new NSF-funded project. Feel free to call for more info (352-273-0299), or simply send your CV and a short summary of your accomplishments to Jiri Hulcr, hulcr@ufl.edu.

Application deadline: February 15, 2013. Start date: flexible, ideally Summer 2013.

“Hulcr,Jiri” <hulcr@ufl.edu>

UFlorida BarkBeetleEvolution 2

Several PhD student, Masters student, and postdoc positions available in bark beetle evolution, systematics & symbiology

Students seriously interested in any or all of the following should apply: * molecular phylogenetics * hi-tech morphological systematics * bark beetles, their ecology and evolution * symbioses among insects, fungi and bacteria * citizen science, science communication

Join our growing Forest Entomology and Symbiology team at the University of Florida on a new NSF-funded project. Feel free to call for more info (352-273-0299), or simply send your CV and a short summary of your accomplishments to Jiri Hulcr, hulcr@ufl.edu.

Application deadline: February 15, 2013. Start date: flexible, ideally Summer 2013.

“Hulcr,Jiri” <hulcr@ufl.edu>

UHelsinki EvolutionaryBiol

University of Helsinki, Institute of Biotechnology: PhD position in Evolutionary Biology, Developmental Biology and Systems Biology

We are looking for a student, preferably a biologist, to start a grant for a PhD on the interrelationship between the evolution of gene networks, development and the phenotype:

- Simulation of the evolution of the genotype-phenotype map of complex organs based on development.

or/and

- Quantitative study of the patterns of phenotypic variation across ontogeny and phylogeny

or/and

- Computational models of pattern formation and morphogenesis in animal development

One of the current challenges of evolutionary biology is to understand how genetic variation leads to specific morphological variation (the genotype- phenotype map) and how that process affects the direction of morphological change in evolution. Our group is devoted to address this question by using gene network models.

Programming skills or a willingness to acquire them is required.

The project involves spending some time with collaborators in Barcelona and close collaboration with Jukka Jernvall's group (<http://www.biocenter.helsinki.fi/bi-evodevo/index.shtml>).

The exact topic of the theses would be discussed in de-

tail during interview.

The job can start as soon as a adequate candidate is found.

For an outline of the groups research: http://www.biocenter.helsinki.fi/bi/evodevo/-group_isaac.shtml For further inquiries: isalazar at mappi.helsinki.fi Developmental biology program, Institute of Biotechnology, University of Helsinki

Article exemple: Salazar-Ciudad I, Jernvall J.A computational model of teeth and the developmental origins of morphological variation. Nature. 2010 Mar 25;464(7288):583-6.

The University of Helsinki is a public University that has regularly been ranked among Europe's 10 to 15 best universities on worldwide ranking lists of research universities. Some 470 doctorates are completed annually and nearly 10,000 scientific articles or monographs are published yearly by the universitys researchers.

Isaac.Salazar@uab.cat

UJyvaskyla Finland ExperimentalEvolution

PhD position: Experimental evolution in fluctuating environments University of Jyväskylä, Finland.

Climate change scenarios predict higher mean temperatures, but also increased thermal fluctuations. In order to persist under climate change, species need to respond adaptively to the change and fluctuations, to prevent extinction. Moreover, fluctuating environments play a strong role also in several evolutionary theories. Evolutionary consequences of fluctuating temperatures on bacterial life-histories are tested with several bacterial species and strains in experimental evolution settings, in order to test how repeatable or constrained evolution in fluctuating environments is.

The person that I seek for this position should have MSc in biology (ecology, evolutionary biology, genetics, microbiology etc.) and strong interest on evolutionary adaptation. Microbiological techniques that are needed in this position are easily learned. However, prior microbiological/lab knowhow is certainly acknowledged, as well as statistical skills.

Send application, curriculum vitae and maximum of two recommendation letters (preferably all in the same file), by email (entitled: application “Your Name”) to

tketola@jyu.fi. I aim to fill this position as soon as I find suitable candidate for the job.

Yours, Tarmo Ketola, PhD, Adjunct Professor

The grant is 25.500 euro per 12 months (minus social security insurances 11-15 % of the total amount). Note that grant is tax-free up to 19.444 euro . Funding from KONE foundation is for three years, and additional money is reserved for travel and lab work. The work is conducted in Microbial Ecology and Evolution Lab that is part of the Centre of Excellence in Biological Interactions, in University of Jyväskylä, Finland.

Relevant links: <http://www.ketolatarmo.blogspot.fi/>
http://www.helsinki.fi/~jlaakso/lab/MEEL/Lab_home.html <https://www.jyu.fi/bioenv/en/divisions/coe-interactions> <https://www.jyu.fi/en/tarmo.t.ketola@jyu.fi>

ULouvainlaNeuve BehaviouralEvolution

Student stage in Behavioral Ecology (f/m)

Project title

Plasticity of multimodal communication under sexual selection in a butterfly, *Bicyclus anynana*/

Position and peculiarity

A 3- to 5-month student stage (Bachelor or Master) is available at the Biodiversity Research Centre, Earth and Life Institute, University of Louvain-la-Neuve (UCL) in Belgium (<http://www.uclouvain.be/en-bdiv.html>), preferentially starting in February-March 2013.

Description of the project

Individuals often show large phenotypic variation in sexual traits (signals and preferences), which affect their reproductive success. Phenotypic variation may be due to their genotype, to the environment(s) in which their phenotype is present, and to genotype-by-environment interactions (GEIs). The impact of GEIs on sexual selection has only recently drawn the attention of researchers. The project aims at assessing the role of GEIs on the variation observed in sexual traits and tests whether such variation has an adaptive value in mate choice. An integrative approach will allow investigating: 1) multiple phenotypic (visual, olfactory, gustatory) traits to grasp the full pheno-

type of the organism, forming its “lifestyle”, and 2) the adaptive value of phenotypic plasticity in both sexual signals and preferences in both sexes. More specifically, the project will aim at identifying the extent of plastic and genetic effects in male-female interactions due to signaling and preference for signals. Methods will include behavioral, chemical and statistical analyses to test the extent with which sexual signals and preference depend on individual quality, experience and on environmental conditions (e.g. [1 <#_ENREF_1>, 2 <#_ENREF_2>]). The species under focus is an African tropical butterfly *Bicyclus anynana*, in which mutual mate choice and ornamentation has recently been shown [3 <#_ENREF_3>]. This species is a model lab-reared system for studies in phenotypic plasticity, sexual selection and multimodal sexual communication [4 <#_ENREF_4>]. Several sexually selected signals have recently been identified, namely male sex pheromones [5 <#_ENREF_5>, 6 <#_ENREF_6>] and the UV-reflectance of male and female forewing eyespot centres [3 <#_ENREF_3>, 7 <#_ENREF_7>]. We expect the results to contribute significantly to our understanding of the role phenotypic plasticity in sexual traits and other life history traits may play in population or species adaptation to reproduce in their environment.

Tasks

The student will participate to a large project as detailed in the above description. She/he will have the opportunity to work on a specific question (to be defined based on the student’s own interest) and to develop various theoretical and technical skills in an integrative manner.

Requirements

We are looking for a strongly motivated candidate with advanced courses in Evolutionary and/or Behavioral Biology and Ecology. Experience in behavioral and/or chemical ecology is a plus, as is the ability to work efficiently, independently as well as in collaboration.

Work environment

The student will work in a highly active and integrated academic environment, in the research team of Prof. C. Nieberding, including Dr. MJ Holveck and other postdocs, PhDs and students, and will interact with members of other research teams of the Institute, including Prof. H. Van Dyck. Our University is in a French-speaking region, but the language for meetings and scientific interactions is English. For background information about our university, see <http://www.uclouvain.be/en-index.html> . Application

Application should be sent to Caroline Nieberding

(caroline.nieberding@uclouvain.be) and Marie-Jeanne Holveck (marie-jeanne.holveck@uclouvain.be) and include the following: (1) a cover letter describing your research interests and qualifications, (2) a full CV, (3) contact information (email, phone number) of minimum 1 referee. Only complete applications will be considered and should be sent preferably in one single digital pdf file. Applications will start being reviewed immediately and until January 31st 2013 (or until the position is filled). Informal inquiries are welcome.

Please include « Student stage application » in the subject line of the e-mail.

References

1. Holveck MJ, Geberzahn N, Riebel K (2011) An experimental test of condition-dependent male and female mate choice in zebra finches. Plos one 6.
2. Holveck MJ, Riebel K (2010) Low-quality females prefer low-quality males when choosing a mate. Proceedings of the Royal Society B-Biological Sciences 277: 153-160.
3. Prudic KL, Jeon C, Cao H, Monteiro A (2011) Developmental plasticity in sexual roles of butterfly species drives mutual sexual ornamentation. Science 331.

— / —

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>

UMaryland SpatialModelingVariation

PhD Assistantship (U. of Maryland): Spatial modeling and remote sensing of intraspecific variation in phenology under changing climate

The University of Maryland Center for Environmental Science is seeking a motivated PhD student interested in studying spatial variation in forest tree phenology and its relationship to underlying genomic variation and environmental gradients. The student would join a team of biogeographers, remote-sensing scientists, and population geneticists to develop novel statistical methods to model and map intraspecific variation at regional to continental scales. An emphasis of the position is on developing approaches to identify the geographic location of populations pre/mal-adapted to future climate

change. Within this framework, there are numerous opportunities for a student to extend the broader project objectives to include any number of ideas the student is most interested in pursuing.

This is an ideal project for an individual with excellent quantitative and computer programming skills (e.g., R, python, etc.) and with an interest in working at the interface of biogeographical modeling, remote sensing, and landscape genomics, while developing the following skills:

- statistical modeling generally and spatial modeling of biodiversity in particular - remote sensing of phenology
- spatial analysis, including GIS - macroscale ecology and global change

The project is based at the Appalachian Laboratory in Frostburg, Maryland, with Matt Fitzpatrick, Andrew Elmore, and Stephen Keller. Student support has been secured through a grant from the National Science Foundation. The student will matriculate through the Marine, Estuarine, and Environmental Sciences Program (MEES) at the University of Maryland, College Park and will reside at the Appalachian Laboratory in Frostburg for the duration of the project.

To apply, please email as a single pdf document: (1) a statement of interest, (2) a CV, and (3) contact information for three referees to mfitzpatrick@umces.edu. Review of applications will begin on February 18th, 2013, with a start date of Fall semester 2013.

This ad is also posted at <http://www.umces.edu/al/-employment>

– Stephen R. Keller Assistant Professor Appalachian Laboratory University of Maryland Center for Environmental Science 301 Braddock Rd. Frostburg, MD 21532 301-689-7203

skeller@al.umces.edu

UMuenster PlantEvolutionaryGenomics

PhD position in Plant Evolutionary Genomics, Lab Juliette de Meaux, Münster, Germany

I am looking for a highly motivated PhD student to study the evolution of cis-regulatory DNA in the genus *Arabidopsis*.

Our research seeks to reconstruct the recent history of

adaptive molecular variation in the genus *Arabidopsis*. We are especially interested in the accurate characterization of adaptively relevant variation. Our ultimate goal is to understand the molecular basis of adaptation in plants. In this framework, the project of the PhD student will be to determine the role of regulatory evolution in phenotypic adaptation, via the combined analysis of functional and nucleotide variation in gene expression in the *Arabidopsis* genus. The project will entail bioinformatics and genomics approach and the outcome will be experimentally validated.

Applicants must hold a Diploma/Master degree and prove advanced education in genomics, bioinformatics or population genetics. Proficiency in English is an absolute requirement. Applications of women are specially invited; in the case of similar qualifications, competence and specific achievements, women will be considered on preferential terms, within the framework of the legal possibilities. Handicapped candidates with equivalent qualifications will be given preference. Applications should be sent by February 16th 2013 to juliette.de.meaux@uni-muenster.de. The position is to be filled in Spring 2013 for three years. Starting date can be adjusted to your availability.

For more information on our research, refer to our website (<http://ieb.uni-muenster.de/plantmolevol>).

The IEB in Münster is unique in Germany (<http://ieb.uni-muenster.de/>). Its marked focus on Evolution places it at the forefront of education and research in diverse sectors of evolutionary biology, from evolutionary ecology to phylogenetics, population genetics and evolutionary bioinformatics. This interdisciplinary environment promises to bring you a highly interactive environment in which both your theoretical and experimental skills can be harmoniously developed.

Münster is a multi-faceted city. It is a city of science and learning. Westphalia's longstanding regional capital is a young city; one of 7 of its inhabitants is either studying or employed by university and half of its inhabitants are below 30 years of age. Münster is a forerunner in the field of environment and climate protection. It is Germany's bicycle metropolis with more bikes than inhabitants, more than 250 kilometres of bicycle paths and an underground bicycle parking area in front of the main train station. High-tech and traditional trade coexist in this city, as well as baroque noble residences and modern architecture, with a historical city centre and progressive urban development. This is how Münster can guarantee you the highest quality of life.

Prof. Dr. Juliette de Meaux Plant Molecular Evolution Institute for Evolution and Biodiversity Hufferstr.

1 48149 Münster

Tel: +49(0)251 83 21 095

juliette.de.meaux@uni-muenster.de

UOtago LimpetEvolution

PhD Project Available: Limpet Dispersal or Parallelism? A PhD project, now available, is aimed at determining the evolutionary history of the Australasian limpet genus *Notoacmea*, supervised by Dr Mark Stevens (South Australian Museum), Dr Tomoyuki Nakano (Kyoto University) and Hamish Spencer (University of Otago). For more information see <http://www.otago.ac.nz/zoology/staff/spencer.html#LimpetProject>. Professor Hamish G. Spencer, FRSNZ Director & PI, Allan Wilson Centre for Molecular Ecology and Evolution Department of Zoology / Te Tari o MĀtai Kararehe University of Otago / Te Whare Wānanga o Otāgo Dunedin / Ātepoti New Zealand / Aotearoa

Email: h.spencer@otago.ac.nz Postal: Department of Zoology, P.O. Box 56, Dunedin 9054 Courier: 340 Great King Street, Dunedin 9016 Phone: +64-3-479-7981 Fax: +64-3-479-7584

Departmental Website: <http://www.otago.ac.nz/zoology/staff/spencer.html> Allan Wilson Centre Website: <http://www.allanwilsoncentre.ac.nz/> Gravida Website: <http://www.gravida.org.nz/> NZ Mollusca Website: <http://www.molluscs.otago.ac.nz> Hamish Spencer <hamish.spencer@otago.ac.nz>

UStirling ScotsPineEvolution

PhD: Genetic diversity and local adaptation in Scots pine. University of Stirling UK.

A three year PhD project is available at the University of Stirling, Scotland, UK, working on genetic diversity and local adaptation of Scots pine (*Pinus sylvestris*) in the UK. The successful applicant will be based in the research group of Dr Alistair Jump (University of Stirling) and will work closely with Dr Stephen Cavers (CEH Edinburgh) with additional project input from

Dr Richard Ennos (University of Edinburgh) and Dr Joan Cottrell (Forest Research). The project is funded at the basic UK research council rate by the University of Stirling, the Scottish Forestry Trust and CEH.

This three-year PhD project will use existing data and landscape models to assess historical migration scenarios and the development of patterns of neutral and adaptive genetic structure. This will be complemented by fine-scale analysis of selected native pinewoods to test hypotheses on the maintenance of high within-population diversity and to explore the consequences of human landscape modification for genetic diversity. Published genetic and palaeoecological data will be integrated with functional diversity and trait data held by the Centre for Ecology and Hydrology (CEH Edinburgh) and the University of Edinburgh. The work will centre on three main components: 1) Understanding the development of genetic structure during historical Scots pine migration. 2) Determining how high within-population genetic diversity is developed and maintained. 3) Assessing how native trees and non-local planted trees interact to shape the future diversity of Scots pine.

More detailed information is available by contacting Dr Alistair Jump at a.s.jump@stir.ac.uk

Applicants must be EU citizens and hold a minimum of a Bachelors degree at 2:1 or above (or equivalent) in a related subject. You will ideally possess relevant experience in molecular ecology and or demographic modelling. You should send a current CV and a covering letter to Dr Jump at the address below by 9 am UK time on Monday 18th February 2013. The covering letter must detail clearly your motivation for pursuing this research project and set out how your experience makes you suitable for the post. You should also arrange for two referee statements to be sent directly to Dr Jump by the closing date.

Dr Alistair Jump

Senior Lecturer in Plant Ecology Biological and Environmental Sciences School of Natural Sciences University of Stirling Stirling FK9 4LA UK

Tel: +44 1786 467848 Fax: +44 1786 467843
www.biogeo.org www.sbes.stir.ac.uk Alistair Jump
<a.s.jump@stir.ac.uk>

UUtah EvolutionDietarySpecialization

Graduate Student (Ph.D.) opportunity to study the evolution of dietary specialization in herbivorous mammals. The project is focused on understanding a particular group of detoxification enzymes (Cytochrome P450 2B) in native herbivores (woodrats) and how their structure and function has changed with changes in diet breadth and composition. Applicants should have a strong interest in molecular biology techniques as well as conducting fieldwork to collect woodrats. For more information on the lab visit Dearing Lab - Department of Biology biology-labs.utah.edu/dearing/index.html Please contact Shannon Nielsen <shannon.nielsen@bioscience.utah.edu> immediately for assistance with the application process. Please send inquiries regarding research question to Dr. Denise Dearing dearing@biology.utah.edu, Biology Department, University of Utah. Completed applications are due by January 11, 2013.

Denise Dearing dearing.denise@gmail.com

Denise Dearing <dearing.denise@gmail.com>

UWesternSydney EvolutionLifeHistory

Using telomere dynamics to detect a physiological constraint on the pace of life-histories The Hawkesbury Institute for the Environment (HIE) at the University of Western Sydney, Australia, is seeking a PhD candidate to work on a project in the field of animal physiological ecology. The PhD candidate is anticipated to commence in first semester 2013. The project broadly seeks to understand the physiological basis of trade-offs in life history ecology. In particular, it will test the hypothesis that oxidative stress is a cost associated with increased investment in current production relative to future survival. The project will use a novel index of cumulative oxidative damage to nuclear DNA: rate of telomere shortening in telomerase-knockout mice.

The candidate will design and conduct a series of

hypothesis-driven experiments to determine how variation in the pace of key life-history traits affect rates of telomere shortening and other molecular indices of oxidative stress. These experiments will shed light on the potential for individual mice to make physiological adjustments in response to perceived environmental conditions that maximise lifetime fitness but are associated with variation in rates of decline in physiological function. The task of the PhD candidate will be to design and undertake a series of experiments that address the aims of the project, including: contribute to the innovation, design and day-to-day running of experimental treatments, sampling, extraction and amplification of DNA using real-time (quantitative) PCR, development of other molecular assays (i.e. immunoassay kits, GC-MS) of oxidative stress, measure other physiological variables (e.g. body temperature) using telemetry and respirometry techniques.

The student will be supervised by Dr Christopher Turbill (HIE) and Professor Rob Brooks, Director of the Evolution and Ecology Research Centre at the University of New South Wales. Criteria The successful applicant should: demonstrate excellent academic performance related to the research proposed, hold qualifications and experience equal to an Australian First Class Bachelor Honours degree, be highly motivated to undertake further study at an advanced level, preferably have a background that includes the fields of comparative animal physiology, metabolism and ageing, free radical biology, and the evolution of variation in life history traits.

International applicants must demonstrate a high level of proficiency in the English language. Please refer to the University's web site for information about English Language Requirements. What does the Scholarship provide? Tax free stipend of AUD\$34,653 per annum and a funded place in the doctoral degree. International candidates with a strong track record will receive a fee waiver. Funding is also available for project costs and conference travel. Need more information? Applicants should discuss their research aspirations and eligibility with Dr Christopher Turbill: c.turbill@uws.edu.au or +61 2 4570 1456. Contact the Office of Research Services to discuss enrolment and scholarships at hdrs-scholarships@uws.edu.au To find out more about the scholarship and the Hawkesbury Institute for the Environment, see: <http://www.uws.edu.au/hie/scholarships> How to apply Submit an application form and CV (including two referees) by the closing date. The application form can be downloaded from: <http://www.uws.edu.au/hie/scholarships> Applications close: 1 February 2013

Christopher Turbill

Dr Christopher Turbill Research Fellow | Hawkesbury Institute for the Environment, University of Western Sydney Hawkesbury Campus, Building L3.G.06 Postal Address: Locked Bag 1797, Penrith NSW 2751 +61(0)2 4570 1456 | +61 (0)449 007 174 | c.turbill@uws.edu.au

C.Turbill@uws.edu.au

UppsalaU FungalEvolution

PhD position "Evolutionary forces and genetic mechanisms underlying sexual dimorphism: insights from the fungal kingdom"

A 4-year PhD-student position is currently available at the Department of Evolutionary Biology, Uppsala University, Sweden.

Sexual dimorphism is the systematic distinction in phenotype between individuals of the two sexes in dioecious species. Males and females differ in numerous features, which is thought to be a result of natural and/or sexual selection for traits that influence the fitness of each sex. Nevertheless, we are still at the beginning of understanding the underlying genetic mechanisms and evolutionary forces driving sexual dimorphism. Emerging data from the fungal kingdom suggests that fungi present new opportunities to test hypotheses about the evolution of genetically different sexes and the related phenotypic divergence. Until now, sexual dimorphism has not been recognized in the fungal kingdom. Although male and female reproductive structures exist in fungi, phenotypic traits are generally exchangeable and reciprocal between strains of different mating types. As for most filamentous ascomycetes, the mating type in the model species *Neurospora crassa* is governed by two alternative alleles at a single mating-type locus. In contrast, in the congeneric species *N. tetrasperma*, a large (~7 Mbp, >1,500 genes) region of suppressed recombination surrounds and includes the mating-type locus. Phylogenetic analyses suggest that the suppressed recombination evolved less than 2 MYA but is associated with substantial DNA sequence divergence between the mating-type chromosomes. Recent data from our research group suggest that *N. tetrasperma* exhibit consequent mating-type linked transcriptional divergence. Furthermore, our data indicate that the phenotypes of strains of different mating types in *N. tetrasperma* are optimized for traits promoting development of male or female features. These findings illustrate a possible analogue to sexual dimorphism in the fungal kingdom.

This PhD-project aims at using large-scale genomic/transcriptomic data together with mating experiments of *Neurospora* to test hypotheses about the driving forces and genetic mechanisms of sexual dimorphism. The PhD student will be part of Dr. Hanna Johannesson's lab at the Evolutionary Biology Center, EBC. The Johannesson lab has a broad interest in eukaryote genome evolution. In particular, the research utilizes genomic and experimental data to infer the connection between reproductive behavior and genome evolution. The project is in collaboration with the group of Dr. Simone Immler, whose research focus lays on in particular sexual selection, the evolution of gametes and the consequences of bi-phasic eukaryotic life cycle. The project is announced in combination with a postdoc position on multilevel selection, thus here are ample opportunities to work closely with postdocs and other PhD students in the lab that focus on related projects. The research environment is international with English being the working language. See Johannesson and Immler lab web-pages for more information and recent publications (<http://www.ebc.uu.se/Research/IEG/evbiol/research/Johannesson/> and <http://www.ebc.uu.se/Research/IEG/evbiol/research/Immler/>).

EBC constitutes an exciting arena for multidisciplinary research in evolutionary biology in a broad sense, with research programs including ecology, systematics, genetics, genomics, and developmental biology. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful surroundings conveniently situated 40 minutes by train from Stockholm.

Qualifications: An MSc or possibly a BSc degree (or equivalent) in a relevant field is required. The ideal candidate is highly motivated with thorough education and strong interest in evolutionary genetics/genomics. Previous experience with large-scale genetic data analysis, bioinformatics, and microbiology techniques is advantageous. Candidates must be fluent in English.

Conditions: The PhD training comprises four years of full time research and studies. The successful candidate will receive a fellowship the first year and a PhD-student position year 2-4. The position can be combined with up to 20% of teaching assistantship, which will then prolong the position accordingly. Please contact Hanna Johannesson (Hanna.Johannesson@ebc.uu.se, +46 18 471 6662) for more information. Union representatives are Anders Grundström, Saco-rÅdet +46 18 471 5380 och Carin Söderhäll, TCO/ST +46 18 471 1996, Stefan Djurström, Seko +46 18 471 3315.

How to apply: The application should include 1) a letter of intent describing your research interests and motivation for PhD studies, 2)

— / —

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>

WageningenU ModelingBiologicalSystems

Number 2: AFSG- SSB-0015 PhD: Development of a cyanobacterial photosynthetic platform for à la carte biocatalysis Systems and Synthetic Biology WU 1fte

We are looking for We are looking for an enthusiastic, motivated PhD candidate with a strong background in or affinity to modeling of biological systems. Candidates should have strong mathematical and/ or statistical modeling skills, be fluent in English (both written and spoken), proactive, independent, team players and have the ability to engage with professionals in adjoining fields.

This PhD project aims to understand and, subsequently, steer the regulatory control of product formation by cyanobacteria, a model photosynthetic platform, for sustainable, tailored production of chemical building blocks through Synthetic Biology. The project will provide predictive models of cyanobacterial phototrophic growth, integrating metabolism and regulation at genome-scale. These models - which will be experimentally validated in wet lab matching projects - will enable to pinpoint bottlenecks hindering high-efficiency metabolism and thus provides a solid, model-driven basis for the tailored re-design of novel functions.

Requirements For this position we request modeling skills (constraint-based and/or dynamic), knowledge of analysis and integration of various omics data and a good knowledge of microbial physiology and biochemistry. The candidate is required to have a MSc on Bioinformatics, Biotechnology, Bioprocess engineering, (Computational) Microbiology, Applied Mathematics, or related fields. The PhD student will collaborate in a team with scientists at Chairs of Systems and Synthetic Biology and of Bioprocess engineering.

We offer We offer you a temporary, PhD-candidate position for 48 months (with interim evaluation after of

18 months). As per the PhD scale, the gross salary per month starts at euro 2042 in the first year and rises every year up to euro 2612 in the fourth year.

We not only offer a competitive salary but also good (study) leave and a pension of the ABP Pension Fund.

Additional information For more information about this position, please contact Prof. Vitor Martins dos Santos, chair Systems and Synthetic Biology, telephone number +31 317 482865, email: vitor.martinsdossantos@wur.nl.

For more information about the contractual aspects, please contact Mrs. J. van Meurs, HR advisor, telephone number +31 3174 80101.

Interested? You can apply online at www.werkenbij.wur.nl/UK until 31th of January 2013.

We are Systems Biology is one of the spearheads of the Wageningen UR, which invests considerably in this area. The mission of the Laboratory of Systems and Synthetic Biology (www.wageningenur.nl/ssb) is to contribute to the elucidation of the mechanisms underlying basic cellular processes, evolution and interactions among microbes and between microbes and their environment (including the human host) and to translate this knowledge into applications of biotechnological, medical and environmental interest.

The laboratory is part of the Agrotechnology & Food Sciences Group which is part of Wageningen UR where fundamental and applied sciences complement each other. As an important European player, we carry out top-level research and work alongside authoritative partners within the international business world as well as the government on "Healthy food in a biobased society". We have a crucial role in innovations within the market. In short, we are an interesting, international employer of stature.

Wageningen University and Research centre Delivering a substantial contribution to the quality of life. That's our focus - each and every day. Within our domain, healthy food and living environment, we search for answers to issues affecting society - such as sustainable food production, climate change and alternative energy. Of course, we don't do this alone. Every day, 6,500 people work on 'the quality of life', turning ideas into reality, on a global scale. For further information about working at Wageningen UR, take a look at www.jobsat.wur.nl. Could you be one of these people? We give you the space you need.

Acquisition regarding this vacancy is not appreciated.

Met vriendelijke groet, Kind regards,

Carolien Pinkster Secretary

Wageningen University Laboratory of Systems and Synthetic Biology Wageningen Centre for Systems Biology (WCSB) Laboratory of Microbiology Building 316 Dreijenplein 10 6703 HB WAGENINGEN the Netherlands phone +31 317 482105 fax +31 317 483829 email carolien.pinkster@wur.nl In the office at: Monday / Wednesday / Friday 08.30 - 17.00 hours

"Pinkster, Carolien" <carolien.pinkster@wur.nl>

WageningenU SystemsBiology

AFSG- SSB-0013 Modeling life: exciting PhD positions in Systems Biology Systems and Synthetic Biology WU 1 fte

We are looking for Systems Biology is one of the spearheads of the Wageningen UR, which invests considerably in this area. The Wageningen Centre for Systems Biology (WCSB) has been recently launched with a focus on the Systems Biology of Biobased Economy, Food and Health. The research programme within the WCSB runs across with three main subthemes: Virtual Gut, Virtual Plant, and Virtual Microbe. Within the Wageningen Centre for Systems Biology two PhD modeling positions are available in the themes Virtual Gut and Virtual Microbe respectively. Each of these modeling project is matched by at least one experimental project, with strong interactions between model and experiments envisaged.

We are looking for enthusiastic, motivated and highly qualified PhD candidates with a strong background in or affinity to modeling of biological systems. Candidates should have strong mathematical and/ or statistical modelling skills, be fluent in English (both written and spoken), proactive, independent, team players and have the ability to engage with professionals in adjoining fields. Below you will find information on the research projects available and on the requirements of the position. More information is available on the website: www.wageningenur.nl/systemsbiology. PhD Position 1: Development of probabilistic models for quantitative pathway and response analysis of human intestinal and immune responses to food The homeostasis of the small intestine and its lining immune system can be modulated by various food-products. To efficiently study and, ultimately, predict the effects of food-products on homeostasis, we resort to systems biology-based mathematical models. By drawing on previously acquired

knowledge, available literature and data to be generated in matching experimental projects, we aim to construct an in silico pathway-network model of the most important hubs for local and systemic immune signals of the gut and lined immune cells. This model, which will involve multilevel responses and is to enable predictions of the effect of polysaccharides, and pre- and probiotics, will be tested iteratively by comparing its outcomes to in vitro results.

PhD Position 2: Systems Biology of microalgae as photosynthetic platform for tailored production of chemical building blocks and biomass This computational Systems Biology project aims to develop an experimentally tested modelling framework for the understanding of the metabolic and regulatory wiring of selected microalgae as photosynthetic platform for 'a la carte' production of chemical building blocks and biomass in sustainable value chains. The project will be tightly intertwined with research activities in matching projects in the scope of a broader initiative on microalgae for innovative biorefinery, as summarised in www.AlgaePARC.com and www.wur.nl.

We ask Position 1: The candidate is required to have a MSc on Biotechnology, Nutritional Sciences, Computational Sciences, Applied Mathematics, Bioinformatics, Statistics, Bioengineering or related fields. Only candidates that have a background in human health related biological networks, preferable based on gene transcription and protein interaction, combined with a experience in mathematical, statistical or modeling strategies are asked to apply. The PhD student should have the ability to engage with scientists at WUR-Food & Biobased Research, WUR-Host Microbe Interactomics, WUR System Biology and researchers at The University of Bologna, Italy.

For more information about this position, please contact dr. Jurriaan Mes telephone number +31 317 481174, e-mail jurriaan.mes@wur.nl.

Position 2: The project is formulated in the context of the subtheme 'Virtual Microbe'. It requires strong modeling skills in constraint-based and dynamic modeling, some understanding in the analysis and integration of omics data and a good knowledge of microbial physiology and biochemistry. The candidate is required to have a MSc on Biotechnology, Bioprocess engineering, (Computational) Microbiology, Computational Sciences, Applied Mathematics, Bioinformatics or related fields. The PhD student will collaborate in a team with scientists at Chairs of Systems and Synthetic Biology, Bioprocess engineering, and the WUR unit on Plant Research International.

For more information about this position, please

contact Prof. Vitor Martins dos Santos telephone number +31 317 482865, e-mail: vitor.martinsdossantos@wur.nl.

We offer We offer you a temporary, PhD-candidate position for 48 months (with interim evaluation after of 18 months). As per the PhD scale, the gross salary per month starts at 2042 in the first year and rises every year up to 2612 in the fourth year. We not only offer

— / —

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>

WesternKentuckyU EvolutionMorphology

M. Sc. Opportunity, Ecological Morphology V Fall 2013

Western Kentucky University, Department of Biology Collyer Lab: <http://www.wku.edu/biology/staff/michael.collyer> The Collyer lab at Western Kentucky University (WKU) seeks 1-2 students with combined interests and experience in biology, mathematics, and statistics, and who are especially interested in research directed at ecological explanations for the evolution of organismal morphological diversity. Current empirical research in the lab is focused on the evolution of morphological diversity in North American desert fishes. Current theoretical research in the lab is focused on the development of methods for analysis of phenotypic change using high-dimensional data (e.g., 3-D geometric morphometric data). We especially need students with interest in burgeoning research projects that utilize the WKU Upper Green River Biopreserve (<http://greenriver.wku.edu/>). Competitive funding and tuition waivers are available to qualified students.

Prospective students must have a strong quantitative background in addition to a bachelors degree (or equivalent) in biology, zoology, ecology, evolutionary biology, or related field. Demonstrated excellence in coursework is required; a demonstrated aptitude for biological research and experience in multivariate statistics is preferred.

Candidates should send an email to Dr. Michael Collyer (michael.collyer@wku.edu), including a cover letter describing research interests and quantitative skills, CV,

most recent transcripts (unofficial is ok), and contact information for 2-3 references.

For more information about the Department of Biology and the M. S. Program in Biology, please visit the department web page at <http://www.wku.edu/biology/>. For more information about WKU, please visit <http://www.wku.edu> . Michael Collyer

Assistant Professor Department of Biology Western Kentucky University 1906 College Heights Blvd. #11080 Bowling Green, KY 42101-1080

Tel: +1 270.745.8765 Fax: +1 270.745.6856 Email: michael.collyer@wku.edu

“Collyer, Michael” <michael.collyer@wku.edu>

Jobs

AuburnU BioinformaticsComputationalBiol	42	RiceU EvolutionaryBiology	54
Berlin MuseumDigitization	43	SmithsonianInst Directorship	54
CheetahConservationFund Namibia LabTech ConsGenetics	44	StonyBrookU PrimateGenomicsEvolution	55
CityUNewYork EvolEcolModeling	45	TexasTechU SystematicsEvolBiology	55
Frankfurt FungalGenomics	45	UBergen EvoDevo	56
GeorgiaTech TeachingDirector	46	UBern FieldAssist AvianEvolution	57
GrinnellCollege 1Yr EvolutionaryBiol	46	UCalifornia Merced PopGeneticsGenomics	57
INRA France 41 QuantGenetGenomics	47	UCopenhagen Biodiversity	57
ImperialCollegeLondon 2 Evolution	47	UEdinburgh QuantGenomics	58
KansasStateU ArthropodGeneticsGenomics	48	UInnsbruck Austria EvolutionAlgae	58
Konstanz Germany 2 EvolutionaryBiol	48	ULEicester PopEvolGenetics	59
MasseyU Genetics	49	UMontana Director Wildlife Biology	59
MasseyU StatisticalGenetics	49	UNeuchatel EvolutionParasiteVectors	60
MaxPlanck Tuebingen LabResearchAssistant FunctionalGenetics	50	UNewHampshire 4 Genomics	61
Minnesota SummerFieldInternship PrairieEvolutionEcol	51	UNewHampshire 4 Genomics 2	61
Mississippi MuseumNatSci ConservationBiol Geneticist	51	UNewOrleans IntegrativeBiology	62
NHM London HeadofEarthSciences	52	UOxford 4yrFixedTerm AnimalDiversity	63
NHM London HeadofLifeSciences	52	USussex BeeAdaptation	63
NHM London ResearchLeaders	52	USussex FieldAssist SpainWasps	64
NHM Oslo LichenSystematics	53	UZurich FieldAssist Birds Lapland	64
		Vienna PopulationGenomics	65
		WageningenU ComputationalSystemsBiol	66

AuburnU BioinformaticsComputationalBiol

Auburn University

Assistant Professor in Bioinformatics/Computational Biology

College of Sciences and Mathematics

The Department of Biological Sciences at Auburn University invites applications for a tenure-track faculty appointment (9-month Assistant Professor) in Bioinformatics and/or Computational Biology, be-

ginning Fall 2013. We seek candidates whose research interests expand/enhance existing strengths in life sciences at Auburn University, in particular comparative/functional/population genomics, regulation of gene expression, or molecular systematics/evolution/ecology. Those focused on developing novel computational approaches addressing core problems in environmental sustainability, food systems/safety, and other strategic areas are also encouraged to apply.

Candidates are expected to establish an extramurally funded, internationally recognized research program that actively engages and trains graduate and undergraduate students. Instructional responsibilities will include development of undergraduate/graduate courses promoting application of bioinformatic tools and computational-biology principles. The new faculty member will be housed in the Bioinformatics lab of the new Center for Advanced Science, Innovation, and Commerce (CASIC) facility at the Auburn University Research Park, and will play a role in overseeing the operation/application of a new approximately \$1 million CASIC supercomputer cluster.

Applicants must have a Ph.D. in Bioinformatics, Biological Sciences, Computational Biology or a related discipline, and excellent communication/ interpersonal skills. Desired qualifications include postdoctoral or professional experience, a strong record of publication, teaching experience, and potential for funding. The candidate selected for this position must be able to meet eligibility requirements to work in the United States at the time the appointment is scheduled to begin, and continue working legally for the proposed term of employment. Women and minorities are strongly encouraged to apply.

Review of applications will begin 1 February 2013 and will continue until a suitable applicant is found. Applicants should submit (electronically) a cover letter emphasizing specific qualifications, a curriculum vitae, a description of research interests, a statement of teaching philosophy/experience, and names and contact information of at least 4 references to bioinfo_search@auburn.edu (Dr. Ken Halanych, Bioinformatics Search Committee Chair, Department of Biological Sciences, 101 Rouse Life Sciences Building, Auburn University, AL 36849-5407). More information about the department and its programs can be found at: www.auburn.edu/biology ken@auburn.edu

halocaridina@gmail.com

Berlin MuseumDigitization

Job Advertisement - Digital World at the Museum für Naturkunde, Berlin, Germany - Ref. # 61/2012

Modern life and the sciences are becoming increasingly 'digital' and linked to the www. The development of the Internet and mobile devices has generated opportunities that are changing not only research, but also the Museum experience and its educational aspects. In order to develop a strategy, to coordinate and to direct our efforts in the digital world, a position is being created within the Directorate of the MfN that will work together with other departments such as collections, research, exhibitions and education. The position is to be filled as a senior academic position, initially as a two-year contract.

Tasks and experience we would expect from a candidate would include: * developing a 5-10 year strategy and work programme for the entire MfN, * coordinate network-building with partner organisations at the MfN, * coordinate, initiate or support national and international networks, or scientific initiatives and collaborations, * coordinate or develop current and future ICT infrastructures and programs for MfN collections, research, exhibitions and education, * coordinate and develop IT for research in particular molecular bioinformatics and modelling, * coordinate, support or develop collection digitisation, digital publishing or digital museum exhibits, * coordinate, support or develop outreach activities at the MfN, harnessing social media, learning-by-playing initiatives and citizen science, * develop and support a strategy for maintaining long-term security of digital data in services, publications and research.

Requirements:

University degree in informatics, biology, environmental sciences, bioinformatics or similar subjects and additionally, e.g. comprehensive knowledge of and long-term professional experience in biodiversity informatics, experience in ICT project management especially software development for web services and portals, database applications and/or mobile devices (Android or iOS). We expect several years of experience in people management, experience in managing international work groups or projects, e.g. as coordinator or work package leader. Ability to work independently with a structured approach, ability to develop concepts, strong

commitment, reliability and ability to work in a team, good communication skills and excellent written and spoken English (and German, or willingness to learn German).

In addition we would like to see demonstrable interest in scientific collections and research activities. A PhD would be desirable.

The Museum: With its strong, diverse and relevant research, excellent public engagement and a collection of over 30 Million specimens, the Museum für Naturkunde Berlin (MfN) is amongst the biggest natural history museums in the world. The Museum für Naturkunde Berlin is a foundation (public law) and has been a member of the Leibniz Association since 2009. Within the Leibniz Association we are part of a number of relevant interdisciplinary science consortia, incl. Biodiversity, Science 2.0 & Citizen Science.

We offer work in an exciting environment with remuneration according to Berlin's public sector arrangements (Angleichungs-TV Land Berlin). After the initial two years, this position is intended to be turned into a permanent position.

To ensure equality of opportunities, we would like to encourage female applicants. Candidates with severe disabilities will be given preference where equally suitable.

Applications please with the usual documentation (covering letter, certificates, references) and a letter detailing your experience should be sent to Kaufmännischer Geschäftsführer, Invalidenstraße 43, 10115 Berlin, by 31.01.2013 under reference number 61/2012 or per e-mail to recruiting@mfn-berlin.de.

Please do not send any original documents, as we do not return application documents

Many thanks

Andreas Kunkel

Dr. Andreas Kunkel Scientific Manager Museum für Naturkunde - Leibniz Institute for Research on Evolution and Biodiversity Invalidenstraße 43, 10115 Berlin, Germany Phone: +49-30-2093-8690 Fax: +49-30-2093-8561 E-Mail: Andreas.Kunkel@mfn-berlin.de

The Museum für Naturkunde Berlin is member of the Leibniz Association, www.leibniz-gemeinschaft.de, the consortiums "Deutsche Naturwissenschaftliche Forschungssammlungen", www.dnfs.de, and the Humboldt Ring of German Museums of Natural History, www.humboldt-ring.de "Kunkel, Andreas" <Andreas.Kunkel@mfn-berlin.de>

Cheetah Conservation Fund Namibia LabTech ConsGenetics

Genetics Laboratory Technician Cheetah Conservation Fund, Namibia

The genetics laboratory at the Cheetah Conservation Fund (CCF), Namibia, is currently looking for a motivated and meticulous person to join the team.

Applications are accepted right away and until the position is filled. The successful applicant is expected to start the position as early as possible (January or beginning of February if possible). The position is available immediately and requires a 1 year commitment. Namibian residency is preferred. Applicants should send their CV, letter of motivation and three references to genetics@cheetah.org.

Applicants should have a Master's degree in a relevant field of research and a strong background in genetic laboratory work; candidates with a Bachelor's degree may be considered if they have at least 3 years of relevant experience. The main responsibilities include to run and maintain the genetic analyzer and to supervise interns and students, ensuring that good laboratory practices are respected. Other important aspects of this position are to ensure that the laboratory is adequately stocked at all times, to curate databases, and to assist with the writing of permits and reports. Prior experience in these particular tasks is not required, however willingness to learn and a meticulous character with attention to detail are a must.

The genetics laboratory is at the CCF research center, about 40 km outside of Otjiwarongo, Namibia, the CCF farm is located to the north of the Waterberg plateau. Staff currently lives on CCF property and housing is provided, accommodation is basic and the sharing of rooms may be necessary for junior staff members. Food is communal and prepared by the kitchen staff. CCF is a nonprofit conservation NGO, therefore salaries are dictated by the capability of the organization and adjusted based on the candidate's experience. However, research and professional growth opportunity and the knowledge to contribute to an organization saving the cheetah are a unique combination.

Anne Schmidt-Küntzel, DMV, PhD Assistant Director for Animal Health and Research Life Technologies Conservation Genetics Laboratory Email: ge-

netics@cheetah.org Tel: +264 67 306 225 Fax:
+264 67 306 247 Cheetah Conservation Fund (CCF)
www.cheetah.org

genetics@cheetah.org

CityUNewYork EvolEcolModeling

ASSISTANT PROFESSOR Ecological Modeling
Queens College of the City University of New York

The Department of Biology at Queens College of the City University of New York seeks a tenure-track Assistant Professor to begin September 1, 2013. We invite applications from candidates with a doctoral degree, postdoctoral experience, and a record of research accomplishment in the field of ecological modeling. We seek candidates whose research builds on current faculty strengths in the areas of ecology and evolutionary biology (<http://qcpages.qc.edu/Biology/>). Candidates doing research on niche modeling, population and community dynamics, as well as the impact of climate change and other human activities on populations, are particularly encouraged to apply. Successful candidates will be expected to establish a productive research program with extramural funding and teach at the undergraduate and graduate (M.A./Ph.D.) levels. A cover letter, a CV, a two- to three-page research plan and a statement of teaching philosophy must be submitted by March 4, 2013 to <http://www.cuny.edu/employment.html>. In addition, the candidate must arrange for submission of three current letters of recommendation to Dr. Stéphane Boissinot, Chair, Ecological Modeling Search Committee, Department of Biology, Queens College of CUNY, 65-30 Kissena Blvd., Flushing, NY 11367-1597. An equal opportunity/affirmative action/IRCA/Americans with Disabilities Act Employer.

Stephane Boissinot, Ph.D. Department of Biology
Queens College, CUNY 65-30 Kissena Boulevard
Flushing, NY 11367 Tel: 718 997 3437 email:
stephane.boissinot@hotmail.com

Stephane Boissinot <stephane_boissinot@hotmail.com>

Frankfurt FungalGenomics

Job Advertisement Junior Group Leader - Ref. #01-13001

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 April 2013 we are looking for a

Junior Research Group Leader in Functional 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 underrepresented 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. Closing date for application is January, 31th 2013

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).

Jenny Koepchen <Jenny.Koepchen@senckenberg.de>

GeorgiaTech TeachingDirector

Georgia Tech's School of Biology is searching for a new Director of Introductory Biology Labs and TA Development. We are especially interested in faculty with experience in training teaching assistants and interest in innovative instruction. This is a non-tenure track faculty position. A complete job description is below and attached. If you have questions about Georgia Tech, Atlanta, or the position, please feel free to contact Chrissy Spencer (chrissy.spencer@biology.gatech.edu).

JOB AD: The SCHOOL OF BIOLOGY of the COLLEGE OF SCIENCES at the GEORGIA INSTITUTE OF TECHNOLOGY invites applications for an immediate opening for a full-time non-tenure track general faculty position as Director of Introductory Biology Laboratories and TA Development. It is expected that the position will be filled at the rank of Academic Professional beginning as early as May 2013. We seek a broadly-trained Ph.D. in Biology.

Candidates should have experience teaching undergraduate biology courses and an interest in innovative instruction. This position will require teaching, lab curriculum development, and supervision and professional development of teaching assistants in freshman biology courses, and will require expertise in at least one of the following subject areas: cell biology, microbiology, genetics, ecology, or evolution. In addition to overseeing the introductory biology labs, this academic professional may also teach in core biology courses in his/her area of expertise.

Salary will be commensurate with experience and qualifications. This is a renewable 12-month non-tenure track position. Candidates should complete the online

application form by uploading a single PDF file containing a letter of application, a statement of teaching philosophy and summary of teaching experiences, sample course syllabi, a curriculum vitae and the names and contact information of three professional references to: <http://searches.biology.gatech.edu> Review of applications will begin immediately and will continue until the position is filled. Georgia Tech is an affirmative action, equal education/employment opportunity institution and requires compliance with the Immigration Control and Reform Act of 1986.

More information about the School is available via: <http://www.biology.gatech.edu> -

Chrissy Spencer, PhD School of Biology Georgia Institute of Technology 310 Ferst Drive Atlanta, GA 30332 office 404 385 0539 fax 404 894 0519 chrissy.spencer@biology.gatech.edu

Chrissy Spencer <chrissy.spencer@biology.gatech.edu>

GrinnellCollege 1Yr EvolutionaryBiol

One-year leave replacement position in the Department of Biology (Ecology or Evolution). Assistant Professor (Ph.D.) with post-doc experience preferred. Grinnell College is a highly selective undergraduate liberal arts college. The College's curriculum is founded on a strong advising system and close student-faculty interaction, with few college-wide requirements beyond the completion of a major. Successful candidates will teach in Grinnell's innovative, research-centered undergraduate biology curriculum. The teaching schedule of five courses over two semesters, with labs counting as $\frac{1}{2}$ course, will include Organisms, Evolution, & Ecology with lab (Bio 252) and an advanced course with lab in the candidate's specialty, with the remaining courses to be determined. For more departmental information <http://www.grinnell.edu/academic/biology/> . In letters of application, candidates should discuss their interest in developing as a teacher and scholar in an undergraduate, liberal-arts college that emphasizes close student-faculty interaction. They also should discuss what they can contribute to efforts to cultivate a wide diversity of people and perspectives, a core value of Grinnell College. To be assured of full consideration, all application materials, including letters of reference, should be received by February 15, 2013.

Candidates will need to upload a letter of application, curriculum vitae, transcripts (copies are acceptable), statements of teaching and research interests, and provide email addresses for three references. Be certain to submit your application well in advance of the deadline to ensure that your letters arrive by the closing date. Review of applications will commence immediately. Questions about this position should be directed to the search chair, Professor Peter Jacobson at [BiologySearch@grinnell.edu] or 641-269-3172.

Please consult the college's jobs site for more information and to apply: <https://jobs.grinnell.edu/postings/366> Jackie Brown Prof. of Biology Grinnell College brownj@grinnell.edu

BROWNJ@Grinnell.EDU

INRA France 41 QuantGenetGenomics

Ranked the number one agricultural institute in Europe and number two in the world, INRA (National Institute for Agricultural Research - France) carries out mission-oriented research for high-quality and healthy foods, competitive and sustainable agriculture and a preserved and valorised environment.

Every year, INRA seeks researchers from all disciplines to reinforce laboratory and fieldwork teams. Researchers will be heavily involved in scientific networks and tackle environmental, economic and social issues. They are expected to strive for excellence and come up with useful, concrete applications for the real world. Individual research projects will go hand in hand with group efforts in a bid to further knowledge and innovation, in order to produce sustainably, preserve the environment, and improve human nutrition.

INRA is recruiting 41 Scientists (PhD or equivalent) through open competitions and offering permanent positions.

Positions are open in a wide range of scientific disciplines such as agronomy and ecology of landscapes, community ecology, economics, animal health economics, quantitative genetics and genomics, process engineering, physics and soils chemistry, mathematics and modelling, modeling in cell biology and biology of organisms, nutrition and physiology, veterinary sciences and immunology, sociology and organizational sciences and many more.

> 5 jobs in Quantitative genetics, Genomics: - Sustainability of oomycete resistance in market-crop Solanaceae - Grapevine genomic selection and genetics - Genomic selection of pig populations - Integrative biology of musculoskeletal development - Genetic determinism and disease-resistance immune response in rabbits

Applications are available until to February 28, 2013.

All useful information to apply are available on: <http://www.inra.fr/drh/cr2013/index.php?langue=EN> For further details: concours_chercheurs@paris.inra.fr

Fabienne Giroux Assistante RH en charge de la communication sur le recrutement fabienne.giroux@paris.inra.fr

Direction des Ressources Humaines Service recrutement et mobilité 147, rue de l'Université 75338 Paris Cedex 07 - France Tel 01 42 75 90 77 Fax 01 42 75 90 39

Fabienne GIROUX <Fabienne.Giroux@paris.inra.fr>

ImperialCollegeLondon 2 Evolution

>From lecturer to full professor levels

Up to 10 academic positions in Grand Challenges in Ecosystems and the Environment https://www4.ad.ic.ac.uk/OA_HTML/OA.jsp?page=-/oracle/apps/irc/candidateSelfService/webui/-VisVacDispPG&akRegionApplicationId=-821&transactionid=245376469&retainAM=-Y&addBreadCrumb=S&p_svid=40174&p_spid=-1622199&oapc=9&oas=ViokO_WQmEDq_dE7PIA_FA

At least 2 academic positions in Ecology or Evolution: <http://www.jobs.ac.uk/job/AFR422/lecturer-reader-chair/> Deadline 31 January 2013

Prof. Vincent Savolainen Deputy Head, Department of Life Sciences Imperial College London, Silwood Park Buckhurst Road, SL5 7PY Ascot, Berks, UK Tel: +44 (0)20 7594 2374 Fax: +44 (0)20 7594 2339 v.savolainen@imperial.ac.uk www3.imperial.ac.uk/people/v.savolainen

MRes in Biodiversity Informatics & Genomics: <http://www3.imperial.ac.uk/lifesciences/postgraduate/-courselist/biodiversityandinformaticsgenomics> "Savolainen, Vincent" <v.savolainen@imperial.ac.uk>

KansasStateU ArthropodGeneticsGenomics

ASSISTANT PROFESSOR, ARTHROPOD GENETICS AND GENOMICS, KANSAS STATE UNIVERSITY - The Department of Entomology invites applications for a 12-month, tenure-track ASSISTANT Professor with a 80% Research, 20% Teaching appointment in the area of Arthropod Genetics and Genomics. The successful candidate will be expected to develop a strong research program using genetic/genomic/proteomic tools to address fundamental questions in biology using an arthropod, to pursue vigorously extramurally-funded research, to collaborate in research with other faculty on and off campus and participate in relevant KSU research consortia such as arthropod genomics, ecological genomics, functional genomics, or lipidomics. The teaching load is very reasonable with the incumbent expected to teach one 600-level course on Arthropod Genetics and Genomics every other year, one graduate level class (800-level) in an area of interest every other year, and helping, as needed, in the team-taught undergraduate/g raduate course Molecular Insect Science Laboratory. The successful candidate is also expected to participate in various departmental, college, university, and professional society committees, as well as other areas of service to the Department and University.

A Ph.D. in entomology, biology, genetics, or a closely-related field and a strong background (as measured by publications, grant funding, and academic training) in the genetics and genomics of an arthropod are required, with preference given to individuals with post-doctoral experience and a demonstrated ability to secure extramural funding and publish in high quality, peer-reviewed journals. This position includes a competitive salary and start-up package.

Kansas State University is a major research university with excellent research facilities located in Manhattan, KS, which is situated in the Flint Hills region of northeast Kansas. Manhattan is a growing community with excellent schools, a thriving job market, and a high quality of life as evidenced by being ranked on several top-ten lists (e.g., Forbes Magazine, Money Magazine, and CNN Money).

To apply, submit by e-mail a single PDF document that contains a curriculum vita, a concise statement of cur-

rent and future research interests, a statement of teaching background and philosophy and the names and contact information for at least three references. Submit materials to Dr. Jeremy Marshall (cricket@ksu.edu), Chair of the Search Committee. Screening of applications will begin 18 February 2013, and continue until the position is filled or closed.

Kansas State University is an AA/EO employer, and actively seeks diversity among its employees. Background checks are required for all employees.

cricket@k-state.edu

Konstanz Germany 2 EvolutionaryBiol

In the Institute for Evolutionary Biology (Professor Axel Meyer) at the Department of Biology two positions as

Assistant Professor/Group leader

(Salary Scale 13 TV-L)

are available from March 2013 on.

The person we are looking for should work on current research topics in the fields of either molecular evolution, comparative genomics, and / or the evolution of developmental mechanisms. The position is for a Ph.D. biologist, ideally with prior postdoc experience and a publication record in bioinformatics, molecular evolution or evolutionary developmental biology. A total of three research groups, two of which are headed by Junior Group Leaders each representing their particular subdisciplines of evolutionary biology, make up the evolutionary biology group (Lehrstuhl Evolutionsbiologie) in the Department of Biology at the University of Konstanz in Germany: <http://www.evolutionsbiologie.uni-konstanz.de/index.php?section=172> The taxonomic emphasis is on fish, particularly on cichlid or zebrafish and medaka model systems. Most of the ongoing evolutionary research in Konstanz deals with comparative developmental and molecular evolutionary / genomic aspects of the origin of adaptation and speciation in cichlid fish adaptive radiations in Nicaragua and Africa. For publications of the lab see:

<http://www.evolutionsbiologie.uni-konstanz.de/-index.php?section=92> . For a recent summary of some of our planned work see: Elmer, K.R. and A. Meyer. 2011. Adaptation in the age of ecological genomics:

insights from parallelism and convergence. Trends in Ecology and Evolution 26: 298-306. The lab is also supported by an ERC advanced grant for genomic and ecological work on the repeated adaptive radiations of cichlid fish from crater lakes in Nicaragua.

Space in a modern animal care facility is available and the exclusive support of a part-time technician will be available to each of these new groups. Excellent opportunities are available in terms of space, equipment, departmental facilities and annual financial support for research expenses. The lab has state-of-the-art facilities for molecular and developmental biology, including Illumina and Roche FLX next-generation sequencers at the Genomics Center Konstanz: <http://cms.uni-konstanz.de/en/genomics-center/>. The University of Konstanz and the Department of Biology are among the most highly ranked institutions in Germany and provide a lively and academically outstanding research environment. Konstanz is a lovely historic town located on Lake Constance on the border to Switzerland.

Appointments are initially for two to three years and are renewable for up to six. Habilitation is possible, and a modest amount of teaching (English or German) is required.

The University of Konstanz is an equal opportunity employer and tries to increase the number of women in research and teaching. The University of Konstanz encourages disabled persons to apply; they will be given preference if appropriately qualified. The University of Konstanz has been certified by the Hertie Foundation to be a family-friendly institution. The University is committed to further the compatibility of work and family life.

Additional information can be obtained from: axel.meyer@uni-konstanz.de, <http://konstanz.de>, phone: +49 (0) 7531 / 88 - 4163, fax + 49 (0) 7531 / 88 - 3018 or from our website: <http://www.evolutionsbiologie.uni-konstanz.de>. Applications including a statement of research interests, research plans, a full CV and names and email addresses of 3 referees, should be emailed to: a.meyer@uni-konstanz.de.

Applications should be received before January 31st, 2013. Interviews will be scheduled for February 2013.

Prof. Axel Meyer, Ph.D. Lehrstuhl für Zoologie und Evolutionsbiologie Department of Biology Building M, Room M806 University of Konstanz 78457 Konstanz Germany

fon + 49 (0)7531 88 4163 fax + 49 (0)7531 88 3018

secretary: Ingrid.Bader@uni-konstanz.de tel. + 49 (0)7531 88 3069

www.evolutionsbiologie.uni-konstanz.de Axel Meyer
<axel.meyer@uni-konstanz.de>

MasseyU Genetics

Lecturer/Assistant Professor in Genetics Massey University, New Zealand

We are seeking a strong candidate with a distinguished record of research in any aspect of genetics. The successful candidate is expected to develop an independent and innovative research program that embraces new developments in genetics and interfaces with current research within the institute. The successful candidate will also contribute to teaching and curriculum development within the Biochemistry and Genetics Group in the Institute of Fundamental Sciences.

This permanent, tenure-track position is offered at the rank of Lecturer, which is equivalent to Assistant Professor in the US. Appointments at a higher level could be considered for exceptional candidates.

Enquiries should initially be directed to Assoc Prof Rosie Bradshaw, Head of the Biochemistry and Genetics Group:

Email: r.e.bradshaw@massey.ac.nz Tel: +64-6-350 5515 ext. 2567

Further information about the position can be found here:

<http://jobs.massey.ac.nz/PositionDetail.aspx?p=7689>

Assoc Prof Murray Cox Institute of Fundamental Sciences Massey University New Zealand

<http://massey.genomicus.com/> m.p.cox@massey.ac.nz

“Cox, Murray” <M.P.Cox@massey.ac.nz>

MasseyU Statistical Genetics

Lecturer/Assistant Professor in Statistical Genetics Massey University, New Zealand

We are seeking a strong candidate with a distinguished

record of research in statistical methods in genetics and their application to evolutionary biology, molecular epidemiology or cognate areas. The successful candidate is expected to develop an independent research program, as well as contribute to teaching and curriculum development within the Statistics and Bioinformatics Group in the Institute of Fundamental Sciences.

This permanent, tenure-track position is offered at the rank of Lecturer, which is equivalent to Assistant Professor in the US. Appointments at a higher level could be considered for exceptional candidates.

Enquiries should initially be directed to Professor Martin Hazelton, Head of the Statistics and Bioinformatics Group:

Email: m.hazelton@massey.ac.nz Tel: +64-6-356 9099 ext. 2483

Further information about the position can be found here:

<http://jobs.massey.ac.nz/PositionDetail.aspx?p=7499>
Assoc Prof Murray Cox Institute of Fundamental Sciences Massey University New Zealand

<http://massey.genomicus.com/> m.p.cox@massey.ac.nz
"Cox, Murray" <M.P.Cox@massey.ac.nz>

MaxPlanck Tuebingen LabResearchAssistant FunctionalGenetics

The research group of Felicity Jones at the Friedrich Miescher Laboratory of the Max Planck Society is looking for an experienced and motivated

Research Assistant in Biology; BTA (Full time, starting Spring 2013)

Our lab investigates the molecular mechanisms of adaptation and speciation in threespine stickleback fish. Using functional genetics and genomics we aim to understand the molecular changes that contribute to phenotypic differences, affect individual fitness and play a role in adaptive divergence. Your responsibilities: Your work will involve techniques in molecular biology and genetics of fish. Your tasks will include cloning and sequencing of DNA, PCR, DNA and RNA library preparation, transgenic microinjection and microscopy). As we study natural populations of sticklebacks, your help and participation in field collections may occasionally

be required.

Our requirements: We are looking for an enthusiastic and motivated individual with experience in molecular biology and genetics. You should have an appropriate technical school or university degree in Biology with good knowledge and background experience of molecular biology (DNA/RNA extraction, PCR, cloning, DNA/RNA library preparation). Prior experience with transgenic microinjection techniques and microscopy is desirable. Experience working with fish (breeding and crosses, genotyping and care) and databases would be advantageous. We expect from you interest and enjoyment in fundamental research, goal-oriented and self-motivated work ethic, flexibility and the willingness to learn new skills. Good English communication skills would be advantageous, as English is the working language in our lab.

We offer: interesting work in an interdisciplinary team with young scientists, and international atmosphere and excellent lab working conditions. We will train you in new methods in molecular biology and will provide comprehensive on-the-job training. We offer remuneration in accordance to the TVöD standard based on qualification and previous study. The position is initially limited to 2 years, with the possibility of extension.

The Max Planck Society is an inclusive, equal opportunity employer. Individuals with disabilities will be given priority, assuming equal qualifications and are thus encouraged to apply.

Applicants of all nationalities are encouraged to apply. Application deadline: 4 February 2013

Please send your applications by e-mail to: fcjones@tuebingen.mpg.de

or by mail to: Dr. Felicity Jones Friedrich Miescher Laboratory of the Max Planck Society Spemannstrasse 39 72076 Tübingen Germany

–

Dr. Felicity Jones

Max Planck Research Group Leader Friedrich Miescher Laboratory of the Max Planck Society Spemannstrasse 39 72076 Tuebingen Germany Ph +49 (0)7071 601 840
jones.floss@gmail.com

Minnesota SummerFieldInternship PrairieEvolutionEcol

Summer field research internships

Are you interested in gaining field research experience and learning about the ecology and evolution of plants and plant-animal interactions in fragmented prairie? We are looking for 3-5 summer field researchers for an NSF-funded project on habitat fragmentation of the tallgrass prairie. We are investigating how small plant population size influences inbreeding, demography, pollination, and herbivory in the purple coneflower, *Echinacea angustifolia*. This is a great summer internship, REU, or co-op for those interested in field biology or conservation research.

No experience is necessary, but you must be enthusiastic and hard-working. You will survey natural plant populations, measure plant traits in experimental plots, hand-pollinate plants, observe & collect insects, and assist in all aspects of research. Housing is provided and there is a stipend. Undergraduate students have the opportunity to do an independent project as an REU participant.

If you want more information or wish to apply, please visit this website <http://echinaceaProject.org/opportunities/> or contact Stuart Wagenius. Applications will be reviewed starting 28 February 2012.

Stuart Wagenius, Ph.D. Conservation Scientist Division of Plant Science and Conservation Chicago Botanic Garden 1000 Lake Cook Road Glencoe, IL 60022 phone: 847 835 6978 fax: 847 835 6975

email: echinaceaProject@gmail.com web: <http://echinaceaProject.org/>
katherine.muller2010@gmail.com

Mississippi MuseumNatSci ConservationBiol Geneticist

DWFP - Conservation Resources Biologist (Geneticist, Research & Collections)

Mississippi Department of Wildlife, Fisheries and Parks

The Mississippi Museum of Natural Science (MMNS), a Bureau of the Mississippi Department of Wildlife, Fisheries and Parks, is currently seeking qualified applicants for a Conservation Resources Biologist position with a Molecular Biology emphasis.

WORK STATION: Mississippi Museum of Natural Science, 2148 Riverside Drive, Jackson, Mississippi 39202

JOB DESCRIPTION:

- * Collaborate with existing Museum staff on molecular based projects while also developing an independent program that complements existing staff and programs.
- * Research into systematics, taxonomy and population genetics-based questions providing data needed for the successful management of threatened and endangered species.
- * Development, maintenance and oversight for expanding and existing tissue collections
- * Networking with other regional and national government agencies and academicians.

WORK SCHEDULE:

- * Full time with occasional weekend and evening work.
- * Job may require some overnight travel.

MINIMUM QUALIFICATIONS:

- * A Master's degree from an accredited four-year college or university in biology, or biological sciences, with specific training in molecular systematics or population genetics or a directly related field and one (1) year of experience directly related to the above-described duties;

OR:

- * Directly related education above the Master's Degree and directly related experience may be substituted on an equal basis. Applicant must provide employing agency evidence of completion of education requirements and a valid copy of his/her transcript to verify course work, when applicable.

Salary Range: \$45,121 - \$47,868

Please send via email a cover letter addressing applicant's qualifications and current C.V. on or before March 1, 2013 to:

Verity Mathis, MMNS Research Coordinator, verity.mathis@mmns.state.ms.us

For additional information about the Museum and its programs, please refer to our website (<http://www.mdwfp.com/museum/>).

Verity.Mathis@mmns.state.ms.us

NHM London HeadofEarthSciences

HEAD OF EARTH SCIENCES, NATURAL HISTORY MUSEUM, LONDON

The Natural History Museum (NHM) is seeking to recruit a Head of Department to lead its Department of Earth Sciences.

The NHM is one of the world's great natural history museums, combining excellence in scientific discovery; scientific collections and infrastructure; and science communication. Its scientific mission is to use its expertise and collections to tackle questions of broad significance to science and society.

The successful applicant will have a strong vision for the development of the Department of Life Sciences, excellent leadership skills, and excellent track record of achievement in a relevant area of Life Sciences, and the ability to play a leading role in the broader science group and museum.

We are prepared to be flexible with respect to appointment level, starting salary and starting date, depending on track-record, experience and circumstances.

For a full role specification and to apply online, please visit the Natural History Museum website at www.nhm.ac.uk/jobs < <http://www.nhm.ac.uk/jobs> > (REF: NHM/HES/GS).

Salary: £50,776 to £84,735 with a £10,000 Head of Department allowance per annum, plus benefits

Closing date: 15 February, 2013

Informal enquiries may be made to Ian Owens, Director of Science,

i.owens@nhm.ac.uk

NHM London HeadofLifeSciences

HEAD OF LIFE SCIENCES, NATURAL HISTORY MUSEUM, LONDON

The Natural History Museum (NHM) is seeking to recruit a Head of Department to lead its Department of Life Sciences.

The NHM is one of the world's great natural history museums, combining excellence in scientific discovery; scientific collections and infrastructure; and science communication. Its scientific mission is to use its expertise and collections to tackle questions of broad significance to science and society.

The successful applicant will have a strong vision for the development of the Department of Life Sciences, excellent leadership skills, and excellent track record of achievement in a relevant area of Life Sciences, and the ability to play a leading role in the broader science group and museum.

We are prepared to be flexible with respect to appointment level, starting salary and starting date, depending on track-record, experience and circumstances.

For a full role specification and to apply online, please visit the Natural History Museum website at www.nhm.ac.uk/jobs < <http://www.nhm.ac.uk/jobs> > (REF: NHM/HLS/GS)

Salary: £50,776 to £84,735 with a £10,000 Head of Department allowance per annum, plus benefits

Closing date: 15 February, 2013

Informal enquiries may be made to Ian Owens, Director of Science,

i.owens@nhm.ac.uk.

NHM London ResearchLeaders

RESEARCH LEADERS, NATURAL HISTORY MUSEUM, LONDON

The Natural History Museum (NHM) is seeking to recruit a number of 'Research Leaders' into its staff to strengthen its capacity in Earth and Life Sciences.

The NHM is one of the world's great natural history museums, combining excellence in scientific discovery; scientific collections and infrastructure; and science communication. Its scientific mission is to use its expertise and collections to tackle questions of broad significance to science and society.

The successful applicants will be recognised leaders in their fields of research, having strong records of publication in leading international journals and proven records of winning external funding to support their research programme or, in the case of early career applicants, the potential to achieve such a research profile

in the near future. They will also have an interest in communicating science to a broad audience and in taking full advantage of the opportunities offered by the NHM.

We are prepared to be flexible with respect to appointment level, starting salary and starting date, depending on track-record, experience and circumstances.

For a full role specification and to apply online, please visit the Natural History Museum website at www.nhm.ac.uk/jobs < <http://www.nhm.ac.uk/jobs> > (REF: NHM/RSL/GS)

Closing date: 15 February, 2013

Informal enquiries may be made to Professors Andy Fleet (Head of Department of Earth Sciences, a.fleet@nhm.ac.uk), Phil Rainbow (Head of Department of Life Sciences, p.rainbow@nhm.ac.uk) or Ian Owens (Director of Science, i.owens@nhm.ac.uk).

i.owens@nhm.ac.uk

NHM Oslo LichenSystematics

The Natural History Museum at the University of Oslo in Norway is recruiting a researcher in lichen biosystematics. Deadline for application is February 1.

<http://uio.easycruit.com/vacancy/898883/-71922?iso=3Dno> The official job announcement is in Norwegian, but a (minimally edited) Google Translate translation is pasted below:

“Natural History Museum

Researcher in Biosystematics - 12 month contract

The Natural History Museum announced a 12-month contract as a researcher (1109) in biosystematics for work within two externally funded projects. Working time is divided 50% on each of the projects.

One project is funded by the Species Project / Species Data Bank, entitled ”Mapping of lecideoid lichens in Norway: Building a DNA barcode library.“ The project will primarily go out to fill a library of DNA barcodes for Norwegian lecideoid lichen with data for 200 species. The barcodes must usually be generated from materials that are not older than 10 years, fieldwork and species identification are an important part of the project. The researcher will be responsible for analysis of material and technical evaluation of the results, including the detection of unknown genetic variation /

cryptic species and new phylogenetic understanding.

The second project, ”Areas for red-listed species - mapping and monitoring (ARKO)“, is a project funded by several ministries, and NHM has the responsibility to create a monitoring program to conserve biodiversity in the natural kind of open shallow limestone soils in boreonemoral zone (mainly in the Oslofjord area). This habitat type is likely home to many red-listed species of lichens to be evaluated within the project. The researcher will work with genetic analysis (including DNA barcoding) of taxonomically problematic Red-Listed species of lichens on shallow limestone soils in the Oslofjord area.

We seek a person with a PhD in botany or mycology and solid knowledge of lecideoid lichens of relevant habitats. It requires experience and skill to carry out independent lab and data analysis work (including removal of material, DNA extraction, PCR amplification, analysis and control of the results).

We offer:

a pleasant and challenging environment wages by pay grade 57-65 (NOK 468,400 to 542,900) membership in the National Pension Fund position in IA activity good welfare

The online application must contain

Cover Letter CV (summarizing education and practice)

Testimonials and certificates produced with a possible interview.

UiO has an agreement for all employees, aiming to secure rights to research results.

University of Oslo wants more women in academic positions. Women are encouraged to apply. If applicants are considered to have equal or nearly equal qualifications, after teaching as well as academic / professional qualifications are assessed, a female applicant be given priority for a male applicant.

The University of Oslo also people from minority backgrounds in academic positions. Ethnic minorities are encouraged to apply.

According to the Act, §25, 2 paragraph, information about the applicant be made public even though the applicant has requested not to be included on the list of applicants.”

Anneleen Kool Associate Professor Natural History Museum University of Oslo

P.O. Box 1172 Blindern 0318 Oslo Norway

Visiting address: Sars' gate 1, Lids hus Tøyen, 0562 Oslo

Tel: +47 228 51612 Mob: +47 40648061
anneleen.kool@nhm.uio.no

RiceU EvolutionaryBiology

SENIOR FACULTY POSITION IN ECOLOGY AND EVOLUTIONARY BIOLOGY.

The Department of Ecology and Evolutionary Biology at Rice University (<http://eeb.rice.edu/>) anticipates filling a faculty position at the senior level. We invite applications in any area of ecology and evolutionary biology but are especially interested in applications in the areas of evolutionary ecology, ecosystem ecology, theory, population genetics, evolution of life history traits, or evolutionary genomics. Rice is a private university with a strong commitment to the highest standards of research, undergraduate, and graduate education.

Please submit applications including curriculum vitae, statements of research and teaching interests electronically, and arrange to have three letters of reference sent separately to: rdh@rice.edu - Subject: Faculty Search, or by regular mail to the attn. of Diane Hatton, Faculty Search, Department of Ecology and Evolutionary Biology, MS-170, Rice University, 6100 S. Main St., Houston, TX 77005, U.S.A.

Review of applications will begin February 4. Rice University is an Equal Opportunity/Affirmative Action employer, committed to excellence through diversity and inclusion. In this spirit, we particularly welcome applications from women and members of historically underrepresented groups who bring diverse cultural experience and who are especially qualified to mentor and advise all members of our diverse student population. The University will provide reasonable accommodations to individuals with a disability.

Diane Hatton <rdh@rice.edu>

SmithsonianInst Directorship

Colleagues suggested [this] list because someone with a background in EB would be appropriate for the position.

Regards, Pat

*** Director, Tennenbaum Marine Observatories
Smithsonian Institution

The Smithsonian Institution seeks an innovative leader for the newly endowed Tennenbaum Marine Observatories (TMO). For more information on the TMO, please visit: <http://www.si.edu/marinegeo/>. The Smithsonian has launched the TMO, an initiative envisioned as a long-term, global-scale network of ecological observatories that will be dedicated to understanding changes in the structure and function of marine ecosystems. This network is committed to innovative measurements and experiments that will span traditional disciplinary boundaries and be executed in a standardized fashion over exceptional spatial and temporal scales. It is anticipated that this approach will lead to a new and fundamental understanding of our oceans that supports sustainable use.

The TMO will build upon the extraordinary strengths, capacity, and leadership of the Smithsonian Institution in marine sciences. With over 50 marine scientists, the Smithsonian expertise provides considerable depth that spans many disciplines in biology, ecology, evolutionary biology, paleobiology, anthropology, systematics, geochemistry, genetics, and other areas. The Smithsonian also has excellent infrastructure for marine science, including marine laboratories in Maryland, Florida, Belize, and Panama. The founding director of the TMO will have the opportunity to lead a cutting-edge research program that will result in high profile, policy-relevant discoveries.

Characteristics that we seek in a director include: * Record of experience and scholarly achievement in core areas of TMO research. * Evidence of innovative approaches and ability to integrate ideas/concepts across traditional disciplinary boundaries. * Clear record as an effective leader in developing and implementing a major research program and in working with diverse groups of people both inside and outside the home institution. * Demonstrated strong organization and management skills. * Ability to serve as the spokesperson/ambassador to other Smithsonian programs, outside collaborators, donors, and the public. * Successful track record of competitive grant funding.

The director will be based at the National Museum of Natural History (<http://www.mnh.si.edu/>) in Washington DC, with the opportunity to establish close affiliations with one or more other research units at the Smithsonian including the Smithsonian Environmental Research Center (<http://www.serc.si.edu/>), the Smithsonian Tropical Research Institute (<http://www.stri.si.edu/>), and the Smithsonian Conserva-

tion Biology Institute (<http://nationalzoo.si.edu/scbi/default.cfm>). The director will guide all aspects of the design, development, implementation and growth of this new initiative, in consultation with TMO participants, and will manage all TMO activities both nationally and internationally. The Smithsonian Institution is an Equal Opportunity Employer.

This is a full-time, permanent position located in Washington, DC with a pay range of \$150,000 to \$165,300.

This position will be open for applications starting December 20, 2012. Review of applications will start on January 21, 2013.

For further details and information on how to apply, consult <http://www.sih.si.edu/jobs.cfm> and scroll to position number EX-13-08.

“Megonigal, Patrick” <megonigalp@si.edu>

StonyBrookU PrimateGenomicsEvolution

Program for Human Evolutionary Biology Position in Primate Genomics and Evolution

As initial appointments in an interdepartmental initiative in Human Evolutionary Biology, Stony Brook University invites applications for a tenure-track position in the Department of Ecology and Evolution, at the level of Assistant Professor, beginning September 2013. Successful candidates for this position will have an outstanding research program, a commitment to excellence in teaching and will participate in a new interdepartmental university initiative in Human Evolutionary Biology.

The Department of Ecology and Evolution seeks an individual specializing in the evolutionary genomics of primates, including humans. Basic descriptive, statistical modeling, or bioinformatic approaches will be considered. The successful candidate will be responsible for developing and teaching an undergraduate course in primate genomics.

The candidate will be expected to teach additional undergraduate or graduate courses in their area of expertise, secure external research funding and play an active role in our highly ranked graduate programs. Stony Brook is located on the north shore of eastern Long Island, NY, amid extensive farmlands and vineyards, miles of beaches, and with easy access to

the cultural resources of New York City. This is a great place to establish a career. Applicants must have a Ph.D. by starting date and a strong publication record. Applicants should include a letter of application (including research and teaching interests), curriculum vitae, up to three examples of publications, and request that three letters of recommendation be sent to the Primate Genomics Search Committee Chair, at the Department of Ecology and Evolution, Stony Brook University, Stony Brook, NY 11794. Letters also be e-mailed to michael.bell@stonybrook.edu. For full consideration applications should be submitted before February 21, 2013. Applications should be submitted online at <http://life.bio.sunysb.edu/ee/ee-open-positions.html>. Questions about the search should be directed to Mike Bell (michael.bell@stonybrook.edu). Stony Brook University is an Equal Opportunity/Affirmative Action Employer.

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>

TexasTechU SystematicsEvolBiology

Assistant Professor, Systematics and Evolutionary Biology Texas Tech University

(Note that this position is distinct from the Ecological Genetics/Physiological Ecology position also posted on EvoDir.)

The Department of Biological Sciences at Texas Tech University invites applications for a tenure-track Assistant Professor position in Systematics and Evolutionary Biology, beginning September 1, 2013. Members of the Systematics and Evolutionary Biology research group have a broad array of interests in organismal biology, population genetics, evolutionary theory, molecular evolution, and evolutionary biology, extending from traits to ecosystems. We seek an outstanding individual who complements these existing strengths and is knowledgeable in current and emerging genomic methods. Candidates must have a Ph.D. and a proven track record of postdoctoral accomplishments in appropriate fields. 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. To ap-

ply, please go to: <https://jobs.texastech.edu/postings/-50184> .Application review will begin on January 18, 2013 and continue until the position is filled. Questions can be addressed to rich.strauss@ttu.edu.

Sean Rice Professor, Dept of Biological Sciences Texas Tech University

“Rice, Sean H” <sean.h.rice@ttu.edu>

UBergen EvoDevo

Early Stage Researcher (ESR) position Development and evolution of the mesoderm in Invertebrates±

An Early Stage Researcher position is offered in the FP7 Marie Curie Initial Training Network (ITN) (Multidisciplinary training in evo-devo and neurobiology of marine animal models.±NEPTUNE± project. NEPTUNE will train a new generation of biologists through cutting edge research on marine animal models. The network unites 8 leading European labs with complementary expertise in evolutionary developmental biology (EvoDevo), bioinformatics, functional neurobiology, and palaeontology; four leading visiting researchers from Europe and the US; a full partner from industry, Sigma-Aldrich, specialised in advanced genetic manipulation technology; and, as associate partner, a leading manufacturer of microscopy systems, Carl Zeiss MicroImaging GmbH.

The project will be conducted in the group Comparative Developmental Biology± of Dr. Andreas Hejnol at the Sars Centre and through short term visits in the partner laboratories of NEPTUNE± (see www.sars.no/research/neptune.php). The Hejnol group studies a broad range of mainly marine invertebrates using genomic, embryological, and advanced microscopic and molecular methods. The project will study a diverse range of invertebrate taxa with the goal to reconstruct the evolution of major organ systems such as the circulatory system, nephridia, muscles and the digestive tract. The project will also address the evolution of the molecular patterning underlying the specialization of mesodermal cell types..

The Sars Centre is a partner of the European Molecular Biology Laboratory (EMBL) < <http://www.embl.de/> > and a department of Uni Research AS < <http://www.uni.no/> >, affiliated with the University of Bergen < <http://www.uib.no/info/english/> >. The Centre is focused on basic research in marine molecular biology,

developmental biology and evolution, through genetic and comparative studies of invertebrates and vertebrates. The institute has employee insurance and pension agreements and is an equal opportunity employer. The appointee will have the opportunity to enroll in the University of Bergens Molecular and Computational Biology Research School (MCB) < <http://www.uib.no/rs/mcb> > PhD program if enrollment qualifications are met.

Applicants are required to have experience in molecular biology and experience in evolutionary biology is advantageous. The position must start no later than November 2013 and is open only to individuals who have spent less than 12 months in Norway in the last three years. In addition, applicants must be in the first four years (full-time equivalent) of their research careers and not yet have been awarded a doctoral degree. This is measured from the date when they obtained the degree that would formally entitle them to embark on a doctorate, either in the country in which the degree was obtained or in Norway. The length of this appointment will not exceed 3 years. Salary is based on educational background and qualifications.

For further information regarding the position and scientific content of the project please contact the Group Leader, Dr. Andreas Hejnol (email andreas.hejnol@sars.uib.no, phone +47 55 58 43 28). For information about the ITN granting requirements see FP7 Marie Curie People site < http://ec.europa.eu/research/mariecurieactions/about-mca/actions/itn/index_en.htm >.

Written applications, in English, should include a C.V., summary of educational and work experience, a statement describing your interest in developmental biology and evolutionary questions and contact information for two references. Applications marked 13Sars_02. can be mailed to: Human Resource Officer, Sars Centre, Bergen High Technology Centre, Thorm@hlsngt. 55, NO-5008 Bergen, Norway. Application deadline 28 February 2013.

Applications by e-mail only will not be considered.

Carol Bruce HR Consultant Sars International Centre for Marine Molecular Biology Thorm@hlsngt. 55 5008 Bergen Norway Tlf: +47 55 5843 60 cell: +47 920 67 947

Carol Bruce <Carol.Bruce@sars.uib.no>

UBern FieldAssist AvianEvolution

UBern.FieldAssist.AvianEvolution

Field assistants in evolutionary ecology of Great tits (*Parus major*), Switzerland I am looking for two enthusiastic field assistants for the upcoming field season (1st of April until end of June 2013) to join my project investigating the relationship between begging behavior and antioxidant availability. The fieldwork will take place in a forest near Bern.

I will require field assistants to help with all aspects of the work, including nest checks, ringing and taking body measures of the birds, recording the nests and some smaller amount of lab work. Experience in fieldwork and bird handling would be an advantage. Since we will work many hours in the forest in all weather conditions, motivation is very important.

Applicants should speak English fluently and have a driving license. Travel expenses and accommodation will be paid, additionally; the field assistants will receive approximately 900 Swiss Francs per month to cover their expenses.

Applications should include a CV and a short letter of motivation. Please send your application to:

Lea Maronde (Evolutionary Ecology Lab, University of Bern)

lea.maronde@iee.unibe.ch

UCalifornia Merced PopGeneticsGenomics

UPDATE: Closing date revised to 25th January.

We're simply looking for an inspirational colleague - empiricist and/or theoretician ...

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 com-

plements 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 deadline is January 25, 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

UCopenhagen Biodiversity

Center of Macroecology, Evolution and Climate Natural History Museum of Denmark and Department of Biology University of Copenhagen

Faculty Professor and Associate Professor positions

Fixed-term postdoc and Assistant Professor positions in

Biogeography, Phylogeography, Macroecology, Macroevolution and Community Ecology

We seek international competitive candidates with a strong publication record at the level of position interested in. We expect strong analytical and data handling skills and the ability to communicate within a cross-disciplinary research center. Competitive salaries are offered.

For full description of the individual positions see www.bio.ku.dk or www.employment.ku.dk. Inquiries can be made to Professor Carsten Rahbek, e-mail: crahbek@bio.ku.dk

The center (<http://macroecology.ku.dk/>) is a long-term funded center of excellence with a cross-disciplinary research program addressing fundamental questions on the origin, maintenance, conservation and future of life and biological diversity on Earth. Researchers at

the center currently represent 14 nationalities and the working language is English.

Lisbeth Andreassen Centeradministrator, cand.mag. Center for Macroecology, Evolution and Climate Department of Biology University of Copenhagen Universitetsparken 15, DK-2100 Copenhagen , Denmark

Phone: +4535321259 Fax: +4535321250

E-mail: LAndreassen@bio.ku.dk

Lisbeth Andreassen <LAndreassen@bio.ku.dk>

UEdinburgh QuantGenomics

Job: Edinburgh Postdoc Genetic Dissection of Complex Traits.

Dear All,

there is a core funded post in the quantitative genetics and genomics group at the Roslin Institute (<http://www.roslin.ed.ac.uk/albert-tenesa/>). We are looking for a quantitative geneticist wishing to move into functional genomics or someone with experience in functional genomics wishing to expand their expertise to quantitative genetics.

If you are interested, please, go to: <https://www.vacancies.ed.ac.uk> and enter the vacancy number: 008122.

Regards,

Albert Tenesa The Roslin Institute and Royal (Dick) School of Veterinary Studies University of Edinburgh Easter Bush Midlothian EH25 9RG

albert.tenesa@ed.ac.uk

– The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

Josephine Pemberton <j.pemberton@ed.ac.uk>

UInnsbruck Austria EvolutionAlgae

Institute for Limnology, Mondsee of the University of Innsbruck in Austria:

Assistant Professor/Postdoc Molecular algal ecology (Code BIO-7400) Assistant Professor/Postdoc (40 hours per week), University of Innsbruck, Research Institute for Limnology, Mondsee, Austria, beginning 1st April 2013, duration 6 years. Tenure track can be offered. Main tasks: Internationally competitive research including grant acquisition as PI in the field of limnology, with focus on ecology, physiology and evolution of secondary metabolism in algae (cyanobacteria). High-quality, research-oriented teaching in the field of molecular algal ecology and algal physiology. Supervision of BSc, MSc, PhD candidates. Practical guidance of technical assistance. Administrative tasks include research management. Qualifications: PhD in aquatic ecology. International research experience as PostDoc, acquisition of third-party research funds, as well as an outstanding publication record including papers in high-ranking scientific journals. Experience in teaching and supervision of BSc, MSc, PhD candidates is required. Social and integrative abilities in team-playing are essential. Send a CV, two reference letters and a teaching concept with your application. Travel costs cannot be reimbursed. The legally binding text is available at the Career Opportunities website of the University of Innsbruck: http://orawww.uibk.ac.at/public_prod/owa/karriereportal.home. Please use this link to send your application online with reference to the code number given above. Deadline for applications: 26 January 2013.

Assistant Professor/Postdoc Bacterial Ecology and Microevolution (Code BIO-7401) Assistant Professor/Postdoc (40 hours per week), University of Innsbruck, Research Institute for Limnology, Mondsee, Austria, beginning 1st April 2013, duration 6 years. Tenure track can be offered. Main tasks: Internationally competitive research including grant acquisition as PI in the field of ecology and microevolution of freshwater bacterioplankton. Organisation and performance of high-quality teaching in the field of microbial limnology. Supervision of BSc, MSc, PhD candidates. Practical guidance of technical assistance. Administrative tasks include research management. Qualification: PhD in Biology/Microbiology, experience in the research areas Aquatic Microbial Ecology, taxonomy of bacteria, and analyses of prokaryotic genomes. International research experience as PostDoc, acquisition of third-party research funds, as well as an outstanding publication record including papers in high-ranking scientific journals. Experience in teaching and supervision of BSc, MSc, PhD candidates is required. Social and integrative abilities in team-playing are essential. Send a CV, two reference letters and a teaching concept with your application. Travel costs cannot

be reimbursed. The legally binding text is available at the Career Opportunities website of the University of Innsbruck: http://orawww.uibk.ac.at/public_prod/-owa/karriereportal.home. Please use this link to send your application online with reference to the code number given above. Deadline for applications: 26 January 2013.

Both positions require experience in evolutionary topics, that is why we think that they are interesting for evolutionary biologists. Many thanks for your effort and kind regards from Mondsee, Sabine

ULeicester PopEvoGenetics

Lectureship in Genetics

We are seeking a high calibre scientist with a research profile of growing international quality to join the Department of Genetics as a Lecturer. The Department is recognised for its outstanding research in human, mouse, drosophila, and microbial genetics.

Your interests will closely fit into at least one of the key research areas of the Department. We are particularly interested in applications from high quality candidates with a research interest in population/evolutionary genetics involving computational and statistical approaches. A focus of research on humans or model organisms would be welcome.

Closing date is 13th February 2013, and further details can be found at: <http://www.jobs.ac.uk/job-AFV021/lecturer-in-genetics/> maj4@leicester.ac.uk

UMontana Director Wildlife Biology

***DIRECTOR, WILDLIFE BIOLOGY PROGRAM, *
DEPARTMENT OF ECOSYSTEM AND CONSERVATION SCIENCES,**

**COLLEGE OF FORESTRY & CONSERVATION,
THE UNIVERSITY OF MONTANA, MISSOULA**

***POSITION APPOINTMENT:** *The University of Montana College of Forestry and Conservation seeks a visionary leader with administrative, teaching, and re-

search experience in wildlife biology to direct an interdisciplinary team of wildlife biology faculty that comprise one of the highest ranked programs in the country. This is a twelve month, tenure-track position as a Director of the Wildlife Biology Program in the Department of Ecosystem and Conservation Sciences (DECS) in the College of Forestry & Conservation (CFC). Employment may begin 1 July 2013.

***RESPONSIBILITIES:** *Work with faculty to provide vision and strong leadership to further enhance the Wildlife Biology Program at the college, university, national, and international levels and facilitate the programs teaching, research, and service. This appointment involves leadership, administrative, and fundraising responsibilities for the Wildlife Biology Program, including coordination of program activities amongst 20 faculty, 350 undergraduate, and 50 graduate students in Wildlife Biology. The Program is a joint program among the College of Forestry and Conservation, Division of Biological Sciences, and the Montana Cooperative Wildlife Research Unit.

* *

***SPECIFIC RESPONSIBILITIES*:** 1) guide undergraduate and graduate curriculum development to ensure we are training the next generation of leaders in the field of Wildlife Biology; 2) develop and maintain a relationship with resource management agency staff to help preserve a focus on real-world, applied problems; 3) work to raise external funds to meet programmatic goals and enhance opportunities for students; 4) foster positive communication and collaboration with local, national, and international conservation organizations and governmental agencies to support our teaching and research mission; 5) supervise two to three administrative staff; 6) direct graduate and undergraduate wildlife seminars and/or teach a course in area of expertise; 7) participate in Wildlife Biology, CFC, and university committees.

* *

***ACADEMIC AND PROFESSIONAL QUALIFICATIONS:** *The candidate must possess: 1) Ph.D. in the area of wildlife biology or a related field and professional accomplishments equivalent to an academic rank of Associate Professor or higher; 2) experience in the field of wildlife biology, including publications in peer-reviewed journals and successful development of competitive externally-funded grants; 3) a record of high quality teaching and/or outreach in wildlife and conservation biology or related fields; 4) significant administrative experience with diverse groups of wildlife researchers; 5) experience with external funding, private fundraising, and/or grant administration; 6) an ability

to collaborate and communicate effectively with students, wildlife professionals, university administrators, and private donors. Candidates with effective experience interacting with natural resource agencies, international conservation experience, and active participation in professional organizations are strongly encouraged to apply.

* *

***THE COMMUNITY AND RESOURCES:** *The University of Montana is located in Missoula, a community of 80,000 people in the Rocky Mountains. Scientists and students have access to CFCs Lubrecht Experimental Forest and Bandy Experimental Ranch, the Flathead Lake Biological Station, and the Boone and Crockett Clubs Theodore Roosevelt Memorial Ranch. In addition, there is a strong research community in the surrounding area including the U.S.F.S. Rocky Mountain Research Station, several non-profit groups, state, and federal scientists.

* *

***APPLICATION INFORMATION:** *Screening of applicants will *begin 15 January 2013*, and continue until a suitable candidate is appointed. Questions regarding the position should be directed towards:

Lisa Eby, Chair, Wildlife Biology Program Director Search Committee

Wildlife Biology Program; College of Forestry and Conservation

Phone: (406) 243-5984; email: lisa.eby@umontana.edu

To apply go to: <http://umjobs.silkroad.com/> and upload the following materials: (1) Statement of administrative experience and interest; (2) Curriculum vitae; (3) Recent publications, (4) Copies of unofficial transcripts

The University of Montana is an AA/EOE/ADA/Veterans preference employer. Minorities and underrepresented groups are encouraged to apply. Position announcements can be made available in alternative formats upon request. Finalists will be subjected to a background check.

Jeffrey Good <jeffrey.good@mso.umt.edu>

We are open to various approaches, including the evolutionary ecology of parasite-vector interactions.

The University of Neuchâtel, Switzerland, invites applications for a position of

Assistant professor in Medical Entomology

Job description: the appointee is expected to establish an internationally recognized research programme in parasite-vector-host interactions. We are particularly interested in candidates that use original and integrative approaches to elucidate mechanisms involved in host location, acceptance and feeding. The appointee will teach biology at all levels (bachelor, master and doctoral school). A non French-speaking appointee will be expected to achieve fluency in French following a period of adaptation to teach undergraduate courses in that language.

Starting date: 1st August 2013 or upon agreement.

Requirements: PhD degree in biology or in another life science discipline, as well as an internationally recognized research record.

Application file: to be sent by regular mail to the Dean of the Faculty of Science, Prof. Peter Kropf, Rue Emile Argand 11, 2000 Neuchâtel, Switzerland, as well as by email to doyen.sciences@unine.ch.

The applications will include a signed letter of motivation and curriculum vitae covering the applicant's teaching and research experience, research funding obtained, list of publications and copies of academic degrees. Applicants will also provide a brief teaching statement (max. 1 page), and a description of the research projects he/she would develop at the University of Neuchâtel (max. 2 pages). The candidate will request 3 experts to send a signed letter of reference via email directly to the head of the Hiring Committee, Professor T. Turlings ted.turlings@unine.ch.

Application deadline: 1st February 2013.

The University of Neuchâtel encourages women to apply.

Additional information: head of the Hiring Committee, Prof. T. Turlings ted.turlings@unine.ch, the Dean of the Faculty doyen.sciences@unine.ch and www.unine.ch/sciences . Jacob Koella

Institut de Biologie Université de Neuchâtel rue Emile-Argand 11 2000 Neuchâtel Switzerland

jkoella@gmail.com

UNewHampshire 4 Genomics

DTRA SCC Briefing Template (as of March 2010) Four Tenure-Track Faculty Positions in Genome-Enabled Biology

The UNH College of Life Sciences and Agriculture (COLSA, <http://colsa.unh.edu>) seeks to hire four new tenure-track faculty with demonstrated interests and expertise in diverse areas of biology enabled by modern genomic analysis. We are particularly interested in building on existing strengths in behavior, host/pathogen interaction and co-evolution, nutrition, and genome maintenance and evolution, outlined here (<http://mcbsgrad.unh.edu/research-foci>). We anticipate filling these positions in the fall of both 2013 and 2014.

Minimum Qualifications Candidates must have a Ph.D. in the appropriate field, and demonstrated potential to develop and lead strong and productive research programs. They will be expected to compete successfully in national and regional funding initiatives, and to achieve national and international prominence in their fields. Individual hires will embrace interdisciplinary approaches and will be expected to integrate their areas of research strength with academic programs.

Successful candidates will also be expected to train graduate students and to develop and teach outstanding courses at the undergraduate and graduate levels that contribute to academic excellence. Undergraduate education, including provision of original research opportunities, is an area of distinction that will be incrementally strengthened through these positions.

The new faculty will be located within COLSA (<http://colsa.unh.edu>), matched with the department that best suits their interests and expertise. Anticipated start dates are spread over two years (2013 and 2014). Possible home departments are Biological Sciences (BS), Molecular, Cellular and Biomedical Sciences (MCBS), and Natural Resources and the Environment (NRE).

About UNH and COLSA The University of New Hampshire, located in Durham, is a Research-I, Land, Sea and Space Grant University that has been recognized both nationally and internationally for research excellence and a commitment to sustainability. The College of Life Sciences and Agriculture is newly reorganized

into four interacting academic units and includes the state's Agricultural Experiment Station.

The University of New Hampshire is an Equal Opportunity/Equal Access/Affirmative Action institution. Application by members of all underrepresented groups is encouraged.

Application Process Information, including detailed position descriptions and complete application information is available at <http://colsa.unh.edu/employment>. All applicants will be required to apply online at <http://jobs.usnh.edu>. The online application will ask for a letter of application, current vitae and names, addresses, email and phone number of five professional references. The candidate will be notified before any references are contacted. Review of applications will begin on February 15, 2013 and will continue until the positions are filled. The University actively seeks excellence through diversity among its administrators, faculty, staff and students and prohibits discrimination on the basis of race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, veteran status, or marital status.

Please direct all inquiries to:

Genome Enabled Biology Search Lisa Buchalski, COLSA Search Coordinator 603-862-3626 lisa.buchalski@unh.edu

– Vaughn S. Cooper, Ph.D. Associate Professor Department of Molecular, Cellular, and Biomedical Sciences University of New Hampshire 212 Rudman Hall Durham, NH 03824 603 862 3422 vaughn.cooper@unh.edu <http://cooperlab.wikidot.com> twitter: @vscooper

vscooper@gmail.com

UNewHampshire 4 Genomics 2

apologies for repost, slight edits below Four Tenure-Track Faculty Positions in Genome-Enabled Biology

The UNH College of Life Sciences and Agriculture (COLSA, <http://colsa.unh.edu>) seeks to hire four new tenure-track faculty with demonstrated interests and expertise in diverse areas of biology enabled by modern genomic analysis. We are particularly interested in building on existing strengths in behavior, host/pathogen interaction and co-evolution, nutrition, and genome maintenance and evolution (for example

see: <http://mcbsgrad.unh.edu/research-foci>). We anticipate filling these positions in the fall of both 2013 and 2014. A complete job description can be found here: <http://colsa.unh.edu/employment>. Minimum Qualifications Candidates must have a Ph.D. in the appropriate field, and demonstrated potential to develop and lead strong and productive research programs. They will be expected to compete successfully in national and regional funding initiatives, and to achieve national and international prominence in their fields. Individual hires will embrace interdisciplinary approaches and will be expected to integrate their areas of research strength with academic programs. Successful candidates will also be expected to train graduate students and to develop and teach outstanding courses at the undergraduate and graduate levels that contribute to academic excellence. Undergraduate education, including provision of original research opportunities, is an area of distinction that will be incrementally strengthened through these positions. The new faculty will be located within COLSA, matched with the department that best suits their interests and expertise. Anticipated start dates are spread over two years (2013 and 2014). Possible home departments are Biological Sciences (BS), Molecular, Cellular and Biomedical Sciences (MCBS), and Natural Resources and the Environment (NRE).

About UNH and COLSA The University of New Hampshire, located in Durham, is a Research-I, Land, Sea and Space Grant University that has been recognized both nationally and internationally for research excellence and a commitment to sustainability. The College of Life Sciences and Agriculture is newly reorganized into four interacting academic units and includes the state's Agricultural Experiment Station.

The University of New Hampshire is an Equal Opportunity/Equal Access/Affirmative Action institution. Application by members of all underrepresented groups is encouraged.

Application Process Information, including detailed position descriptions and complete application information is available at <http://colsa.unh.edu/employment>. All applicants will be required to apply online at <http://jobs.usnh.edu>. The online application will ask for a letter of application, current vitae and names, addresses, email and phone number of five professional references. The candidate will be notified before any references are contacted. Review of applications will begin on February 15, 2013 and will continue until the positions are filled. The University actively seeks excellence through diversity among its administrators, faculty, staff and students and prohibits discrimination on the basis of race, color, religion, sex, age, national ori-

gin, sexual orientation, gender identity or expression, disability, veteran status, or marital status.

Please direct all inquiries to:

Genome Enabled Biology Search Lisa Buchalski, COLSA Search Coordinator 603-862-3626 lisa.buchalski@unh.edu

Vaughn S. Cooper, Ph.D. Associate Professor Department of Molecular, Cellular, and Biomedical Sciences University of New Hampshire 212 Rudman Hall Durham, NH 03824 603 862 3422 vaughn.cooper@unh.edu <http://cooperlab.wikidot.com> twitter: @vscooper

vaughn.cooper@unh.edu

UNewOrleans IntegrativeBiology

EVOLUTIONARY BIOLOGISTS WITH INTEGRATIVE RESEARCH PROGRAMS ARE ENCOURAGED TO APPLY FOR THE FOLLOWING POSITION:

The Department of Biological Sciences, University of New Orleans invites applications for a tenure-track position at the rank of ASSISTANT PROFESSOR.

We seek an INTEGRATIVE BIOLOGIST working in organismal, cell, or developmental biology. We encourage applicants who use tools and approaches from diverse disciplines or multiple levels of biological organization, and whose research complements current interests in the department.

Applicants must have a Ph.D. and postdoctoral experience. Successful candidates will develop extramurally funded research, contribute to the Integrative Biology doctoral program, and teach at the undergraduate and graduate levels. For information about the department, see [*http://biology.uno.edu/*](http://biology.uno.edu). Applications should be sent electronically as a single PDF file that combines a cover letter, a curriculum vitae, statements of research interests and teaching philosophy, and names and contact information of three references. Send application materials electronically to Dr. Wendy Schluchter, [*biology@uno.edu*](mailto:biology@uno.edu), Integrative Biology Search Committee, Department of Biological Sciences, University of New Orleans, LA 70148. Review of applications will begin Jan 30, 2013.

The University of New Orleans is an Equal Opportunity/Affirmative Action employer.

– Simon Lailvaux, Assistant Professor Department of Biological Sciences University of New Orleans 2000 Lakeshore Drive New Orleans, LA 70148

email: slailvaux@gmail.com phone: 504 280 6740

<http://www.fs.uno.edu/slailvau/index.html> Simon Lailvaux <slailvau@uno.edu>

UOxford 4yrFixedTerm AnimalDiversity

UNIVERSITY OF OXFORD, UK (Dept of Zoology)

JOB ADVERT: 4-year fixed-term lectureship in animal diversity. Maybe an opportunity for an early career researcher to establish independent research or collaborate with current faculty. Will teach a practical course in animal diversity, plus conduct own research. Job advert and requirements: <http://goo.gl/iV1SI> Closing date 16 Jan 2013. Further details peter.holland@zoo.ox.ac.uk

Peter Holland <peter.holland@zoo.ox.ac.uk>

USussex BeeAdaptation

Postdoctoral Research Fellow in Bee Ecology and Ecotoxicology Three year post, available from 1 April 2013, based at the University of Sussex (Falmer, near Brighton, UK). Closing date 15 February 2013.

A full-time, Defra-funded, 3-year postdoctoral research position is available to join a research team in the School of Life Sciences at the University of Sussex, UK. The programme of research is led by Prof Dave Goulson (currently relocating from University of Stirling to University of Sussex). The main aim of the project is to improve our understanding of the impact of pesticides on wild bumblebee populations in arable farmland, horticultural areas and gardens. In particular, we will focus on how bee foraging behaviour and differences between bee species influences their exposure to pesticides. This is currently an area of considerable controversy; we anticipate the potential for high impact publications.

The project will involve collection of field samples of

pollen, nectar, vegetation and bees for screening for neonicotinoid insecticides, and performing a variety of field experiments. The screening will be carried out in conjunction with Prof E Hill, and technical support is available for this. Expertise in chemical analysis is therefore not needed, but the fellow will be expected to become familiar with interpretation and analysis of outputs.

The successful applicant will have a PhD in ecology. Experience with social insects, pollinators, agroecosystems and / or pesticides is desirable but not essential. Knowledge of experimental design and analysis is essential. A driving licence is essential, since the appointee will spend considerable time visiting remote field sites across SE England.

The appointee will also be part of the Evolution, Behaviour and Environment (EBE) Subject Group in the School of Life Sciences at Sussex (<http://www.sussex.ac.uk/lifesci/ebe/research>), a thriving research environment providing ample opportunities to interact with leading senior researchers and their groups. The successful applicant will particularly benefit from an exceptional (on a world scale) concentration of research expertise that focusses on social insects: in addition to Dave Goulson, Jeremy Field, Francis Ratnieks, Bill Hughes, Tom Collett and Paul Graham all lead well-established research groups.

APPLICATIONS PROCEDURE Applications should include a CV, a covering letter explaining the applicant's suitability for the post, and a completed University of Sussex application form. This should include: 1. Contact details (including e-mail addresses) for the applicant and 3 referees who would be available to provide references before interview (during the month after the closing date). 2. The applicant's availability for interview at Sussex University during the 3 weeks after the closing date. 3. A clear statement that (a) the applicant would be available to start work on 1 April 2013 or soon thereafter; (b) the applicant has a full driving licence.

Salary scale is £30 424 to £36 298 per year, plus superannuation.

Informal enquiries: Dave Goulson
(dave.goulson@stir.ac.uk)

Professor Dave Goulson, Biological & Environmental Sciences, University of Stirling, Stirling FK9 4LA
Tel: 01786 467759 <http://www.sbes.stir.ac.uk/people/-goulson/> [includes pdfs of publications]

Dave Goulson <dave.goulson@stir.ac.uk>

j.field@sussex.ac.uk <http://www.sussex.ac.uk/lifesci/-fieldlab/> J.Field@sussex.ac.uk

USussex FieldAssist SpainWasps

VOLUNTEER FIELD ASSISTANT sought for 3 months starting early March 2013, to help with a study of paper wasp (*Polistes*) behavioural ecology in southern Spain. The work will involve helping a postdoctoral researcher to census and observe colonies as part of experiments to elucidate the basis of helping behaviour in these wasps, which live in small colonies of <20 individuals. The successful applicant must be prepared to work hard and have an interest in behavioural/evolutionary biology and enthusiasm for fieldwork. Successful applicants will obtain excellent experience of cutting-edge insect behavioural ecology. A driving licence and any ability to speak Spanish would be an advantage, though not essential. Because the work involves recording colour marks on individual animals, the job would not be suitable for someone who is colour-blind. See our research group website for more information about the kind of work we do (<http://www.sussex.ac.uk/lifesci/fieldlab/>).

Air fare (from the UK) and accommodation expenses will be provided, with the applicant needing to pay for only their own food/personal expenses, which are relatively cheap in Spain (a successful applicant will also receive a £500 contribution towards their expenses). Accommodation will be a room in a flat shared with the postdoctoral researcher and/or other members of the research group - including shower, cooking facilities, TV etc. Accommodation is in a medium-sized coastal town with nice beach.

Send a covering letter and CV, including contact details (including e-mail addresses/tel nos.) for the applicant and 2-3 referees who would be available to provide references during January/February 2013. Email as a single Word document to: j.field@sussex.ac.uk Or post a hard copy to: Prof Jeremy Field, School of Life Sciences, John Maynard Smith Building, University of Sussex, Brighton BN1 9QG, UK.

Applicants must be available for interview at Sussex University, and review of applications will begin on 18 January and continue until 31 January. Informal enquiries: j.field@sussex.ac.uk

Professor Jeremy Field School of Life Sciences, John Maynard Smith Building, University of Sussex, Falmer, Brighton BN1 9QG, UK

UZurich FieldAssist Birds Lapland

Job: U_Zurich_FieldAssist_Birds_Lapland

Expenses paid field assistant positions to study life-history evolution in Siberian Jays in Swedish Lapland

For the upcoming field season (May-July 2013) we are looking for an additional highly motivated expenses paid field volunteer to join our field project (main responsible Michael Griesser, University of Zurich, Switzerland) investigating life-history evolution in Siberian jays (*Perisoreus infaustus*). The study population is located near Arvidsjaur, Swedish Lapland.

Our current project investigates the influence of habitat quality on offspring quality. The work of the field volunteers will be to help in field experiments, behavioural observations, following radio-tagged birds, measuring nestlings, and data management. This work will give insight into exciting experimental fieldwork and will be carried out partly in managed forests and partly in scenic pristine boreal habitats.

Qualifications: (1) BSc/MSc in Biology, Ecology or similar qualification (2) Previous field experience (3) Ability to work in small teams and sociable personality (4) Knowledge in observing & handling birds is a plus (5) Driving licence (6) Fluent in English

We will cover for the accommodation, travel expenses from and to the study site (in total up to 300 Euros) as well as the living expenses.

Applications - including a CV, a letter of motivation (1 page) and the name of two referees - should be sent to Xenia Schleuning: x.schleuning@gmx.net

Applications received until 5th February 2013 will be given full consideration. However interviews will be held as soon as suitable applications are received. If you applied for the previous announcement which came out December 2012, your candidature is being considered, please do not apply again.

For further information on the project, see:

<http://www.aim.uzh.ch/Research/birdfamilies.html>
x.schleuning@gmx.net

Vienna PopulationGenomics

Junior Faculty Position Tenure Track: Statistical Genetics / Population Genomics at the Max F. Perutz Laboratories, University of Vienna.

* last call for this position: deadline Jan 4th coming up *

The Max F. Perutz Laboratories (MFPL; 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.evolvienna.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), 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 a qualification agreement if the scientific performance of the employee suggests that the required qualification can be reached. This agreement is connected with the title of Assistant Professor [AssistentzprofessorIn]. In case the goals of the qualification agreement are met, the employment will be made permanent and the title of the employee will be changed to Associate Professor [assozierte/r ProfessorIn]. We offer a competitive salary and a start-up package.

Application files:

* strict adherence to the form suggested below is not essential as long as all key points are covered *

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. Esteem 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, with cc to joachim.hermisson@univie.ac.at. Informal inquiries can be sent to 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

— / —

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>

WageningenU ComputationalSystemsBiol

Number 3: AFSG- SSB-0014 Assistant Professor in Computational Systems Biology (Tenure Track) Systems and Synthetic Biology WU 1 fte

We are looking for In a challenging career trajectory you are, as Assistant Professor in Computational Systems Biology, responsible for the organisation, implementation and coordination of new research activities in this field, as well as building up a leading international position. In this position you will also be motivating and teaching students and develop new courses. Training and coaching is provided for the Tenure Track position to accomplish all this.

We ask As Assistant Professor you are an ambitious and enthusiastic scientist, and a team player, devoted to research and education in Computational Systems & Synthetic Biology.

You also have: - a PhD in Physics, Engineering, Computational Systems Biology, Bioinformatics or related; - several years of postdoctoral experience at high level; - an excellent track record according to the Tenure Track systems in place at the WUR; - knowledge in pattern recognition, machine learning, multivariate statistics and large scale data mining. Expertise in a broad range of approaches (both top-down and bottom up) for modeling biological systems is a substantial plus; - experience with supervision of PhD projects; - experience with management of multi-team projects; - proven ability in acquiring research funding; - excellent communication skills; - excellent didactic qualities and enthusiasm for teaching and working with students.

We offer We offer you as, a talented scientist, a challenging career trajectory within a Tenure Track system. From the position of Assistant Professor you can grow into a Professor holding a Personal Chair. Training and coaching are provided and interdisciplinary (international) cooperation is strongly stimu-

lated. You will also be given the chance to build up your own research line. You will be part of the Laboratory of Systems and Synthetic Biology and embedded in the newly created Wageningen Centre for Systems Biology (www.wageningenur.nl/systemsbiology), in which you will participate also with executive, managerial functions. As all the other scientific staff members you are expected to attract funding and to participate in the supportive activities of the Laboratory.

We offer you a temporary contract with the possibility of extension, formally, for 38 hours per week. Gross Monthly Salary: from based on full time employment and dependent on expertise and experience. Information Tenure track Wageningen UR The Wageningen University offers talented young scientists a challenging new career trajectory, the Tenure track. By introducing this trajectory, our aim is to attract top talent and to stimulate excellence.

>From the position of Assistant Professor, candidates can grow into a Professor holding a personal chair in a maximum period of twelve years. In addition, they will be given the chance to build up their own research line. It goes without saying that candidates will be intensively supervised and coached during the trajectory. Moreover, this transparent career path can lead to a permanent employment contract.

As we will only be selecting outstanding candidates to take part in Tenure Track, this will be a good stepping stone to a further career within Wageningen UR or elsewhere.

We offer a temporary contract with the possibility of extension, for 38 hours per week. Gross salary: starts from 3195 euro (Scale 11), based on a full time employment and dependent on expertise and experience.

For more information about Tenure Track within Wageningen UR look at <http://www.wur.nl/UK/work>. Additional information For more information about this position please contact Prof. dr. Ir. Vitor A.P. Martins dos Santos, Chair, tel. +31- 317-482865, vitor.mds@wur.nl.

For information about the contractual aspects please contact Mrs. J.E.C. van Meurs, HRM-advisor, tel. +31- 317-480101, joes.vanmeurs@wur.nl.

Interested? You can apply online at www.wageningenur.nl/en/Jobs.htm until 31th of January 2013.

We are Laboratory of Systems and Synthetic Biology The recently created Laboratory of Systems & Synthetic Biology (www.wageningenur.nl/ssb) addresses in an integrated way critical issues and novel biotech-

nological applications in the areas of Health & Food, BioBased Products and Environment.

We carry out our research activities broadly along three major lines: - Computational Systems Biology - Microbial Systems Biology - Synthetic Biology

Our mission is to contribute to the elucidation (from a Systems Biology perspective) of the mechanisms under-

lying basic cellular processes, evolution and interactions among microbes and between microbes and

— / —

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

Other

AMNH NewYork UndergraduateResearch	67	Phyloseminar SimonGreenhill Jan16	76
AlleleScoring OutOfRange	68	REUProgram KelloggBiologicalStation	76
Artificial Evolving Systems	68	Seewiesen Germany VolAvianFieldAssist	77
CoevolutionSociety Symposium	69	Software Avida-ED	77
Evolution Mammalian Hibernation	69	Software FLOCK 3 0	78
EvolutionModernHumans	70	Software Paternity	78
EvolutionSimulation for IntroLabs	70	SouthAfrica Volunteers EvolStripedMice	79
FieldMuseum Chicago SummerUndergraduateFellowships	71	SouthTexas Spea bombifrons TissuesSought	79
Fst estimation genome wide answers	71	Switzerland FieldAssist GreatTitsEvol	80
IIASA Austria 3MnthSummerFellowships	72	Training in phylogeny	80
Leipzig OpenCall for WorkshopsPostDocsSabbaticals	73	Translational Bioinformatics	80
Massive open online courses in evolution	74	UArizona lab technician	81
MissouriBotanicalGarden ResExperienceUndergrad	74	UBern FieldAssist GreatTits	81
MountainLakeBioStation EarlyCareerFellowships ..	75	UWinnipeg BatVolunteers	82
NIMBioS support	75	UZurich FieldAssist GreatTitsEvol	82
Phyloseminar FionaJordan Feb05	75	Webcast Princeton OriginOfLife Jan21-24	83
		iPad app for Evolution	83

AMNH NewYork UndergraduateResearch

Do you know an exceptional undergraduate student who would like to spend a fun and engaging summer in the heart of New York City working at the American Museum of Natural History?

The Research Experiences for Undergraduates (REU) program, funded by the U.S. National Science Founda-

tion, offers paid summer internships for qualified undergraduate students to conduct research projects with AMNH scientists in evolutionary biology, linked to specific individual research projects. Included in the program are a general orientation to the Museum and a series of weekly meetings at which students discuss their research, present informal progress reports, and participate in discussions and seminars as well as graduate and research career opportunities. At the conclusion of the internships, students deliver oral presentations of their work and prepare publication quality research papers.

The program is open to all students who are U. S. citi-

zens or permanent residents and who are currently enrolled in a four-year undergraduate degree program.

Pending the approval of federal funding, successful applicants will receive a stipend, while dormitory housing on a nearby university campus, or an equivalent housing stipend, will be provided together with a subsistence allowance. Based on need, travel costs to and from New York City are also covered.

A description of the potential projects may be found here http://rggs.amnh.org/pages/-academics_and_research/reubio Susan Perkins, Ph.D. Associate Curator & Professor Sackler Institute for Comparative Genomics and Division of Invertebrate Zoology American Museum of Natural History Central Park West at 79th Street New York, New York 10024

p: 212-313-7646 f: 212-313-7819 <http://malaria.amnh.org> <http://genomics.amnh.org> Twitter: @NYCuratrix Blog: Parasite of the Day - <http://dailyparasite.blogspot.com> Susan Perkins <perkins@amnh.org>

AlleleScoring OutOfRange

Dear All, I have scored DRBP1 (BRB1) for different alleles within a range from 119 to 139. The FAO recommended list says that the range within 195-229 bp.

Would there results be correct or I have made a mistake somehow. Please advise.

Kindest regards

Raed

Dr. Raed Al-Atiyat Animal Breeding and Genetics Animal Sci. Dep., Agriculture Faculty Mutah University, Jordan. Ph(W): +962 3 2372380 Ext 6555 Fax: +962 3 2323 154 Mobile: +962 777926168

Raed al-atiyat <ratiyat2003@yahoo.com.au>

Artificial Evolving Systems

Call for Papers Special Issue on Evolvability and Robustness in Artificial Evolving Systems for the Springer journal Genetic Programming and Evolvable Machines

Extended Deadline April 30, 2013

The journal Genetic Programming and Evolvable Machines (GPEM) was founded to focus on artificial evolutionary systems that are active “ which take inputs from their environment and act on them to produce their behavior.

Short- and long-term evolution depends on the “variational properties“ (Altenberg, 1994) of the systems ” how changes to their structure map to changes in their behavior. Robustness and evolvability are key variational properties that themselves show evolutionary dynamics. Active systems are an especially rich domain for the evolution of robustness and evolvability since they often allow for open-ended complexity.

GPEM is calling for papers for a special issue on Evolvability and Robustness in Artificial Evolving Systems. “Artificial” may include any model that departs from, or is more general, than what is found in nature. A diversity of concepts under the rubrics of evolvability and robustness have been introduced as the literature on these subjects has expanded. This special issue is open to the full range of these concepts. However, confusion has entered the literature due to imprecise usage of these terms. Therefore, a unique requirement for this special issue will be that the authors provide precise quantitative definitions for the aspects of evolvability and robustness they investigate.

Examples of topics sought include: Generalization of the biological concept of distribution of mutation effects on fitness to the distribution of genetic operator effects on the objective functions in AESs (Nordin and Banzhaf, 1995);

Relationships between 1) the robustness of the behavior to variation in inputs and environment, and 2) its robustness under change from the genetic operators (e.g. plasto-genetic congruence Ance and Fontana (2000));

The emergence, or the engineering, of evolvability or robustness into artificial evolutionary systems (AESs);

New theoretical understanding of the evolution of evolvability, robustness, neutral networks, and their inter-relationships;

Case studies of the evolution of evolvability, robustness, or neutral networks in AESs; Methodology for measuring evolvability and/or robustness;

Mechanisms whereby variational properties of the environment or inputs can shape the variational properties of the AESs under the genetic operators.

References Altenberg, L. 1994. The evolution of evolvability in genetic programming. In Kinnear, K. E., editor, *Advances in Genetic Programming*, pages 47-74.

MIT Press, Cambridge, MA.

Ancel, L. W. and Fontana, W. 2000. Plasticity, evolvability and modularity in RNA. *Journal of Experimental Zoology (Molecular and Developmental Evolution)*, 288:242-283.

Nordin, P. and Banzhaf, W. 1995. Complexity compression and evolution. In Eshelman, L., editor, *Genetic Algorithms: Proceedings of the Sixth International Conference*, pages 310-317, San Francisco. Morgan Kaufmann.

Important Dates: Submission deadline: April 30, 2013. Notification of acceptance: June 30, 2013. Final manuscript: August 31, 2013.

Paper Submission: Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals. Springer offers authors, editors and reviewers of *Genetic Programming and Evolvable Machines* a web-enabled online manuscript submission and review system. Manuscripts should be submitted to: <http://GENP.edmgr.com>. Instructions for Authors may be found at <http://www.springer.com/10710>. All enquiries should be sent to Lee Altenberg at gpem@physics.org.

altenber@santafe.edu altenber@santafe.edu

CoevolutionSociety Symposium

Dear Colleagues,

1. We wish to announce the establishment of the Coevolution Society with its temporary (and minimalist) web site at

<http://dambe.bio.uottawa.ca/CoEvol> The membership is free. Please join.

2. The Coevolution Society will launch a Coevolution journal in collaboration with Taylor & Francis. The journal launch will be announced separately.

3. A "Molecular coevolution" symposium will be organized for this year's SMBE meeting at Chicago (Jul 7-11).

Best Xuhua

Xuhua Xia Professor Biology Department University of Ottawa Rm 278 Gendron 30 Marie Curie, Ottawa, Ontario Canada K1N 6N5 Tel: (613) 562-5800 ext 6886 <http://dambe.bio.uottawa.ca> <http://www.biology.uottawa.ca/details.php?lang=eng&id1>

[/www.biology.uottawa.ca/details.php?lang=eng&id1](http://www.biology.uottawa.ca/details.php?lang=eng&id1)
Xuhua Xia <Xuhua.Xia@uottawa.ca>

Evolution Mammalian Hibernation

Special Issue on The Evolution of Mammalian Hibernation: Genetics, Physiology, Behavior, Ecology, and Applications to Human Health

Call for Papers

Torpor is hypothesized to be an evolved strategy for energy conservation in the face of lowered and unpredictable resource availability and is defined by reduced metabolism and body temperature. Hibernation is a seasonal behavior wherein the torpid state is extended for several days to several weeks and is regularly interrupted with spontaneous arousal intervals, when normal metabolism and body temperatures are reinstated for 10-20 hours. In the past, hibernation was perceived to be a response to low temperatures though we now know that there are numerous species found in warm climates that show these same extreme physiological states. Researchers are targeting the genetic, molecular, neurobiological, and physiological components of hibernation to unveil factors that confer biological protection against hypothermia, ischemia-reperfusion injury, and disuse atrophy. Results derived from this research can potentially provide the tools to pharmaceutically or genetically induce components of the hibernation state in nonhibernators. We invite interdisciplinary contributions to address fundamental questions in the evolutionary dynamics of torpor and hibernation and their potential implications for Darwinian medicine, particularly those that address opposing sides of current debates in the field of mammalian hibernation. Potential topics include, but are not limited to:

- The evolutionary polarity of heterothermy: ancestral versus convergent adaptation - Hibernation and macroevolution: relationship to climate change and environmental unpredictability - Ecophysiology of temperate/arctic and tropical hibernation: environmental triggers - Neurophysiology of heterothermy: relationship between hibernation, daily torpor, and sleep - The role of biological clocks in timing and regulation of daily torpor and hibernation - Metabolic suppression, low body temperature, and organ function - Endocrine control in hibernators: hormones involved in appetite and metabolic and immune functions - The role of fat metabolism in the hibernation response - Genetic and

genomic controls that govern hibernation

Before submission authors should carefully read over the journal's Author Guidelines, which are located at <http://www.hindawi.com/journals/ijeb/guidelines/>. Prospective authors are encouraged to contact one or more of the Guest Editors to discuss the suitability of their intended submission. When submitting their manuscripts, authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at <http://mts.hindawi.com/author/submit/journals/ijeb/emh/> according by April 5, 2013.

Guest Editors Anne Yoder, Department of Biology, Duke University, Durham, NC, USA; anne.yoder@duke.edu SandyMartin, Department of Cell and Developmental Biology, University of Colorado, Denver, CO, USA; sandy.Martin@ucdenver.edu Brian Barnes, Institute of Arctic Biology, University of Alaska Fairbanks, Fairbanks, AK, USA; bmbarnes@alaska.edu Mihai Podgoreanu, Department of Anesthesiology, Duke University School of Medicine, Duke University, Durham, NC, USA; mihai.podgoreanu@duke.edu Marina Blanco, Duke Lemur Center, Duke University, Durham, NC, USA; marina.blanco@duke.edu

anne.yoder@duke.edu anne.yoder@duke.edu

EvolutionModernHumans

Call for Participants: Evolutionary Biology of the Built Environment Working Group

We are organizing the first working group aimed at understanding the evolutionary biology of the built environment. Our bedrooms, our houses, our backyards and our cities. This working group will occur* June 10 V 14, 2013, in Durham, North Carolina*. We are now inviting applications for participants in the working group: <http://bit.ly/Zm3mdB> (Deadline: Jan 25, 2013)

As recently as 100,000 years ago the indoor environment did not exist. Yet, this is now where most humans spend the majority of their life. An emerging body of literature shows that hundreds of multicellular species and thousands of unicellular species can be found in houses and buildings more generally. Among the species found in homes are those whose presence (or absence) is likely to have a large impact on human health and well-being, species including beneficial mi-

crobiota on the body but also pathogens and potential pathogens or toxic species such as extremophilic fungi. Yet, with the exception of a few deadly, the evolutionary history of most of the species with which we most intimately interact in our homes remains unknown.

To remedy our lack of knowledge and take advantage of recent advances in disparate fields we will bring together scientists studying both the fauna (microbiologists, entomologists) and environment (engineers, architects) along with social scientists (anthropologists) and evolutionary biologists (e.g. theoreticians, bioinformaticians, geneticists) to begin to build a framework for the evolution of the indoor and more generally built biome. *Our goal is to develop a framework for a comprehensive understanding of the evolution of the species we most intimately interact with, particularly in the context of considering how to build and design our environments so as to favor beneficial (rather than dangerous) evolutionary trajectories.*

* *

We are currently accepting applications a diverse group of scientists and practitioners at various stages in their careers. Online application here: <http://bit.ly/Zm3mdB> - APPLY TODAY! Deadline January 25, 2013.

Sponsored by a partnership between the Sloan Foundation and the National Evolutionary Synthesis Center (NESCent).

Project Leaders: Jonathan Eisen (UC Davis), Rob Dunn (NC State), Kerry Kinney (UT-Austin) and Craig McClain (NESCent).

Holly Menninger, PhD

Director of Public Science, Your Wild Life

Dept of Biology, NC State

Holly Menninger <hlmennin@ncsu.edu>

EvolutionSimulation for IntroLabs

I'm looking for suggestions for evolution software programs for teaching introductory biology labs. I am particularly looking for programs that simulate selection on a quantitative trait and let students manipulate the selective environment, characteristics of the initial population, and heritability to trait and then follow the effects on trait evolution. We had been using the EvolutionLab of Biology Labs Online (<http://>

[/biologylab.awlonline.com/index.html](http://biologylab.awlonline.com/index.html)), but they have recently changing their pricing structure and this is no long an option for us.

Any suggestions would be welcome.

Thanks in advance, Sarah Gilman

Sarah Gilman, Ph.D.

W.M. Keck Science Department The Claremont Colleges 925 N. Mills Avenue Claremont, CA 91711

<http://faculty.jsd.claremont.edu/sgilman>
sgilman@kecksci.claremont.edu 909-607-0715

SGilman@kecksci.claremont.edu

FieldMuseum Chicago SummerUndergraduateFellowships

Field Museum summer 2013 undergraduate research internship opportunities

The Field Museum of Natural History in Chicago, Illinois is please to announce its 2013 summer NSF REU internship program. Please visit the program web site for information and REU project descriptions:

<http://fieldmuseum.org/about/c-r-research-experiences-undergraduates-reu/> All REU applications must be made online at: <http://grants.fieldmuseum.org/> Application deadline: February 11th, 2013. Deadline for letters of reference: February 15th, 2013. Announcement of Awards: March 15, 2013. Start of 2013 REU program: Monday, June 10, 2013. The 5th Annual Undergraduate Research Symposium will be held Friday, August 16 at the Field Museum.

Please note: Undergraduate student participants in REU Sites must be citizens or permanent residents of the United States or its possessions and must be a freshman, sophomore or junior at the time of application. Seniors cannot apply for an REU internship.

The Field Museum houses one of the world's foremost scientific collections of biological diversity (>25 million specimens), and supports active biodiversity research around the globe. Despite the urgency of the current biodiversity crisis, few educational opportunities exist for students in the biological sciences to interact with scientists and institutions dedicated to the study of organic diversity. The Field Museum REU program will train a cohort of at least eight students

in biodiversity-related research in a 10-week summer program. Each participant will undertake an independent research project supervised by a museum scientist in a discipline such as taxonomy and systematics, phylo/biogeography, paleontology, molecular phylogenetics, or conservation. Students will experience biological diversity through the use of the museum's collections in their research, and will be trained in project-relevant techniques and equipment such as the scanning electron microscope, various light microscopy set-ups, and equipment in the Pritzker DNA lab. A six-week course in phylogenetic systematics is run concurrently with intern projects and will provide a common theoretical framework for their research. REU students will receive an introduction to the Encyclopedia of Life (EOL) in Field Museum's Biodiversity Synthesis Center. At the conclusion of the summer students will present their research results to their peers and museum scientists at the Undergraduate Research Symposium. Providing equal opportunity in biodiversity-related research is an important goal of the program.

REU student participants receive a salary of \$4,500 for the 10-week program, and additionally \$2,500 subsistence and \$500 travel allowance.

This REU program is funded through a REU-Site grant from the National Science Foundation to Drs. Petra Sierwald and Ken Angielczyk (Field Museum of Natural History).

—

Corrie Saux Moreau, Ph.D. Assistant Curator, Division of Insects Department of Zoology Field Museum of Natural History 1400 South Lake Shore Drive Chicago, IL 60605 USA Office: (312) 665-7743 Fax: (312) 665-7754 Email: cmoreau@fieldmuseum.org <http://fieldmuseum.org/users/corrie-moreau> *** Visit our LAB WEBSITE: www.moreaulab.org ***
cmoreau@fieldmuseum.org

Fst estimation genome wide answers

Dear Evoldir users,

I sincerely apologize for the delay of this answer.

More than a month ago, I asked for tools that estimate FST index for each locus for Genome wide data.

I am really grateful to all the users that answered me, providing a very useful help.

First of all, let me say that Bruce Weir sent me an e mail suggesting me to be cautious about single-SNP estimates, since the variances are too large.

Please find below the answers that I received. Please feel free to contact me for every enquiry.

Hi Francesco,

I used the hierfstat R package for analysis of 13 mio SNPs in 20 individuals. The variance component estimation might not be the fastest, but once you get SNP-wise estimates, any kind of randomization is fast.

cheers, Reto

Francesco,

The speed of the analysis will depend to a certain extent on your computers processor and RAM, but I would recommend Fstat or Genalex.

Good luck,

Dan

Hi,

have you tried hierfstat (R package) and its function basic.stats (much faster than varcomp.glob)

Dear Francesco,

Hierfstat or Plink should be able to do it.

Armando

Hi Francesco,

Read this post: <http://www.molecularecologist.com/-2012/05/calculating-pair-wise-unbiased-fst-with-r/> I personally use the Rpackage "hierfstat" to calculate Fst for >200k SNPs relatively quickly.

I have also used MSA in the past for medium size SNP datasets. It does the same calculation as Hierfstat.

MSA reference:

Dieringer, D. and Schlötterer, C. (2003), microsatellite analyser (MSA): a platform independent analysis tool for large microsatellite data sets. *Molecular Ecology Notes*, 3: 167-169. doi: 10.1046/j.1471-8286.2003.00351.x

cheer,

sebastien

Dear Francesco,

We use here a software called ADEGENET (R-source) for large datasets analyses (Gen Div, H&W, FST, Multivariate analyses).

I would be happy to hear what other suggestions you receive from the community.

Sincerely,

Gregory

Dear Francesco,

we are developing 'PopGenome', a powerful toolbox for population genetic & genomic data within the R statistics environment (<http://www.r-project.org/>). A substantially improved version 1.2 will be online at CRAN very soon - in the meantime, I'd be happy to email you (or anyone else interested) the package. It will run on Windows, MacOS, and Linux.

PopGenome implements a wide range of population genetics statistics and methods, including different variants of F_{ST}. These can be applied to sets of alignments, sets of loci within a large SNP file (e.g., 'gene' or 'exon' regions specified in an annotation file) , or sliding windows.

At this time PopGenome can read in the following data formats: Alignments: FASTA, PHYLIP, MAF, MEGA, NEXUS. SNP data: SNP, VCF, HAPMAP (in particular files from the 1000/1001 genomes projects)

You can also split large datasets in your own format into chunks and convert them into R-objects, PopGenome will concatenate them internally. This mechanism is well documented and will also be available on CRAN.

To ensure fast computation on a very large scale we implemented some R specific bottlenecks in C++.

If you have any further questions on PopGenome and its usage, please ask!

Best wishes,

Bastian

Francesco Montinaro <francesco.montinaro@gmail.com>

IIASA Austria 3MnthSummerFellowships

Summer Fellowships for Young Scientists at the International Institute for Applied Systems Analysis, Austria

Funding is available for PhD students interested in three months of collaborative research during June-August 2013 on

Evolutionary and Ecological Modeling

at the International Institute for Applied Systems Anal-

ysis (IIASA) in Laxenburg, Austria.

Young scientists from all countries are eligible for stipends provided by IIASA's Evolution and Ecology Program (EEP) that contribute to travel and accommodation costs. Students from Australia, Austria, Brazil, China, Egypt, Finland, Germany, India, Indonesia, Japan, Korea, Malaysia, the Netherlands, Norway, Pakistan, Russia, South Africa, Sweden, and the USA are furthermore eligible for fellowships that provide full coverage of travel, accommodation, and living expenses.

Model-based summer research projects are invited in the following indicative areas:

Evolution of Cooperation Governance of Common Goods Systemic Risks and Network Dynamics Eco-Evolutionary Dynamics Evolutionary Community Ecology Food-Web Evolution Vegetation Dynamics Adaptive Speciation Disease Ecology and Evolution Evolutionary Conservation Biology Fisheries Management Fisheries-induced Evolution Adaptive Dynamics Theory and Models Spatial Models in Ecology and Evolution

Applicants prepare a research proposal that corresponds to their scientific interests and to the research agenda of their hosting IIASA Program. Accepted applicants begin work before the summer by planning their research in close collaboration with their IIASA supervisors. Previous experiences with implementing and studying evolutionary or ecological models are important assets for working in EEP. To improve chances of being selected, potential applicants are encouraged to send informal inquiries regarding their specific research interests and plans to EEP's program leader Ulf Dieckmann (dieckmann@iiasa.ac.at).

Online applications will be accepted until Monday, January 14, 2013 (24:00 CET).

Since 1977, IIASA's annual Young Scientists Summer Program (YSSP), has attracted 1600+ students from 80+ countries. The YSSP 2013 will take place from June 1 to August 31. IIASA is located in the former summer palace of Austria's royal family, ca. 15 km south of Vienna. IIASA's summer program offers exceptional opportunities for acquiring experience in an international and interdisciplinary research environment. Research training is based on regular personal interaction with advising scientists, and typically leads to a publication in an international journal, as well as to a chapter in a candidate's PhD thesis.

Some useful links:

+ Details about the summer program, and online application <http://www.iiasa.ac.at/web/home/education/-yssp/Apply/Conditions-and-Eligibility.en.html> +

Information about IIASA's Evolution and Ecology Program <http://www.iiasa.ac.at/web/home/-research/researchPrograms/EvolutionandEcology/-New-page.en.html> + Examples of successful YSSP projects <http://www.iiasa.ac.at/web/home/-research/researchPrograms/EvolutionandEcology/-AbouttheProgram/Student-Participation-in-EEP.en.html> + General information about IIASA http://www.iiasa.ac.at/web/home/about/-whatisiiasa/what_is_iiasa.html

Ulf Dieckmann Program Leader Evolution and Ecology Program International Institute for Applied Systems Analysis A-2361 Laxenburg Austria

Email dieckmann@iiasa.ac.at Phone +43 2236 807 386 Phone secretary +43 2236 807 231 Fax +43 2236 807 466 or +43 2236 71313 Web <http://www.iiasa.ac.at/Research/EEP> Online reprints <http://www.iiasa.ac.at/~dieckman> FroSpects Network <http://www.iiasa.ac.at/Research/EEP/FroSpects> FinE Network <http://www.iiasa.ac.at/Research/-EEP/FinE> FishACE Network <http://www.iiasa.ac.at/-Research/EEP/FishACE>

Ulf Dieckmann <dieckmann@iiasa.ac.at>

Leipzig OpenCall for Workshops PostDocs Sabbaticals

Dear colleagues (sorry for cross-posting!),

We herewith announce the *first open call for Workshops, PostDocs and Sabbaticals *at the *Synthesis Centre for Biodiversity Research* (*sDiv*). sDiv is part of the newly established *German Centre for Integrative Biodiversity Research (iDiv)*: <http://www.idiv-biodiversity.de/idiv-global/?lang=en>. Please distribute this call among your colleagues and networks.

Initiating collaborations between scientists across the world is one of the central tasks of the Synthesis Centre for Biodiversity Sciences (sDiv) <http://www.idiv-biodiversity.de/sdiv/>. We have established sDiv that offers national and international workshops, postdoc positions and a sabbatical programme to foster theoretical and synthetic thinking and to boost scientific developments. sDiv is an important instrument of iDiv to foster theoretical and synthetic thinking in biodiversity sciences by bringing together researchers from different projects and disciplines and providing conditions that

promote the creative process.

Please have a look into the general call text document and the specific application templates: <http://www.idiv-biodiversity.de/sdiv/calls> The submission *deadline is April 1st.*

Please don't hesitate to contact with any kind of questions Marten Winter the scientific coordinator of sDiv (marten.winter@idiv-biodiversity.de).

Thank you very much! We are looking forward to receive your applications and to meet you here in beautiful Leipzig (Germany). With best regards from snowy Leipzig, Marten Winter

Dr. Marten Winter

Scientific Coordinator Synthesis Centre for Biodiversity Sciences - sDiv Wissenschaftlicher Koordinator Syntheszentrum - sDiv

German Centre for Integrative Biodiversity Research (iDiv) Universität Leipzig Deutscher Platz 5d 04103 Leipzig Germany

Phone: +49(0)341-97-31261 Fax: +49(0)341-97-31264
Email: marten.winter@idiv-biodiversity.de <http://www.idiv-biodiversity.de/sdiv/?lang=en> Marten Winter <marten.winter@ufz.de>

Massive open online courses in evolution

Hello EvolDir!

I just wanted to do a quick survey to ask if the list is aware of any Massive Open Online Courses in Evolution or related topics.

Massive Open Online Courses are learning platforms that scale teaching and instruction using the web, videos, assignments, discussion forums, and other forms of engagement.

MIT's open courseware, Google, P2PU, Coursera, Udacity, Udemy, and Lore are a few examples of platforms although there are others.

Here are two current implementations: EEB with Stephen Stearns by Yale on Udemy <http://www.udemy.com/evolution-ecology-and-behavior-122-with-stephen-c-stearns/> Introduction to Genetics and Evolution with Mohamed Noor by Duke on Coursera <https://www.coursera.org/course/geneticsevolution>
Please share instances of past courses, current offerings,

and future courses in the pipeline. These may be ones offered through a home university, a commercial entity, or even without direct institutional support Vanywhere in the world.

And finally, are any of the societies and/or synthesis centers developing directed, open, online education platforms for broadening engagement around evolutionary biology.

I will try to compile the responses and share with the list.

Kind Regards, Gabriel

Gabriel Harp | gabrielharp@gmail.com | +001 313-330-1012 | @gharp

Gabriel Harp <gabrielharp@gmail.com>

MissouriBotanicalGarden ResExperienceUndergrad

Missouri Botanical Garden, REU Opportunity, Summer 2013

The Missouri Botanical Garden is currently recruiting students for a Research Experience for Undergraduates Program (REU). This NSF-funded program provides full support for 10 students to work on mentored research projects for 10 weeks during the summer of 2013, from May 19 to July 28.

The MBG REU program focuses on the areas of plant systematics, conservation biology, and ethnobotany. Potential projects for this year include taxonomic description of new species and revisionary studies in Lythraceae, Araceae, Passifloraceae, and Tectariaceae (African ferns), DNA sequencing and phylogenetic analysis, DNA barcoding, pollen analysis, seed banking, conservation biology of threatened species, herbarium study of historically important collections, plants used as natural pesticides, and morphometrics of drought tolerance in native *Vitis* species. REU students have access to a herbarium of 6.2 million specimens, an excellent botanical library, rich garden collections, a 2,400 acre natural area, and a laboratory with facilities for plant anatomy, microscopy, digital imaging, SEM, and DNA analysis. Students are expected to work full-time on research and participate in twice-weekly lunch-time seminars and workshops, including subjects on botany, conservation, career development, ethics in research, writing, communication skills, and

preparation for graduate school.

Students receive lodging near the Garden, a food allowance, research and travel expenses, plus a \$500/week stipend.

The deadline for application is February 28, 2013.

For more information and application procedures please see the program website at <http://www.mobot.org/-mobot/research/reu/reu.shtml> or contact the REU Coordinator at reu@mobot.org, or the PI David Bogler (david.bogler@mobot.org).

David J. Bogler, PhD Missouri Botanical Garden P.O. Box 299, St. Louis, MO 63166-0299 Office: 314-577-0831 Fax: 314-577-0830 Email david.bogler@mobot.org

David J. Bogler, PhD | Missouri Botanical Garden | P.O. Box 299, St. Louis, MO 63166-0299 Office: 314-577-0831 | fax: 314-577-0830 | david.bogler@mobot.org | <http://www.davidbogler.com>

David Bogler <david.bogler@mobot.org>

MountainLakeBioStation EarlyCareerFellowships

Mountain Lake Biological Station 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. 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).

Please Post.

Yours, Melissa Ivy Wender Office Manager Mountain Lake Biological Station University of Virginia 223 Gilmer Hall 1-434-982-5486 www.mlbs.org "Wender, Melissa (miw2m)" <miw2m@eservices.virginia.edu>

NIMBioS support

March 1, 2013 is the deadline for requests for support for Working Groups, Investigative Workshops, Sabbaticals, and Short-term Visitors for activities beginning Fall 2013 at the National Institute for Mathematical and Biological Synthesis (NIMBioS). All areas of research at the interface of biology and mathematics will be considered. NIMBioS, located at the University of Tennessee-Knoxville, is an NSF-sponsored initiative to foster interdisciplinary research at the interface between mathematical and biological sciences. The institute's mission is to cultivate cross-disciplinary approaches in mathematical biology and to develop a cadre of researchers who address fundamental and applied biological problems in creative ways. Other NIMBioS sponsors include DHS and USDA, with additional support from the University of Tennessee-Knoxville. More details are posted at <http://www.nimbios.org> Sergey Gavrilts email: gavrila@nimbios.org web: www.tiem.utk.edu/~gavrila NIMBioS: www.nimbios.org gavrila@tiem.utk.edu

Phyloseminar FionaJordan Feb05

Next talk at <http://phyloseminar.org/>: "Testing hypotheses about cultural evolution" Fiona Jordan (University of Bristol)

Anthropologists had a name for the non-independence-of-species-problem way back in the 1880s. Solving "Galton's Problem", and the promise of comparative methods for testing hypotheses about cultural adaptation and correlated evolution was a major catalyst for the field of cultural phylogenetics. In this talk I will show how linguistic, cultural, and archaeological data is used in comparative phylogenetic analyses. The "treasure trove of anthropology" - our vast ethnographic record of cultures - is now being put to good use answering questions about cross-cultural similarities and

differences in human social and cultural norms in a rigorous evolutionary framework.

West Coast USA: 09:00 (09:00 AM) on Tuesday, February 05
 East Coast USA: 12:00 (12:00 PM) on Tuesday, February 05
 UK: 17:00 (05:00 PM) on Tuesday, February 05
 France: 18:00 (06:00 PM) on Tuesday, February 05
 Japan: 02:00 (02:00 AM) on Wednesday, February 06
 New Zealand: 06:00 (06:00 AM) on Wednesday, February 06

Note that despite the transition to the SeeVogh system please continue to use the system at <http://evo.caltech.edu/evoGate/> – Frederick “Erick” Matsen, Assistant Member Fred Hutchinson Cancer Research Center <http://matsen.fhcrc.org/> ematsen@gmail.com

Phyloseminar SimonGreenhill Jan16

Next talk at <http://phyloseminar.org/>: “Language phylogenies and cultural evolution” by Simon Greenhill (Australian National University)

Charles Darwin famously noted that there were many curious parallels between the evolution of species and languages. Since then evolutionary biology and historical linguistics have used trees to conceptualise evolution. However, whilst evolutionary biology developed the vast discipline of phylogenetic methods, linguistics dabbled with computational methods before rejecting them. The last decade or so has seen the introduction of phylogenetic methods into linguistics, often with some startling results. In this talk I will present some of these studies, and discuss how phylogenetics can help us grapple with the problems of linguistic and cultural evolution. These problems range from testing population dispersal hypotheses, to investigating the shape of cultural evolution, to inferring the rates at which languages change.

West Coast USA: 14:00 (02:00 PM) on Wednesday, January 16
 East Coast USA: 17:00 (05:00 PM) on Wednesday, January 16
 UK: 22:00 (10:00 PM) on Wednesday, January 16
 France: 23:00 (11:00 PM) on Wednesday, January 16
 Japan: 07:00 (07:00 AM) on Thursday, January 17
 New Zealand: 11:00 (11:00 AM) on Thursday, January 17

Note that despite the transition to the SeeVogh system please continue to use the system at <http://evo.caltech.edu/evoGate/> Frederick “Erick” Matsen, Assistant Member Fred Hutchinson Cancer Research

Center <http://matsen.fhcrc.org/> ematsen@gmail.com

REUProgram KelloggBiologicalStation

*Michigan State University Kellogg Biological Station (KBS)** *

Research Experience for Undergraduates (REU) Program

Field Based Ecology and Evolution

<http://www.kbs.msu.edu/education/internships-reu/nsf-reus-for-undergrads> The Kellogg Biological Station is currently accepting applications from highly motivated students for the Summer REU Program. REU students will live in residence at KBS and develop an independent research experience in conjunction with a research mentor. Tentative program dates are May 27th-August 2nd. REU students will be provided a stipend (\$3000–\$4500), free room and board, and potentially travel expenses. We encourage applications from students from underrepresented backgrounds in the sciences and students who have limited research opportunities at their home institutions. Funding for the REU program is provided by BEACON (An NSF Center for the Study of Evolution in Action), the Great Lakes Bioenergy Research Center (GLBRC), and individual NSF grants awarded to KBS faculty.

2013 REU Projects

Climate change and rapid evolution

Effects of climate change on Damsselfies

Invasive species ecology

Plant eco-physiology

Restoration ecology

Biological invasions

Ecological genetics

APPLICATION DEADLINE: FEB. 1st 2013

In addition to the REU program KBS offers initial research experiences through the Undergraduate Research Apprentice (URA) Program. URA students take a course at KBS, live in residence, and serve as research assistants to graduate students and post-docs. More information can be found at: <http://www.kbs.msu.edu/education/internships-reu/research-apprenticeship> . The Kellogg Biological

Station is located in southwest Michigan on the banks of beautiful Gull Lake. World renowned for its contributions to ecological science and evolutionary biology, the Station is home to one of the National Science Foundation's Long-Term Ecological Research sites, and is committed to science and ecology education, conservation of natural resources and sustainable agriculture research and demonstration. The 4,065-acre station includes Kellogg Bird Sanctuary, Kellogg Farm, the Kellogg Biological Laboratories, the KBS Conference Center, Extension and Outreach offices and the Lux Arbor Reserve. The nearby Kellogg Experimental Forest is closely affiliated with KBS.

More information on:

KBS (<http://www.kbs.msu.edu>)

BEACON (<http://www.beacon-center.org>)

GLBRC (<http://www.glbrc.org>)

Michael Grillo <grillom1@msu.edu>

Seewiesen Germany VolAvianFieldAssist

VOLUNTEER - TWO AVIAN FIELD ASSISTANTS FROM MARCH TO MID JUNE 2013- AGENCY: Max Planck Institute for Ornithology - **LOCATION:** Seewiesen, Bavaria, Germany. Dept. Kempenaers, Behavioural Ecology and Evolutionary Genetics. **SUBJECT:** Who is the perfect partner and how do individuals find him or her? Our research focuses on the evolution of mate choice, parental care, and promiscuity in birds. We study why individuals differ in their mating behaviour and how this affects their reproductive success and survival. For more information see http://www.orn.mpg.de/2612/Abteilung_Kempenaers. **JOB DESCRIPTION:** Monitoring nest and breeding activities of blue tits (*Cyanistes caeruleus*), catching and handling (banding and measuring) the birds. Maintenance of our electronic nest boxes, installation of experimental equipment, data entry and data management. Our study site is the Westerholz, a natural forest reserve near Landsberg am Lech. **QUALIFICATIONS:** You should have experience with bird handling, you are highly motivated and well organized, and able to work independently, while at the same time you function well in a group. You have a driving license and good driving practice for at least one year, and you are experienced in operating vehicles with manual transmission. The field

work is physically demanding and takes place under all weather conditions. The breeding season is intense with long working days, also on weekends and holidays. We will provide housing for living. Non-EU applicants should make sure that they are eligible for an extended stay in Europe. Accepted assistants need a vaccination against tick Borne Encephalitis (TBE or FSME) before starting field work. Applicants should be also aware that Lyme disease (carried by ticks) is prevalent in the area and should inform themselves about this disease beforehand. Applications will be accepted until 18th of February 2013 or until the positions are filled and should include (1) a statement that highlights relevant experience, and (2) a short resume or CV and contact information for references (up to 2). Please send your application to Agnes Türk, email: tuerk@orn.mpg.de Telefon: ++49 - (0)8157 - 932410 (Agnes Türk) oder ++49 - (0)8157 - 932335 (Andrea Wittenzellner)

Agnes Türk Max-Planck-Institut für Ornithologie Eberhard-Gwinner-Str. Haus 7 82319 Seewiesen

email: tuerk@orn.mpg.de Tel. 08157-932 410 Fax 08157-932 400

www.orn.mpg.de Agnes Tuerk <tuerk@orn.mpg.de>

Softare Avida-ED

Dear Evolution Community,

Avida-ED is a digital evolution education software platform, based on the research platform AVIDA, that can be used to teach about and do experiments on evolution.

The software is freely available at: <http://avida-ed.msu.edu/> We are interested in hearing from people who are or have used Avida-ED in their classrooms.

We are also almost ready to release the Avida-ED 2.0 Beta for MacOS and are looking for people interested in testing the new version (the 2.0 Beta for Windows will be ready late spring 2013). Please contact us now if interested in the Mac OS version (lsmead@msu.edu)

Thank you.

Avida-ED Team at Michigan State University

Louise S. Mead, PhD Education Director 567 WILSON RD BPS RM 1441 BEACON Center for the Study of Evolution in Action Michigan State University EAST LANSING, MI. 48824-6457 (517) 884-2560

Louise Mead <lsmead@msu.edu>

Biologie, Université Laval

Quebec City, Canada

pierre.duchesne@bio.ulaval.ca

Julie.Turgeon@bio.ulaval.ca

Software FLOCK 3 0

Dear EvolDir members,

A new version of FLOCK has been released:

FLOCK is designed to unravel genetic structure within a collection of genotypes, whether pure or admixed. It is assumed that pure, “source”, samples are not available. The program may be used to solve the “number (K) of populations” problem. When K is already known, it may be used to separate pure and admixed specimens into K groups. FLOCK is a non-Bayesian, non MCMC, method and therefore differs substantially from previous clustering algorithms and processing time is much shorter. Its working principle is repeated re-allocation of all collected specimens (total sample) to k subsamples.

The methods to map genetic admixture on a set of samples (K known) and to estimate the number of populations K were described respectively in:

Duchesne P, Turgeon J (2009) FLOCK: a method for quick mapping of admixture without source samples. *Molecular Ecology Resources* 9: 1333-1344

Duchesne P, Turgeon J (2012) FLOCK Provides Reliable Solutions to the “Number of Populations” Problem *Journal of Heredity* 2012; doi: 10.1093/jhered/ess038

A new version (3.0) of FLOCK is currently available. In this latest version, the criteria used to select the “best” run for a given value of the parameter k has been changed. In the two previous versions, the run with the highest Mean LLOD was selected. A set of runs that repeatedly generate an identical k-partition of the genotypes is termed a “plateau” and their number the “plateau length”. Recently, a large number of simulations have shown that runs that belong to the longest plateau generate more accurate partitions (references) generally. Therefore this version selects as “best” one run among those that have produced the largest set of identical partitions.

FLOCK 3.0 can be downloaded at:

http://www.bio.ulaval.ca/no_cache/departement/-professeurs/fiche_des_professeurs/professeur/11/13/
Pierre Duchesne

Julie Turgeon

Software Paternity

Dear Evoldir members,

I have just released an application called Uncertain_Paternity_Coancestry (UPC).

This programme is intended to calculate the coancestry matrix for a pedigree when uncertainty about the parents of some individuals exists. We may have individuals with more than one possible father and/or mother. Then, probability of receiving an allele from these potential parents has to be divided between them, following the approach presented in Pérez-Enciso (1995). All candidates are assumed to be equally probable. The software also provides a simple pedigree analysis that could be restricted to a portion of the genealogy (what will be called the ‘cohort of interest’). Average inbreeding and coancestry, founder contributions, effective number of founder and non-founders as well as founder genome equivalents will be calculated. Realise that although averages will be calculated for the indicated individuals (the cohort of interest), particular values account for the whole pedigree.

Software can be freely downloaded from my personal web page (see address below). Hope somebody find it useful.

Best regards.

Jesús Fernández Martín Departamento de Mejora Genética Animal 34-91 3471487 Instituto Nacional de Investigación y 34-91 3478743 (FAX) Tecnología Agraria y Alimentaria (INIA) jmj@inia.es Crta. A Coruña Km. 7,5 28040 Madrid (SPAIN)

<http://dl.dropbox.com/u/5714008/Fernandez.htm>

Jesús Fernández Martín <jmj@inia.es>

SouthAfrica Volunteers
EvolStripedMice

2 volunteers needed from May / June 2013 onwards

2 volunteers needed from August 2013 onwards

as field assistants for the project:

Evolution and Socio-Ecology of small Mammals in the Succulent Karoo of South Africa

Opportunity: This is a great opportunity for anybody who wants to get more experience in field work relating to eco-physiology, animal behavior, evolution, and ecology before starting an MsC or PhD project.

Project: We study the evolutionary and ecological reasons as well as physiological mechanisms of group living, paternal care, communal nesting and social flexibility in the striped mouse. One focus is on the adaptation to droughts, combining physiological, behavioral, ecological and evolutionary research. As this species is diurnal and the habitat is open, direct behavioral observations in the field are possible.

What kind of people are needed? Biology/zoology/veterinary students are preferred as candidates. Applicants must have an interest in working in the field and with animals. Hard working conditions will await applicants, as the study species gets up with sunrise (between 5 and 6 o'clock), and stops its activity with dusk (19 o'clock). Work during nights might also be necessary. Work in the field will be done for 5 days a week. Applicants must be able to manage extreme temperatures (below 0 at night in winter, sometimes over 40C during summer days). Applicants must both be prepared to live for long periods in the loneliness of the field and to be part of a small social group.

Work of field assistants: Trapping, marking and radio-tracking of striped mice; direct behavioral observations in the field. Volunteers will also see how blood samples are collected for physiological measurements. Volunteers are expected to help with maintenance of the research station (water pump, solar power, etc.).

Confirmation letter: Students get a letter of confirmation about their work and can prepare a report of their own small project to get credit points from their university for their bachelor or masters studies.

Costs: Students have to arrange their transport to the field site themselves. Per month, an amount of Rand 1250 (around 180 US\$, 120 Euro) must be paid for accommodation at the research station. Students must buy their own food etc in Springbok (costs of about R 2500, approx. 360 US\$ or 250 Euro/month). Including extras (going out for dinner; shopping), you should expect costs of about 600 US\$, 450 Euros per month. Students get an invitation letter which they can use to

apply for funding in their home country.

Place: The field site is in the Goegap Nature Reserve near Springbok in the North-West of South Africa. The vegetation consists of Succulent Karoo, which has been recognized as one of 25 hotspots of biodiversity. It is a desert to semi-desert with rain mainly in winter (June to September).

When and how long: At the moment we are looking for 2 volunteers starting in May / June and 2 in August 2013. Volunteers are expected to stay at least three months, but longer periods of up to 6months are preferred.

How to apply? Send a short motivation letter stating why and for which period you are interested and your CV via email to succulent.karoo.research.station@kabelbw.de.

More information under

http://stripedmouse.com/site1_3-5.htm

Contact via e-mail: succulent.karoo.research.station@kabelbw.de

Succulent Karoo Research Station

Dr. Carsten Schradin (Director)

South Africa

The research station is a South African non-profit organization

Carsten Schradin <carsten.schradin@iphc.cnrs.fr>

SouthTexas Spea bombifrons TissuesSought

SOUTH TEXAS SPEA BOMBIFRONS TISSUE SOUGHT

I am an undergraduate student at Lehigh University working on an independent research project. I am studying a disjunct population of Plains spadefoot toads (*Spea bombifrons*) found in South Texas. I am studying genetic divergence between this population and populations from the remainder of the range. I have access to tissue samples from many locations except for this southern Texas region. Most museum samples I have found are in formalin, which makes DNA work more difficult. I would appreciate hearing from anyone who would be willing to share tissue samples of *S. bombifrons* collected from any of the following coun-

ties: Aransas, Bee, Brooks, Cameron, Dimmit, Duval, Goliad, Hidalgo, Jim Hogg, Jim Wells, Kenedy, Kleberg, La Salle, Live Oak, McMullen, Nueces, Refugio, San Patricio, Starr, Webb, Willacy, Zapata.

Any help will be greatly appreciated!

Please contact me at:

rfs214@lehigh.edu

Thank you in advance for your help. Rebecca Silverman

amr511@lehigh.edu

Switzerland Field Assist Great Tits Evol

Field assistants in evolutionary ecology of Great tits (*Parus major*), Switzerland

I am seeking two highly motivated field assistants interested in taking part in field studies in Bern, Switzerland. Applicants will be part of the evolutionary ecology team (Institute of Ecology and Evolution, University of Bern).

The project aim to investigate maternal effects induced by increased predation risk and is based in a forest in Bern (Switzerland)

I will require field assistants that will help with all the aspects of the work, including checking nests, ringing and taking body measures of the birds, catching adults, performing treatments, and some smaller amount of lab work. Applicants with a Msc in Biology/Ecology and/or with bird handling or field experience would have an advantage, but motivation will play a key role; the work is hard and demanding, takes place in changing weather and requires long hours at times. The study will start around the 15th of March 2013 until mid-June 2013. Fluent English, French or Italian speaking and a valid European driving license are required.

Travel expenses and accomodation will be paid and the field assistants will receive approximately 900 Swiss Francs per month to cover the expenses.

Applicants can send a letter of motivation, a CV and ask for further details or questions to:

Alessandra Basso (Institute of Ecology and Evolution, University of Bern) E-mail: alessandra.basso@iee.unibe.ch

alessandra.basso@iee.unibe.ch

Training in phylogeny

Dear all,

We are highly interested in gathering information about courses or trainings on (i) phylogenetic reconstructions and (ii) high-throughput sequencing techniques.

If you know one, would you please be so kind to let us know ? We are notably interested in answering the following aspects :

- Regarding phylogenetics : i) learn the general methods of tree reconstruction ii) get specific guidelines for methods choice in tree reconstruction iii) how to produce phylogenetic trees from biological material ? iv) how to use phylogenetic trees to analyse patterns of geographic distribution, or phenotypic evolution? v) learn to use specific softwares vi) ...

- Regarding high throughput sequencing : i) learn how to choose the best general methods for one's question ii) learn to use specific programs or applications iii) how to design the biological experiment at best for the appropriate methodology ? iv) ...

Any suggestion would be strongly appreciated. Thank you very much in advance !

Best regards,

Gwennaël Bataille, on behalf of Professor Caroline Nieberding

< gwennael.bataille@uclouvain.be >

- Gwennaël BATAILLE, PhD student - Teaching assistant

Earth and Life Institute Université Catholique de Louvain SST/ELI/ELIB Bâtiment Carnoy, c.145 Croix du sud 4-5, bte L7.07.04 1348 Louvain-la-Neuve BELGIUM

gwennael.bataille@uclouvain.be

Translational Bioinformatics

Dear Colleagues,

Sorry for multiple copies. Dr. Ju Han Kim has kindly share this e-mail address so I can communicate this to you.

Just to let you know that we have published the Translational Bioinformatics book in PLOS-CB (first open access book in PLOS) and the ebook just come out.

<http://blogs.plos.org/biologue/2012/12/28/-translational-bioinformatics-plos-computational-biology-presents-an-educational-resource-for-an-emerging-field/> The epub file went live yesterday and is downloadable from the collection page:

www.ploscollections.org/translationalbioinformatics
It's also in mobi format for Kindle users. If you don't have an ipad/tablet/ereader to view the epub or mobi file on, you should be able to view it on Firefox if you download this add-on:<https://addons.mozilla.org/en-US/firefox/addon/epubreader/> Phil Bourne wrote an nice editorial about it that has just been published as a blog post on PLOS Biologue (the PLOS Biology blog): <http://blogs.plos.org/biologue/2013/01/23/lets-make-those-book-chapters-open-too/> and it will be published in PLOS CB as an editorial in February.

This textbook is good introduction to many topics in the emerging field of Translational Bioinformatics, and it is free and accessible to all. Please help me let the world know about it (tweet, Facebook, any other suggestions?) Also, watch out for more chapters that are coming up in a few weeks.

Thanks to all of you that help me to complete this project.

Maricel. Dr. Maricel G. Kann Assistant Professor Dept of Biological Sciences University of Maryland, Baltimore County 1000 Hilltop Circle, Baltimore, MD 21250 email: mkann@umbc.edu <http://www.umbc.edu/biosci/general/user/mkann> <http://bioinf.umbc.edu/dmdm> Phone: 410-455-2258 lab: 410-455-2062 Fax: 410-455-3875

Maricel Kann <mkann@umbc.edu>

UArizona lab technician

A Laboratory Technician position is available in the laboratory of Dr. Richard E. Michod (<http://www.eebweb.arizona.edu/Michod/>) in the Department of Ecology and Evolutionary Biology at the University of Arizona, Tucson (<http://www.eebweb.arizona.edu>). We are looking for a motivated, enthusiastic and inde-

pendent individual with a biological science background (molecular / cell biology is preferable). Responsibilities will include:

(1) Daily management of the laboratory, comprising tasks such as ordering materials, maintaining cell culture stocks, preparing reagents and glassware and providing a supportive role for researchers in the lab.

(2) Contributing to research projects as required. The main project currently requiring an assistant involves the identification of genes implicated in the origin of multicellularity in the volvocine green algae.

Attributes deemed necessary for this position are good organizational and time management skills and a good work ethic. Although molecular biology skills are preferred, the necessary training will be provided.

Salary range for full-time employment depends on background and experience. The position budgeted in a NASA grant is in the \$22,600 - \$28,000 range p.a.. A probationary period applies. We are flexible as to whether the position is part-time or full-time.

Official job listing at UA Human Resources: www.uacareertrack.com/applicants/-Central?quickFind=7069

Please contact Dr. P. Ferris (pjferri56@gmail.com) with any questions.

–

Erik R Hanschen PhD Student, Michod Lab Department of Ecology and Evolutionary Biology University of Arizona

“Nothing in biology makes sense except in the light of evolution.” -Theodosius Dobzhansky, 1973

hanschen@email.arizona.edu

UBern Field Assist Great Tits

I'm seeking 2 enthusiastic field assistants interested in taking part in a field experiment in Bern, Switzerland. Our study model is the great tit, *Parus major*; we work with individuals that are breeding in nest-boxes in forests near Bern. The study investigate the relationship between secondary sexual signals and oxidative stress.

We need 2 field assistants that will help with all the aspects of the work, including checking nests, ringing the birds, catching adults, performing treatments, working

in the lab and inserting data. Applicants with a Msc in Biology/Ecology, with bird handling and/or lab experience would have an advantage. Motivation will play a key role; the work is hard and demanding, takes place in changing weather and requires long hours at times. The study will start at the beginning of April 2013 until the end of June 2013. Fluent English speaking and a valid European driving license are required. Travel expenses and accommodation are paid and a salary of about 900 swiss francs is provided.

Applicants can send a letter of motivation and a CV and ask for further details or questions to this email address: viviana.marri@iee.unibe.ch

Viviana Marri Institute of Ecology and Evolution University of Bern Baltzerstrasse 6 3012 Bern

viviana.marri@iee.unibe.ch

UWinnipeg Bat Volunteers

Volunteer Field Assistants wanted for White nose syndrome Bat project in Canada

Volunteers wanted from Mid April to the end of May 2013 to assist with a field project on little brown bats (*Myotis lucifugus*) and factors which may be important in managing the disease white nose syndrome (WNS) currently wiping out colonies of hibernating bats in the USA and Canada.

Field work will take place in Manitoba and Ontario in multiple teams each led by an experienced local crew leader. Team volunteers will assist with capture and handling of individual bats as they emerge from hibernacula (caves or mines) in the spring, outfitting bats with passive transponders (PIT tags) and deployment of PIT-tag recording systems. This is an excellent opportunity to obtain training and gain experience in field research with bats, disease ecology and basic electronics.

Food and accommodation in the field will be provided as will return travel to and from Winnipeg at the beginning and end of fieldwork. Accommodation will be basic; either camping or in rustic cabins. Training will be provided and no experience is necessary but candidates should have an interest in ecology, wildlife, field biology and animal behavior. A large amount of time will be spent camping or in basic accommodation in all weather conditions and, as such, successful applicants need to love the outdoors, be up-beat, positive, respon-

sible and work well as part of a team.

In addition to work from April to May, there is the possibility of renewal of some of these positions from late July to late September depending on performance. If you have any further questions or wish to apply for one of these posts please send a CV with a cover letter and contact details of three references (with email addresses) by email to Mary-Anne Collis (macollis@gmail.com) by 15th February 2013.

Contact:

macollis@gmail.com

Department of Biology, University of Winnipeg, 515 Portage Avenue Winnipeg, Manitoba CANADA R3B 2E9

Cell: 001 (204) 230 0756

Skype: [macollis1984](https://www.skype.com/people/macollis1984)

macollis@gmail.com

UZurich FieldAssist GreatTitsEvol

Field assistant position April-May 2012. Evolutionary biology of Great tit. University of Zurich

Internship position in evolutionary ecology of Great tits (*Parus major*), Switzerland.

We are looking for enthusiastic internship students interested in joining us for a field study on great tits in Zurich, Switzerland.

This work will give you insights into exciting experimental fieldwork with wild birds. It is part of a larger project that aims to investigate causes and evolutionary consequences of maternal effects in birds. The project is based at the University of Zurich, Institute of Evolutionary Biology and Environmental Studies, under the supervision of Prof. Dr. Barbara Tschirren <http://www.ieu.uzh.ch/research/evolbiol/immuno.html> Internship students will help with all aspects of the project, including checking nests, ringing and measuring nestlings, catching adults, performing treatments, etc. Experience with bird handling or field work is a plus, but motivation is even more important. Physical fitness is essential for this internship position. Be prepared for a lot of cycling and walking, rainy and cold weather, and very long days during the peak breeding period (approx. 3 weeks).

The study will start around April 1st 2013 until May

31st. The working language is English. Internship students will receive CHF 1200.- / month to cover travel, accommodation, food and other expenses.

Applications - including a CV and a short letter of motivation ? should be sent to:

Marta Giordano: marta.giordano@ieu.uzh.ch

For further information feel free to contact me marta.giordano@ieu.uzh.ch

marta.giordano@ieu.uzh.ch

Webcast Princeton OriginOfLife Jan21-24

please post immediately: Princeton Origin of Life Webcast

To watch a live stream of this conference click on the link (and login as guest) <http://connect.arc.nasa.gov/-ool2013> NAI and SBE Satellite Workshop on the Origin of Life 21-24 January 2013 Princeton University Center for Theoretical Science

<http://www.pctp.princeton.edu/pcts/-Originoflife2013/Originoflife2013.html> Organizers:
Laura Landweber and Aaron Goldman

The last few decades have witnessed the burgeoning of many highly productive lines of investigation into abiogenesis and the early emergence of biological complexity. Planetary sciences and geochemistry have produced a short-list of well-studied settings where prebiotic chemistry may have led to the transition from non-living to living matter. Major advances in abiotic syntheses of important biomolecules have resulted in an improved understanding of the relative availabilities of proto-biomolecules. The continuing growth of bioinformatics databases has given computational biologists an unprecedented ability to reconstruct the properties of early organisms and ancient evolutionary histories. Synthetic biology now allows investigators to examine the boundaries of life's genetic systems and minimal life in the laboratory. In general, the advance of astrobiology has expanded our understanding of habitability and life as cosmological phenomena. This workshop will integrate these themes, foster new local, national and international collaborations, and actively encourage scientists from within and outside the Princeton community to pursue studies of life's origins. The workshop program will bring together researchers in these dis-

parate subjects and subfields to address the questions of life's origins in the astronomical, chemical, genetic, evolutionary, and information-theoretic contexts.

To watch a live stream of this conference click on the link (and login as guest) <http://connect.arc.nasa.gov/-ool2013> Laura Landweber <llf@princeton.edu>

iPad app for Evolution

Roberts and Company Publishers - News from the Press

iPad Apps

Chapters 1-8 of Carl Zimmer and Doug Emlen's Evolution: Making Sense of Life iPad app will be available 10/19/12 in the Apple app store. Chapters can be purchased individually for \$4.99 up to \$9.99. Chapters 1 and 8 (on natural selection) can be downloaded at no charge.

Peter Grant at Princeton University describes the book this way: "Two master craftsmen in the art of scientific communication have combined to produce an excellent basic text on Evolution: it informs, explains, and inspires."

We hope the interactive app will make learning even more inspirational and educational. The authors have used various techniques to prompt students from reading passively into actively working with the concepts; for instance, they have added hundreds of reading comprehension questions, so students receive immediate feedback as they read. Many of these questions are not only motivating, but they also address common misconceptions.

Soaring Textbook Prices

As a company, we're taking seriously the problem of soaring textbook prices. As proof, we recently slugged Whitlock and Schluter's The Analysis of Biological Data into a cool Amazon price tracker. The average price of the book (since publication in 2009) was \$85.74. We thought this was too high, though we were somewhat relieved when we looked at the book's major competitors. Samuels and Witmer has an average price of \$126.42. Zar's average price is \$128.10. And Moore and Baldi's average price is \$127.12. Now used at well over 100 schools, Whitlock and Schluter is no doubt the gold standard for teaching biological statistics. Students who use the book not only get a great read, full of

fascinating and relevant biological examples, but they also save on average over \$41.

Tree Thinking

We're pleased to announce the publication of David Baum and Stacey Smith's *Tree Thinking: An Introduction to Phylogenetic Biology*.

Jack Sullivan, President of the Society of Systematic Biologists, says "Tree thinking will be a critical tool in

the arsenal of those of us who train the next generation of evolutionary biologists."

To celebrate the book's publication, we're offering it for \$37.50 (50% off the list price) until November 15th. Use coupon code TREE. Offer does not include shipping of \$5.00. Limit one copy per customer.

Ben Roberts <bwr@roberts-publishers.com> Ben Roberts <bwr@roberts-publishers.com>

PostDocs

BrighamYoungU PlantEvoDevo	85	flow	103
CNRS France FishAdaptation	85	UAntwerp SongbirdEvolution	104
CaliforniaAcademySciences EvolutionBiodiversity	86	UArizona EvolutionaryPhysiology	104
CityUNewYork MarineGenomics	86	UArizona ProteinEvolvability	105
CzechRepublic GenomicsTranscriptomics	87	UBasel HostMicrobeInteractions	105
CzechRepublic ImmuneGeneEvolution	88	UBrest MarineInvertebrateEvoDevo	105
FrenchGuiana ForestPopulationGenomics	88	UBritishColumbia ProtistEvolution	106
Heidelberg ExelixisLab HomeOfRAxML	89	UCIrvine ButterflyVisionTranscriptomics	106
INRA France Evolution Bacillus cereus	89	UCalgary ParasitePopulationGenomics	107
INRA France Evolution Bacillus cereus 2	90	UChicago 2 EvolHumanGeneRegulation	108
IowaStateU EvolutionaryEcol	90	UCollegeCork Ireland FishQuantGenetics	108
IowaStateU InsectResistance	91	UCopenhagen ArthropodBiodiversity	109
IowaStateU TurtlePhyloGenomics	91	UEdinburgh BacterialEvolutionaryGenomics	110
Lyon ReconstructingGenomes	92	UExeter 2 EvolutionMicrobialCommunities	111
MaxPlanck Ploen 3 EvolutionaryGenetics	93	UFlorida SeasonalAdaptation	111
MaxPlanck Tuebingen Sticklebacks	93	UGeorgia EvolutionDiseases	112
McGill PopulationGenetics	94	UGothenburg SpeciationGenomics	113
Montpellier EcoEvolutionaryModeling	95	UHelsinki FungalPathogenEvolution	113
Montpellier TheoreticalEvolution	95	UHull Microbial shape evolution	114
NHM London CropWildRelativesEvolution	96	UKansas SoftwareForLargeGeneTrees	114
NHM Oslo IntraspecificDivergenceInPasserines	96	ULiverpool MothMelanismPopGen	115
NIST UMaryland Bioinformatics	97	UMichigan ComputationalEvolutionaryBiology	115
NMNH Paris GorillaAdaptation	98	UNewOrleans EvolutionaryBiol	116
OregonStateU EvolutionaryGenetics	98	UOregon HostMicrobeInteraction	117
OregonStateU FounderEffects	99	UOslo DiseaseEvolution	118
Paris DemographyPolymorphism	99	UParisSud ProtistDiversity	119
Roscoff France MolecularEvolution	100	USouthernCalifornia ComputationalGenomics	119
RutgersU FungalPathogenGenomics	100	UStrasbourg EvolutionaryPhysiology	120
SangerInst ParasitePopulationGenomics	101	USussex SocialWasps	121
SeoulNatIU EvolutionDiseaseResistance	102	UTroms AncientDNA	121
TrentU ContemporaryEvolGenomics	102	UVermont PlantEvolutionaryGenetics	122
UAlabama Birmingham ComparativeAnalysisWork-		UWisconsin Madison PopulationGenomics	122

UWisconsin Madison TropicalMammalEvolution . 123	Wageningen BehaviouralMolecularEpigenetics 126
UWyoming UCaliforniaSantaCruz EvolProteinInterac- tion 123	Wageningen EvolutionEpigenetics 126
UYork ExperimentalEvolution 124	Yale FreshwaterBiodiversityModeling 127
UppsalaU EvolutionMulticellularity 124	Yale HierarchicalEcologicalModeling 127
UppsalaU EvolutionaryBiology 125	Yale VertebrateMacroevolutionMacroecology 128

BrighamYoungU PlantEvoDevo

A postdoctoral position is available in the laboratory of Clinton Whipple (whipplelab.byu.edu) at Brigham Young University to work on an NSF funded project investigating the genetic networks of bract suppression. The successful candidate will employ a variety of approaches to reveal the bract suppression network in maize (*Zea mays*) including positional cloning of maize mutants, laser capture micro-dissection and transcriptome profiling (RNA-seq). The candidate must have a PhD in Plant Biology, Mol/Cell biology or related field. A strong background in molecular biology, including PCR, cloning and sequence analysis, excellent oral and written communication skills, and willingness to mentor undergraduate students are required. Candidates with an interest in plant evo-devo hoping to gain experience with functional characterization are particularly encouraged to apply. Funding is available for multiple years beginning May 1st, 2013.

Interested candidates should send a cover letter describing their research interests and background, reasons for interest in this project, a CV and contact information for at least two references to whipple@byu.edu.

Clinton Jeremy Whipple <whipple@byu.edu>

CNRS France FishAdaptation

The “Environment and Adaptive Mechanisms” group at the marine station of Banyuls/mer (66 -France) invites applications for a postdoctoral fellow to participate in a study funded by the French National Research Agency (ANR).

This project aims at understanding how photoperiod and temperature interact in the synchronization of

Salmonids physiological functions. It combines molecular ecology and neuroendocrinology to understand how fish perceive temperature and its role in the Atlantic salmon smolting process and migration in the context of global warming. Future work on this project will consist of organ culture, cloning, sequencing, and performing pharmacological tests, tissue localization by /in situ/ hybridization and/or immunocytochemistry. The candidate will also participate in animal experimentation and sampling, train master student and write publications.

The applicant should hold a PhD in either ecophysiology, neuroendocrinology, evolutionary biology or related discipline. The ideal candidate will have a strong interest and an advanced experience in theories and techniques of molecular and cellular biology. Knowledge of the literature on fish physiology or pharmacology desired but not required. The candidate should have at least one first authored publication in press.

The position is available first trimester of 2013 for one year but funding is available for an extension contingent on annual progress. Please send a C.V., statement of research interests and career goals (2 pages), pdfs of papers, and contact information (emails and phone numbers) for at least 3 references to Dr. Jack Falcón, falcon@obs-banyuls.fr; please put /Postdoctoral Applicant/ in the Subject Line.

–

Dr Elodie Magnanou BIOM - Biologie Intégrative des Organismes Marins UMR 7232 CNRS - Université P et M Curie Laboratoire Arago 66 650 Banyuls sur Mer

Phone : +33 4 30 19 24 02 Fax : + 33 4 68 88 73 93

e-mail : elodie.magnanou@obs-banyuls.fr web : <http://elodie.magnanou.free.fr> Please, consider the environment before printing this e-mail.

elodie.magnanou@obs-banyuls.fr

California Academy of Sciences Evolution and Biodiversity

Postdoctoral Research Position Microbial Biodiversity, Genomics, and Bioinformatics California Academy of Sciences San Francisco

A postdoctoral position is available for a broadly trained, highly motivated and enthusiastic individual at the California Academy of Sciences to investigate the microbial biodiversity of mosquitoes. Due to their blood-feeding habits, mosquitoes have close coevolutionary relationships with specific communities of endosymbionts. At the same time, mosquitoes are important vectors of infectious diseases. We seek to explore the evolutionary and ecological relationships of mosquitoes and their microbes. The ideal applicant will have strong experience in microbial metagenomics, virology, bacteriology, computational biology and/or entomology and a demonstrated expertise in next-generation sequencing technologies and bioinformatics tools, as well as excellent written and oral communication skills. The successful candidate will be expected to work independently on our collaborative study on the biodiversity of microbial communities in disease vectors while contributing to genomic and collection-based resources at the Academy, in synergy with the Bennett Lab focused on virus evolution and microbial biodiversity. Located in San Francisco's beautiful Golden Gate Park, the Academy offers state-of-the-art research facilities including new MicroLife research facilities and the Center for Comparative Genomics, and a community of active scientists in the areas of evolution, ecology, genetics, entomology, microbiology and virology. The position is available immediately for at least one year, with the possibility of renewal based on mutual satisfaction. If interested, please email a cover letter outlining your research experience and interests, a curriculum vitae and contact information for 3 referees to:

Shannon Bennett sbennett@calacademy.org <http://research.calacademy.org/> Associate Curator of Microbiology California Academy of Sciences 55 Music Concourse Drive San Francisco, CA 94118 p. (415) 379-5334

SBennett@calacademy.org

City University of New York Marine Genomics

Multiple Postdoctoral Positions in Marine Molecular Ecology and Genomics at the City University of New York (CUNY)

The recently established molecular ecology laboratory at Brooklyn College (CUNY) is recruiting 2 Postdoctoral Fellows for positions in Marine Molecular Ecology and Genomics, with anticipated start dates in March, 2013. The research of our lab (<http://www.ieu.uzh.ch/~agwilson>) focuses primarily on the study of the evolution of reproductive complexity in aquatic environments, using a combination of field, laboratory and experimental approaches to investigate how selective pressures contribute to the evolution of reproductive diversity across space and time. Molecular methods are an integral component of this work, and recent advances in high-throughput functional genomics in our lab are providing unique insights into the early development of complex reproductive systems.

We are seeking highly motivated candidates with demonstrated experience and interests in marine evolutionary ecology and/or genomics, interested in developing independent research projects integrating molecular and organismal research. Candidates should have experience in the assembly and analysis of genomic data for non-model organisms and/or expertise in the design and management of lab and field experiments in nearshore marine environments. Exceptional applicants will have experience in both areas.

The host laboratory offers a state-of-the-art molecular laboratory and wet lab facilities equipped with three 5000L climate-controlled marine aquarium systems for experimental work. Opportunities for field research are possible at research sites in Australia, Europe and America. A 16-core Xeon Server and 10 TB file system are available on-site for moderate-throughput applications in bioinformatics/phylogenetics, and access to the CUNY's high-performance computing center (<http://www.csi.cuny.edu/cunyhpc/>) will enable data-intensive research projects.

Brooklyn College is a senior college of the CUNY system, located on a leafy 26-acre campus in Brooklyn, New York, one of the most culturally diverse areas of the city, with a dynamic arts and music scene. Regularly cited as one of the top urban environments in the US, Brooklyn is located at the southern tip of Long

Island, offering ready access to both the seashore and the bright lights of NYC.

Applications should be submitted as a single PDF file, consisting of a CV and list of publications, a 1-2 page statement of research interests, and three academic references, with the subject line, "CUNY-MESearch". The application deadline is February 14, 2013. Informal enquiries concerning these positions and other research opportunities in the lab are welcome, and should be made directly to Tony Wilson (tony.wilson@ieu.uzh.ch).

Sincerely yours,

Tony Wilson

Tony Wilson Associate Professor, Evolutionary Biology Department of Biology Brooklyn College 2900 Bedford Avenue Brooklyn, NY, 11210 United States

<http://www.ieu.uzh.ch/agwilson> Tony Wilson
<tony.wilson@ieu.uzh.ch>

Czech Republic Genomics Transcriptomics

POSTDOCTORAL RESEARCH POSITION 29 MONTHS, FIXED-TERM, FROM FEBRUARY 2013
APPLICATIONS CLOSE 15 JANUARY 2013

TOPIC: The evolution in plant polyploid species, interaction between plants and mycorrhizal fungi, genomics and transcriptomics of plant mitochondria

ACADEMY OF SCIENCES OF THE CZECH REPUBLIC

Three postdoctoral positions are available in team of Helena Storchova at the Institute of Experimental Botany, Czech Academy of Sciences, located in Prague, Czech Republic (<http://www.ueb.asuch.cas.cz/-Reprodukce.rostlin/index.html>) from February 2013 to June 2015. Formal appointment is at the Institute of Botany, Czech Academy of Sciences in Prague, as a part of a large project with 10 postdoctoral positions. A tight collaboration with the Institute of Botany is expected, putting together "white" and "green" biology.

THE STUDY OF POLYPLOIDIZATION AS A DYNAMIC PROCESS AFFECTING PLANT VARIATION

The analysis of the transition between vegetative and reproductive phases of the life cycle across the genus *Chenopodium*. Integration of phylogenetics and developmental studies (evo-devo approach) using transcriptomics to shed light on the evolution of floral transition in this very diverse genus comprising species of various ploidy levels.

THE STUDY OF PLANT GENOME AND TRANSCRIPTOME AS DYNAMIC PROCESSES AFFECTING PLANT VARIATION

The study of coexistence of multiple lineages of arbuscular mycorrhizal fungi in a root system of higher plants. Utilization of transcriptomic and genomic approaches to understand mutual relationships and interactions among the fungal symbionts and their host.

THE APPLICATION OF NEXT GEN SEQUENCING TO THE STUDY OF COMPLEX PLANT GENOMES

Application of next generation sequencing for the study of highly complex plant genomes, containing frequent repeats owing to the polyploidization, gene duplication or recombination. Integration of genomic and transcriptomic methods for the analysis of differential expression, generation of transcription maps of specific genomic regions, and distinguishing gene expression of the parental genomes of the polyploids.

QUALIFICATIONS - PhD in Biology or Biochemistry, basic skills in molecular biology, deep interest in plant biology are required - bioinformatic experience is an advantage for the first two positions and required for the last position

SALARY 45 000 CZK, c. 1800 EUR per month

APPLICATION PROCEDURE Consult full documentation, available at: http://www.ibot.cas.cz/sites/-File/prac_mista/vyberove%20rizeni_postdoci_AJ.pdf

For this position, code is 'Selected position: postdoc No. 5, 6, 7

Please explain your previous work and motivation to apply for this position in your Cover Letter.

For informal enquires and more details (encouraged), please email storchova@ueb.cas.cz OR hstorchova@alaska.edu

Helena Storchova Institute of Experimental Botany Academy of Sciences of the Czech Republic Rozvojova 263, 165 02 Praha Czech Republic http://www.ueb.asuch.cas.cz/Reprodukce_rostlin/index.html
Karol.Krak@ibot.cas.cz

CzechRepublic ImmuneGeneEvolution

POSTDOCTORAL RESEARCH POSITION 29 MONTHS, FIXED-TERM, FROM FEBRUARY 2013

APPLICATIONS CLOSE 15 JANUARY 2013

TOPIC: Diversity of immune genes in ecological context

ACADEMY OF SCIENCES OF THE CZECH REPUBLIC

One postdoctoral position is available in team of Josef Bryja at the Institute of Vertebrate Biology, Czech Academy of Sciences, located in Studenec, Czech Republic (<http://www.ivb.cz/departmens-department-of-population-biology.html>) from February 2013 to June 2015. Formal appointment is at Institute of Botany, Czech Academy of Sciences in Prague, as a part of a large project with 10 postdoctoral positions.

PROJECT The aim is to analyze relationship between variability in immune response (immune genes) and diversity of pathogen communities using comparative approaches and state-of-the-art methods for genetic analysis (next-generation sequencing). Results will be interpreted in ecological and evolutionary context (life history, population ecology and environmental and geographic parameters). Model taxa consist of European and Afrotropic passerine birds and murid rodents.

The project combines immunogenetics and evolutionary ecology and is based on comparative (interspecific and interpopulation) approach. Close collaboration with leading European laboratories is expected.

QUALIFICATIONS - PhD in Biology and experience with basic molecular genetics is required - competence in next-generation sequencing would be advantage (as complementary to our expertise)

SALARY 45 000 CZK, c. 1800 EUR per month

APPLICATION PROCEDURE Consult full documentation, available at: http://www.ibot.cas.cz/sites/-File/prac_mista/vyberove%20rizeni_postdoci_AJ.pdf

For this position, code is Selected position: postdoc No. 1.a.2

Please explain your previous work and motivation to apply for this position in your Cover Letter.

For informal enquires and more details (encouraged),

please email bryja@brno.cas.cz

Josef Bryja Institute of Vertebrate Biology Academy of Sciences of the Czech Republic 675 02 Studenec 122 Czech Republic <http://www.ivb.cz/staff-doc-mgr-et-mgr-josef-bryja-ph-d.html> Josef Bryja <bryja@brno.cas.cz>

FrenchGuiana ForestPopulationGenomics

Post-doc position in population genomics and ecological genetics of tropical forest trees

A post-doc position for 12 months, renewable for 18 further months, is open to work on tropical tree population genomics at Kourou, French Guiana, at the EcoFoG joint research unit.

The hired post-doc will work on a project (FLAG, <http://www.ecofog.gf/spip.php?article635>) revolving around the detection of disruptive selection across ecological gradients and contrasts in tropical tree populations, in the context of evolutionary/ecological genomics and of the modelling of the response of tree stands to expected global change. He/she will prepare DNA samples for NGS genotyping and analyse the data derived from such genotyping activities (which will be outsourced), mostly focussing on modelling of population genetic processes with a minor involvement in bioinformatic data treatment. He/she will also be involved in the setup of reciprocal transplants and in the measurement of quantitative traits in the field. The hired post-doc will closely interact with a resident team (<http://www.ecofog.gf/spip.php?rubrique91>) of three scientists, two Ph. D. students and two technicians, plus he/she will work with another post-doc, hired in the same partnership to work on the same kind of data on temperate trees, and with the rest of the partnership (see FLAG website) for the modelling activities. The EcoFoG Ecological Genetics team is a leader in the population and ecological genetics and in the genomics of tropical tree species and offers wide opportunities for networking with other laboratories around the world.

The grant will start on April 1st, 2013. Propensity for team work, data analysis, statistics and modelling, programming skills (particularly with R), as well as the capacity to live in a remote (hot, humid) place and work in a 'natural' forest, are prerequisites for the

job. Speaking at least rudimentary French and a will to improve it are a good thing for everyday survival and for interaction with team members. Net salary will be around 1700 euro/ month plus the benefits of the French welfare system. for further questions please contact Ivan Scotti (FLAG project coordinator and Team leader) at ivan.scotti@ecofog.gf.

Ivan Scotti INRA - UMR 0745 ECOFOG "Ecologie des Forêts de Guyane" / "Ecology of Guiana Forests" Team Leader << Population Ecology >> Campus agronomique, Avenue de France BP 709 - 97387 KOUROU Cedex FRANCE Phone +594 (0)59432-9274, -9285, -9278 Fax +594 (0)59432-4302 e-mail: ivan.scotti@ecofog.gf, i.scotti.inra.kourou@gmail.com; web: <http://www.ecofog.gf> VISITORS TO FRENCH GUIANA MUST HOLD A VALID YELLOW FEVER VACCINE CERTIFICATE

Ivan Scotti <Ivan.Scotti@ecofog.gf>

Heidelberg ExelixisLab HomeOfRAxML

Postdoc Position available in the SCO group at the Heidelberg Institute for Theoretical Studies (HITS) in Heidelberg, Germany

The Exelixis lab (home of RAxML) at the Heidelberg Institute for Theoretical Studies in Heidelberg, Germany is looking for a PostDoc with a PhD in statistics and/or population genetics working in the broader field of Bioinformatics. HITS gGmbH is a privat non-profit research institute carrying out multidisciplinary research in the computational sciences. It receives its base funding from the Klaus Tschira Foundation.

Prospective candidates should possess good programming skills in C or C++. Experience in high performance computing is not required, but will be a plus.

Our lab focuses on developing discrete and numerical algorithms, parallel implementations, and statistical models for evolutionary analysis of large-scale datasets in the areas of phylogenetics and population genetics.

We have developed several widely-used open source tools and web-services for this purpose that cover areas such as, for instance, forward simulation in population genetics, large-scale phylogenetic inference, and rogue taxon identification.

We also collaborate closely with biologists on large-

scale data analysis projects using supercomputers (e.g., <http://www.1kite.org/>).

The starting date is flexible. We initially offer a two year contract that can be further extended. The actual research topics are open and can be adapted to the particular strengths and interests of the candidate.

To apply, please enter your application here <https://application.h-its.org/intern/register.php?id=0volde6> (reference Postdoc SCO HITS-01-2013)

Applications must be submitted by March 1st, 2013. Please note that applications not submitted via the online system will not be considered. Inquiries about the position can be directed at Prof. Alexandros Stamatakis ([Alexandros.Stamatakis\(at\)h-its.org](mailto:Alexandros.Stamatakis(at)h-its.org)).

Further information about the lab can be found at www.exelixis-lab.org and about the institute at www.h-its.org – Alexandros (Alexis) Stamatakis

Research Group Leader, Heidelberg Institute for Theoretical Studies Full Professor, Dept. of Informatics, Karlsruhe Institute of Technology Adjunct Professor, Dept. of Ecology and Evolutionary Biology, University of Arizona at Tucson

www.exelixis-lab.org

INRA France Evolution *Bacillus cereus*

Dear colleague,

I would like to bring under your attention a two years postdoc position, which will be soon available in my lab to work on the molecular mechanisms of evolution of *Bacillus cereus*, a sporeforming food-borne opportunistic pathogen, in the environment (see the attached announcement). The purpose is to understand how quickly this species evolves in natural conditions, what constrains that rate and what evolutionary mechanisms it uses for adaptation and evolution. The fellowship could start at any time from March-April 2013.

Maybe you know a good candidate, or maybe you could advertise this position or forward this announcement to colleagues and collaborators?

Thank you for your help.

Best regards

Vincent Sanchis

Vincent Sanchis <vincent.sanchis@jouy.inra.fr>

INRA France Evolution *Bacillus cereus* 2

Evolution of a sporeforming food-borne opportunistic pathogen in the environment

A postdoctoral position is available for at least two years (with possible extension depending on funding) on a project funded by the Agence Nationale de la Recherche (ANR) BIOADAPT Programme to work on experimental evolution of bacterial pathogenicity. The position is available in the group of Didier Lereclus (<http://www.micalis.fr/micalis/Poles-et-Equipes/Pole-Risques/GME>- Lereclus) at the "Gut Microbiology for Human Health Institute" (MICALIS) with the aim to *investigate the evolution in the environment of *Bacillus cereus*, a human food-borne pathogen, and to assess the risk of emergence of strains with higher virulence to mammals. The goal is to understand how quickly this species evolves in natural conditions, what constrains that rate and what evolutionary mechanisms it uses for adaptation and evolution. The recruited postdoc will be part of the ANR "PathoBactEvol" project which includes six French academic partners and two European collaborating teams.

In this project the insect *Galleria mellonella* larvae will be used as a host and its digestive tract as a selection medium to select novel pathogenic strains. The principle will be to set up a serial passage experiment of *B. cereus* in the insect, to select more virulent bacterial strains and study how they have evolved. Emphasis will be put on comparative whole genome analysis of multiple evolved strains (or lineages) and in understanding how different life traits evolve in different conditions. Integration of genomic and phenotypic data, using computational approaches, should then allow us to explain phenotypic differences in terms of genotypic differences. An examination of how the genomes and phenotypes of the evolved strains have changed will also permit to identify the selective pressures they have experienced and how this is related to fitness improvement.

The candidate will be in charge of establishing a powerful and versatile model for analysing the causes and processes of evolutionary adaptation, including direct observation of evolution in action and under fluctuating conditions. He will also participate in the analysis of

the genomic sequence data generated using novel high throughput sequencing technologies (NGS) to provide the data necessary to describe the complete set of genes implicated in these adaptation processes.

Interested candidates must hold a PhD in evolutionary biology or in related areas and are expected to have some experience in theoretical quantitative genetics and evolutionary ecology. Additional skills in genomics, applied mathematics and/or in using bioinformatic tools will be an advantage. A capacity to work independently, as well as good communication abilities, are also required.

The MICALIS institute (www.micalis.fr) is a high-profile Microbiology center and a "joint research unit" (UMR) associating INRA and AgroParisTech (a top level training school for European engineers and managers in the fields of life sciences and environment). MICALIS brings together over 350 persons including 120 researchers, engineers and professors, and more than 90 post-docs, PhD students and master students. It is an integral element of the Paris-Saclay campus. It is located on the INRA campus of Jouy-en-Josas (20 Km south-west of Paris and 7 km east of Versailles) that offers excellent modern laboratory infrastructures and a stimulating research environment.

This post is available from March-April 2013 with a raw salary of 2400 EUR per month. Starting time is flexible but must be before May 1, 2013. Applications should include a cover letter, a curriculum vitae and a list of publications, a brief summary of research experience and interest and the names of (at least) two referees. Applications will only be accepted by e-mail and should be sent to Dr. Vincent Sanchis. E-mail: vincent.sanchis@jouy.inra.fr. Ongoing interviews will be held until a suitable candidate is found.

Vincent Sanchis <vincent.sanchis@jouy.inra.fr>

Iowa State U Evolutionary Ecology

Postdoctoral Position in Evolutionary Ecology

I seek a Postdoctoral Research Associate to help lead an NSF-funded project examining the roles of climate, maternal effects, and sex-specific fitness in the evolutionary ecology of environmental sex determination, focusing on the painted turtle as a model organism. The goal is to explore how these major factors affect population dynamics and sex-ratio evolution in nature. This

now 25-year long study involves observational and experimental research at a field site (Turtle Camp) along the Mississippi River near Clinton, IA and at Iowa State University in Ames, IA. The postdoc will be central to all aspects of this project and thus strong mentoring, communication, writing, and analytical skills are essential. In addition to facilitating the goals of the overarching project, the successful candidate will be strongly encouraged to develop her/his own independent research. The ideal applicant should have solid experience in field biology, experimental design, and database management/design/analysis, as well as a strong background in ecology, evolution, and statistics. Genomics expertise also welcomed.

A Ph.D. in a relevant discipline is necessary. Funding for salary, benefits, and research expenses is available for as many as five years, with each annual renewal contingent on performance, emphasizing progress on teamwork, data collection and analysis, and manuscript writing. The successful candidate must be available no later than May 2013. The primary location for the postdoc will be at Iowa State University, but up to 2 months annually may be spent at Turtle Camp (<http://www.public.iastate.edu/~fjanzen>).

Examples of recent publications related to this project include:

- 1) Refsnider & Janzen (2012) *Biol Conserv* 152:90-95.
- 2) McGaugh & Janzen (2011) *J Evol Biol* 24:784-794.
- 3) Bowden et al. (2011) *Physiol Biochem Zool* 84:204-211.
- 4) Schwanz et al. (2010) *Ecology* 91:3016-3026.
- 5) Schwanz et al. (2010) *Evolution* 64:1331-1345.
- 6) Refsnider & Janzen (2010) *Annu Rev Ecol Evol Syst* 41:39-57.
- 7) McGaugh et al. (2010) *Proc R Soc Lond B* 277:1219-1226.

To apply, e-mail Fred Janzen (fjanzen@iastate.edu) with a CV, a brief (< 1 page) cover letter explaining research interests, and contact information for three references. Review of applicants will begin immediately and continue until a suitable candidate is selected. I will be at the SICB meeting in San Francisco from 3-7 January, so please let me know if you wish to learn more about the position in person.

“Janzen, Fredric J [EEOBA]” <fjanzen@iastate.edu>

IowaStateU InsectResistance

Postdoctoral Research Associate Department of Ento-

mology Iowa State University Available 1 March, 2013

Position Summary: Postdoctoral position studying interactions between agricultural pest insects and crops that produce insecticidal toxins derived from *Bacillus thuringiensis*.

Duties and responsibilities: 1) Work as part of a team to accomplish research goals; 2) Run large-scale field experiments and laboratory bioassays, and assist students participating in these experiments; 3) Prepare manuscripts for publication; 4) Assist with grant writing; 5) Consult with principal investigator, technical personnel and other researchers to improve design of experiments and interpretation of results

Minimum qualifications: 1) Ph.D. in Entomology, Biology, Ecology and Evolution, or related field; 2) Demonstrated ability to publish results in refereed journals; 3) Ability to work independently

Preferred qualifications: 1) Knowledge of population genetics; 2) Knowledge of insect resistance to insecticides and transgenic crops; 3) Experience designing and conducting field and laboratory experiments

To apply, send a letter of application, curriculum vitae, reprints of two papers, and the names and contact information for three references to Aaron Gassmann (aaronjg@iastate.edu). Although electronic applications are preferred, application materials also may be mailed to Dept. of Entomology, 18 Insectary Bldg., Iowa State University, Ames, IA 50011

Review of applications will begin immediately and will continue until the position is filled.

Iowa State University is an Affirmative Action/Equal Opportunity Employer.

aaronjg@iastate.edu aaronjg@iastate.edu

IowaStateU TurtlePhyloGenomics

Postdoctoral Position in PhyloGenomics: Turtle Chromosome Evolution

A postdoctoral position is available to work in the laboratory of Dr. Nicole Valenzuela at Iowa State University on an NSF-funded project to study the genome repatterning events responsible for changes in diploid number across turtles and their observed association with evolutionary transitions in sex determination.

The project combines molecular cytogenetics, tran-

scriptomics, bioinformatics and phylogenetic analyses.

The ideal candidate will have a PhD degree and strong background in molecular and classic cytogenetic techniques including chromosomal preparation, fluorescent in situ hybridization/chromosome painting, karyotyping, and the use of Cytovision or other chromosomal analysis platform. Other qualifications such as evolutionary biology background and experience with cell culture and bioinformatics are a plus.

Funding is available for up to 3 years with annual renewal contingent upon performance. The starting date is flexible.

For inquiries or to apply please email Dr. Nicole Valenzuela at nvalenzu@iastate.edu. Applicants should email a cover letter describing their research interests and experience, current CV, and copies of up to two relevant publications, and arrange to have two letters of recommendation be sent directly to nvalenzu@iastate.edu.

The department of Ecology, Evolution, and Organismal Biology at Iowa State University is comprised of over 40 faculty, whose active research programs span many areas of E&E from classic biology to modern “-omic” approaches, and interactions with faculty in other departments and programs are extensive.

Iowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran.

Dr. Nicole Valenzuela Associate Professor 251 Bessey Hall Department of Ecology, Evolution and Organismal Biology Iowa State University Ames, IA 50011 URL: <http://www.public.iastate.edu/~nvalenzu/> nvalenzu@iastate.edu

Lyon Reconstructing Genomes

Integrative methods for reconstructing ancestral genomes

A 2 (+1) year post-doctoral position is available to work on integrative methods for reconstructing ancestral genomes in the Bioinformatics and Genome Evolution (BGE) group at the LBBE in Lyon, France (<http://lbbe.univ-lyon1.fr/?lang=en>).

The researcher will work in collaboration with Vincent Daubin, Bastien Boussau, Gergely Szollosi and Eric Tannier, in the context of the ANCESTROME project.

ANCESTROME (<http://ancestrome.univ-lyon1.fr>) is a large collaborative project funded by the French National Research Agency .

The project aims at building integrative models and studying the genomes of extant living organisms to reconstruct evolutionary intermediates together with the evolutionary processes that have generated them. A critical step in the development of methods to reconstruct the evolution of genomes is the modeling of the processes that relate gene phylogenies to species phylogenies. We have developed methods for integrating events of gene duplication, gene loss and lateral gene transfer in the simultaneous reconstruction of species and gene histories. These methods yield much better estimates of the gene content of ancestral genome, and hence open the door to accurate reconstructions of ancestral species characteristics. These include not only cellular and genome organization, or metabolic capabilities, as deduced from genome content, but also virtually any internal or external factor that has left a trace in the genomic record, in particular details of the environment to which the species has adapted, its resources, symbionts or demography.

In a series of recent papers, we have used probabilistic models and high performance computing methods on the HOGENOM (<http://pbil.univ-lyon1.fr/-databases/hogenom/accueil.php>) database to start exploiting genomes as documents of evolutionary history (see references below).

Possible avenues of research include:

- Reconstructing ancestral genomes, phenotypes and environments
- Modeling coevolution of genes and genomes...

The successful candidate will have a strong background in computational biology or probabilistic models. Good programming skills are essential. A good understanding of the concepts of evolutionary biology is a plus.

The LBBE offers a highly stimulating scientific environment, and Lyon is a lively, beautiful, history rich city (see <http://whc.unesco.org/en/list/872/>) with great food. The researcher will also have the opportunity to visit collaborating labs in the no less interesting cities of Budapest and Berkeley.

Please send a CV and motivation letter including references to Vincent Daubin (vincent.daubin@univ-lyon1.fr) and Bastien Boussau (bastien.boussau@univ-lyon1.fr).

Keywords: Probabilistic Models, Phylogenetics, Evolution of Life on Earth, Evolutionary Genomics, Coevolution, HPC

References: - Boussau B, SzölloSI GJ, Duret L, Gouy M, Tannier E, Daubin V. Genome-scale coestimation of species and gene trees. *Genome Res.* 2012 Nov 6. - SzölloSI GJ, Boussau B, Abby SS, Tannier E, Daubin V. Phylogenetic modeling of lateral gene transfer reconstructs the pattern and relative timing of speciations. *Proc Natl Acad Sci U S A.* 2012 Oct 23;109(43):17513-8. - SzölloSI GJ, Tannier E, Lartillot N, Daubin V. Lateral Gene Transfer from the Dead. *Systematic Biology* - Accepted pending revision (<http://arxiv.org/abs/1211.4606>) - Bérard S, Gallien C, Boussau B, SzölloSI GJ, Daubin V, Tannier E. Evolution of gene neighborhoods within reconciled phylogenies. *Bioinformatics.* 2012 Sep 15;28(18):i382-i388. - Abby SS, Tannier E, Gouy M, Daubin V. Lateral gene transfer as a support for the tree of life. *Proc Natl Acad Sci U S A.* 2012 Mar 27;109(13):4962-7. - SzölloSI GJ, Daubin V. Modeling gene family evolution and reconciling phylogenetic discord. *Methods Mol Biol.* 2012;856:29-51. - Abby SS, Tannier E, Gouy M, Daubin V. Detecting lateral gene transfers by statistical reconciliation of phylogenetic forests. *BMC Bioinformatics.* 2010 Jun 15;11:324. - Boussau B, Daubin V. Genomes as documents of evolutionary history. *Trends Ecol Evol.* 2010 Apr;25(4):224-32. - Penel S, Arigon AM, Dufayard JF, Sertier AS, Daubin V, Duret L, Gouy M, Perrière G. Databases of homologous gene families for comparative genomics. *BMC Bioinformatics.* 2009 Jun 16;10 Suppl 6:S3.

Vincent Daubin <vincent.daubin@univ-lyon1.fr>

MaxPlanck Ploen 3 Evolutionary Genetics

Three postdoc positions for studying the genomics of de novo gene evolution

Max-Planck Institute for Evolutionary Biology, Ploen, Germany

Department of Evolutionary Genetics

Group of Diethard Tautz

<http://www.evolbio.mpg.de/15929/-evolutionarygenetics>

Funded by an ERC advanced grant, we will start a large scale project for understanding patterns and processes of de novo evolution of genes.

There is rapidly accumulating evidence that new gene functions can evolve out of non-coding DNA and that

this contributes to evolutionary innovations (see Tautz and Domazet-Loso, The evolutionary origin of orphan genes, *Nature Reviews Genetics* 12, 692-702). We will follow three major lines of research to investigate this in depth:

1. comparative genomics in the house mouse (genus *Mus*) species group and outgroups, involving RNASeq and genome sequencing to systematically identify genes with a recent history of de novo evolution
2. use an experimental evolution approach in bacteria/phages to assess the frequency of emergence of functional peptides out of random sequences
3. functional analysis of de novo evolved mouse genes through knockout studies

Qualifications required:

position 1: experience in comparative genomics and bioinformatics

position 2: experience in bacterial/phage genetics and genomics

position 3: experience in mouse genetics

Candidates should have a completed PhD in the respective fields. Employment is for initially two years, but can be extended for up to five years with the option to develop an own research agenda in the field. Payment will be at the TVöD13 scale with full social benefits.

Applications should be sent to tautz@evolbio.mpg.de and include a complete CV, publication list, letter of motivation and contact information for up to three references.

Prof. Dr. Diethard Tautz Max-Planck-Institut fuer Evolutionsbiologie Abteilung Evolutionsgenetik August-Thienemannstrasse 2 24306 Ploen (Germany) Tel.: 04522 763 390 Fax: 04522 763 281 tautz@evolbio.mpg.de

tautz@evolbio.mpg.de

MaxPlanck Tuebingen Sticklebacks

Postdoctoral positions are available in the new lab of Dr Felicity Jones at the Friedrich Miescher Laboratory of Max Planck Society, Tuebingen, Germany.

Threespine stickleback fish have recently emerged to be an excellent evolutionary model organism (Jones et al *Nature*; Chan et al 2010 *Science*). In the Jones

Lab we are launching a comprehensive research program to functionally dissect the molecular mechanisms underlying adaptive divergence and speciation. We have previously identified at kilobase resolution a set of loci underlying repeated divergence between marine and freshwater stickleback species-pairs (Jones et al 2012 Nature). These loci are predominantly non-coding and fall within regions of low recombination rate (including inversions), suggesting both regulatory changes and the recombination landscape are important in adaptive evolution and speciation. Using transgenics gain-of-function assays via Tol2 transposon, and loss-of-function via zinc-finger nuclease/TALEN we aim to functionally dissect speciation loci to determine how regulatory evolution affects phenotype, fitness and contributes to adaptive divergence. We will also investigate molecular mechanisms that shape recombination landscape and hotspots across the genome and how this contributes to the maintenance of adaptive suites of loci (“supergenes”) in contact zones between divergent species. We will continue to expand our rich dataset of whole genome sequencing, expression analysis and genetic mapping to identify the molecular basis of reproductive isolation between replicate stickleback species-pairs.

We seek highly motivated Postdoc applicants with experience in molecular genetics, transgenics, developmental, quantitative, computational biology and/or population genomics.

The FML is located on the Max Planck Campus in Tuebingen and offers an international environment, with English as the working language. We are part of a dynamic and interactive group of labs researching various aspects of adaptation and evolutionary genetics, with the aim of linking molecular changes to organismal phenotypes. These include the Chan Lab (genetics of adaptation in mice), Jekely Lab (neurobiology and behavior of marine zooplankton), the Weigel Lab (adaptive genetic variation in arabidopsis and guppy fish), the Sommer group (evolutionary genomics of free-living nematodes), Krause group (evolutionary genetics and ancient DNA - University of Tuebingen). Tuebingen boasts one of Germany’s top universities and a vibrant cultural life with easy connections to major European cities.

Applicants of all nationalities are encouraged to apply. Please send cover letter, CV and contact information for three to referees Felicity Jones (fejones@tuebingen.mpg.de).

For further information see: <http://www.fml.tuebingen.mpg.de/jones-group.html> Jones FC, et al. (2012) The genomic basis of adaptive

evolution in threespine sticklebacks. Nature 484, 55-61. Jones FC, et al. (2012) A genome-wide genotyping array reveals patterns of global and species-pair divergence in threespine stickleback. Current Biology 22, 83-90. Chan YF, et al. (2010) Adaptive evolution of pelvic reduction in sticklebacks by recurrent deletion of a Pitx1 enhancer. Science 327 (5963), 302-305.

Dr. Felicity Jones

Max Planck Research Group Leader Friedrich Miescher Laboratory of the Max Planck Society Spemannstrasse 39 72076 Tuebingen Germany Ph +49 (0)7071 601 840
jones.floss@gmail.com

McGill PopulationGenetics

Job title: Postdoctoral position in statistical and population genetics

A postdoctoral position in statistical and population genetics is available in Simon Gravel’s group at McGill University in Montreal, Canada. The group focuses on population genetics methods to understand human evolution and demography, and on the analysis of high-throughput genomic data. The postdoctoral researcher will be involved in conceptual methods development, implementation, and applications to cutting-edge data.

The ideal candidate will have a strong quantitative background and programming experience in at least one scripting language (e.g., perl, R, python) and/or one compiled language. Previous experience in population genetics, the analysis of high-throughput genetic data, and human evolution are all assets, but are not required. We welcome applications from any area of quantitative biology, mathematics, physics, computer science, and related fields.

The position offers an exceptional opportunity for independent research in a quantitative and theoretical lab with great access to cutting-edge data. The McGill Human Genetics department and the McGill and Genome Quebec Innovation Center, together with numerous nearby institutes in Montreal, provide a thriving academic environment.

Applications and queries should be sent to simon.gravel@mcgill.ca. Please include a research statement and a CV, one of which should address programming experience—code samples or links to published/distributed code are welcome. Contact informa-

tion for three references is required. Review of applications will begin immediately and will continue until the position is filled.

Simon Gravel,

Assistant Professor

McGill University and Génome Québec Innovation Center

Dept of Human Genetics, McGill University

simon.gravel@mcgill.ca

Montpellier EcoEvolutionaryModeling

Postdoc position on eco-evolutionary modelling in Montpellier/France

A postdoctoral position is available at the Institute of Evolutionary Sciences (ISEM) in Montpellier/France to develop simulation models for the eco-evolutionary dynamics of forest trees under climate change. The recruited postdoc will work with Ophélie Ronce, Isabelle Chuine and Frank Schurr, and will collaborate with other members of the ERA-Net BiodivERsA consortium Tiptree (Scenarios for forest biodiversity dynamics under global change in Europe: identifying micro-evolutionary scale tipping points).

We are looking for applicants with considerable experience in the development of models for ecological and/or evolutionary dynamics. Applicants must hold a PhD degree, have proven publication skills, and should be able to work independently. Additionally, expertise on range dynamics, population genetics or genomics, eco-physiology, forest ecology or Bayesian statistics would be a bonus. Applicants should be fluent in English, whereas knowledge of French is not essential.

The position will run for 20 months starting in spring 2013 (preferably in April). The net salary will range between 1800 and 2000 EUR/month (depending on previous work experience).

Montpellier is an international centre of ecological and evolutionary research. Additionally, it is a lively and culturally rich city at the Mediterranean Sea, and has beautiful surroundings.

If you are interested in this position, please send your application (including a cover letter, CV, and contact details of two references) to Frank Schurr,

frank.schurr@univ-montp2.fr Your application should be sent as a single pdf that contains your name in the file name. Review of applications will begin on 25 January and will continue until the position is filled.

Further information on our team can be found at www.metapop.univ-montp2.fr/?page_id (Ophélie Ronce) www.cefe.cnrs.fr/en/biodiversite-flux-et-changements-globaux/isabelle-chuine (Isabelle Chuine) www.sites.google.com/site/frankschurr (Frank Schurr)

– Dr. Frank Schurr Institut des Sciences de l'Evolution UMR 5554 | CNRS Université Montpellier II

Place Eugene Bataillon | bat. 22 | CC065 34095 Montpellier | cedex 5 | France tel. +33 (0)4 67 14 36 93 | fax +33 (0)4 67 14 36 22

frank.schurr@univ-montp2.fr

Montpellier TheoreticalEvolution

A 15-month postdoc position (with possible extension depending on funding) is available in the group <<http://www.cefe.cnrs.fr/en/genetique-et-ecologie-evolutive/evolutionary-genetics-and-ecology>> Evolutionary Genetics and Ecology (EGE) from the <<http://www.cefe.cnrs.fr/en/>> CEFE, in Montpellier. This position is part of a project funded by the French National Research Agency (ANR), aimed at investigating the interactions between phenotypic, genetic, and demographic responses to environmental change, from both theoretical and empirical standpoints. The recruited postdoc will carry out theoretical research on the evolution of multiple correlated characters under pleiotropic mutation and stabilizing selection in a changing environment, using a combination of mathematical analysis and numerical simulations.

Applicants are expected to have strong modeling skills, preferably with some experience in theoretical population/quantitative genetics, and an interest in evolutionary ecology. Capacity to work independently, as well as good communication abilities, are also required.

The CEFE is France's largest ecology lab. The EGE group is a privileged environment for exchanging on broad questions in evolutionary genetics and ecology, from mutation fitness effects to speciation, evolution of breeding systems, or metacommunity dynamics. Montpellier has a strong community of evolutionists (including many theoreticians), with intense scientific interactions and numerous seminars. It is also a vibrant

Mediterranean city with a rich cultural life.

Applicants should send a cover letter detailing their motivation and expectations from this position, and a CV (combined into a single PDF), as well as contact information for two references, to Luis-Miguel Chevin (chevin.lm@gmail.com), before February 23rd 2013.

Relevant references

Chevin L.-M. 2013. Genetic constraints on adaptation to a changing environment. *Evolution* (Early View)

Chevin L.-M., Martin G., Lenormand T. 2010. Fisher's model and the genomics of adaptation: restricted pleiotropy, heterogeneous mutation and parallel evolution. *Evolution* 64: 3213-3231.

Chevin L.-M., Lande R., Mace G. M. 2010. Adaptation, plasticity, and extinction in a changing environment: towards a predictive theory. *PLoS Biology* 8: e1000357.

Chevin L.-M., Lande R. 2010. When do adaptive plasticity and genetic evolution prevent extinction of a density-regulated population? *Evolution* 64-4: 1143-1150.

Luis-Miguel Chevin Chargé de recherche CNRS Centre d'Ecologie Fonctionnelle et Evolutive 1919 route de Mende, 34293 Montpellier Cedex 5 +33(0)4 67 61 32 98

< <http://www.cefe.cnrs.fr/genetique-et-ecologie-evolutive/luis-miguel-chevin> > <http://www.cefe.cnrs.fr/en/genetique-et-ecologie-evolutive/-luis-miguel-chevin>

< <http://www.cefe.cnrs.fr/images/stories/-DPTEEvolution/Genetique/Chercheurs/luis-miguel-chevin/Postdoc%20announcement.pdf> >

chevin.lm@gmail.com

NHM London Crop Wild Relatives Evolution

Post: PDRA - Crop and Pest Wild Relative Modelling - Initiatives Salary: up to £27,612 per annum plus benefits Contract: Fixed Term appointment (3 year contract subject to performance) Line manager: Sandra Knapp

Closing date: 29th January 2013 The Natural History Museum is one of the world's leading muse-

ums, internationally recognised for its dual role as a centre of excellence in scientific research and as a leader in the presentation of natural history through exhibitions, public programmes, publications and the web.

We are seeking to recruit a Post-Doctoral Research Assistant/ Post-Doctoral Researcher to lead the day to day operation of the Crop Wild Relatives and Agroecosystem project in the Natural Resources and Hazards Initiatives. The tasks consist of three main areas; GIS analysis of specimen data from both plants and insects, field sampling of specimens in interdisciplinary teams and molecular biology with phylogenetic data analysis for target groups of plants and insects.

The successful candidate will coordinate the various aspects of the Crop Wild Relative project with staff in Collections Management, Facilities and Research across the NHM. The post holder will also be a key contact point for international collaborators with the project, and will be expected to actively contribute to project design and direction.

A PhD in Biology or relevant subject is essential for this post. Basic knowledge of entomology and/or botany is also desirable.

If you need more information about the project please contact Sandra Knapp (s.knapp@nhm.ac.uk) [Sandy will be in Argentina collecting so reply might be slow Tiina Sarkinen at tiina.sarkinen@nhm.ac.uk can also provide information]

For a full job description and to apply online please visit the Natural History Museum website: www.nhm.ac.uk/jobs

NHM Oslo Intraspecific Divergence In Passerines

The postdoctoral fellow will work on the project "The early stages of the speciation process - prezygotic reproductive isolation and diversification in passerines", funded by the Research Council of Norway and NHM. Speciation is a fundamental evolutionary process in which lineages diverge to form new species. Understanding speciation processes is essential for understanding the evolution of biodiversity. Sexual selection may play a role in speciation processes, e.g. by promoting evolution of secondary sexual traits and preferences in allopatry, leading to divergence and premating isolation upon secondary contact. However, if sexual or-

naments do not diverge in allopatry, populations may evolve deep genetic divergence but still despeciate upon secondary contact. The postdoctoral fellow will investigate cases of deep sympatric intraspecific divergences in two passerine species (common redstart and raven), using multilocus coalescence-based analyses, and explore several hypotheses for how such deep divergences have evolved. The project will require the use of a variety of analytical tools, like modern molecular genetic analyses, population genetics and coalescence analyses, and comparative statistics. The project will include comprehensive field work, both in Europe, Asia and North America.

The project team will consist of two postdocs and one field/lab technician and two senior NHM scientists: Associate professor Arild Johnsen (project leader) and professor Jan T. Lifjeld. The project will be performed in close collaboration with associate professor Kevin Omland (University of Maryland, Baltimore County, USA), and his research group

In order to be successful, the applicant should satisfy the following:

- hold a degree equivalent to a Norwegian PhD/doctoral degree.
- be an evolutionary biologist with a scientific record in avian molecular systematics and phylogeography
- have experience with modern DNA sequencing techniques (including next generation sequencing), multilocus coalescence-based methods and comparative statistics methods

The postdoc fellow will be expected to participate in the supervision of PhD and Master students and should have good training in ornithological field methods. The postdoc fellow must be prepared to spend several months in the field during the first half of the employment period. A research stay of up to one year at University of Maryland, Baltimore County, USA, will be included in the project period. In the ranking of competent applicants, the whole breadth of their qualifications will be assessed. The employment is for two years, starting as soon as possible after 1 June 2013 and no later than 31 August 2013.

Pay Grade: 57 - 60 (NOK 468 400-493 900 per year depending on qualifications)

Application Deadline: 15 February 2013.

Informal inquiries to associate professor Arild Johnsen (arild.johnsen@nhm.uio.no).

For full announcement and details on how to apply, please see <http://uio.easycruit.com/vacancy/910203/-71922?iso=no> arild.johnsen@nhm.uio.no

NIST UMaryland Bioinformatics

NRC Research Associateship (post-doc) in Bioinformatics or Computational Studies of Evolution

The US National Research Council offers a limited number of fellowships for work at NIST (my employer), based on a competitive twice-yearly review of proposals (<http://sites.nationalacademies.org/pg/rap/>). The stipend is extremely generous (base \$65K), the location is Rockville (MD), the time-period is 1 or 2 years, and the scope is flexible— so long as it is consistent with my interests and my ability to provide effective mentorship. These interests are in two main areas: computational studies (simulations, data analysis) of evolution, such as the role of mutation in evolution [e.g., 1-3], Constructive Neutral Evolution [4], and other aspects of molecular evolution (e.g., [5-7]); and developing cyberinfrastructure to facilitate interoperability of data and software [e.g., 8-9]. For instance, a proposal that builds on one of the works cited below, or on a recent hackathon to develop a Tree-of-Life delivery system (<http://www.phylotastic.org>), would be welcome.

I encourage you to consider applying if you are a US citizen or permanent resident with a Ph.D. and a compelling idea for a project. The upcoming deadline for NIST proposals is February 1, 2013, and there is another deadline August 1, 2013. If you are interested, contact me with a brief introduction and a pitch for your idea, and we'll go from there.

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 1. Stoltzfus A, Yampolsky LY: Climbing mount probable: mutation as a cause of nonrandomness in evolution. *The Journal of heredity* 2009, 100(5):637-647.

2. Stoltzfus A: Mutation-Biased Adaptation in a Protein NK Model. *Mol Biol Evol* 2006, 23(10):1852-1862.

3. Stoltzfus A: Evidence for a predominant role of oxidative damage in germline mutation in mammals. *Mutat Res* 2008, 644(1-2):71-73.

4. Stoltzfus A: Constructive neutral evolution: exploring evolutionary theory's curious disconnect. *Biology direct* 2012, 7(1):35.

5. Norris R, Strobe C, and Stoltzfus A: Calibrating molecular clocks with fossils: two new approaches, and a comparison with existing methods. (in prep)
6. Stoltzfus A, Yampolsky LY: Amino Acid Exchangeability and the Adaptive Code Hypothesis. *J Mol Evol* 2007, 65(4):456-462.
7. Yu G, Stoltzfus A: Population diversity of ORFan genes in *E. coli*. *Genome Biology and Evolution* 2012.
8. Stoltzfus A, et al: Sharing and re-use of phylogenetic trees (and associated data) to facilitate synthesis. *BMC Research Notes* 2012, 5:574.
9. Vos RA, et al: NeXML: Rich, Extensible, and Verifiable Representation of Comparative Data and Metadata. *Systematic Biology* 2012, 61(4):675-689.

Arlin Stoltzfus <arlin@umd.edu>

NMNH Paris GorillaAdaptation

Open Post-doctoral Position National Museum of Natural History, Paris, France, in the context of the LabEx BCDiv, Biological and Cultural Diversities: Origins, Evolution, Interactions, Future

Post-doctoral Topic : Food and technical choices of food manipulation among the western gorillas: knowledge acquisition by adaptive mechanisms or traditions ?

Laboratories (Museum National d'Histoire Naturelle) : Main laboratory: UMR 7179, Mécanismes adaptatifs : des organismes aux communautés Other: UMR7206, Eco-Anthropologie et Ethnobiologie

Supervision: Emmanuelle Pouydebat & Françoise Aubaile-Sallenave

Duration of the contract: 12 mois / 12 months

Scientific description Great diet flexibility and manipulation abilities allow primates to be more resilient than many other animals to fluctuations in climate and food availability. Primate food choice is complex and depends on different factors such as the nutritional quality of the available food, and the nutritional needs and health status of the individuals. Moreover, in great apes cultural differences seem to explain part of the feeding variation, but this is still debated as many consider culture to be a uniquely a human trait. Particularly, feeding techniques, which vary across different populations of chimpanzees and orang-utans, have been de-

finied as cultural traits similarly to human societies who live in the same environment and have the same tools but show different cultural choices. Whether feeding traditions and culture exist in all species of great apes and how they are transmitted between generations is still an open question. Little is known on the elusive and endangered western gorillas. Yet, they appear to rely on different learning mechanisms in relation to the use of toxic plants in comparison to wild chimpanzees. The proposed research will shed light on feeding traditions and functional capacities of western gorillas at different levels: inter-species, inter-groups, inter and intra-individuals. This research aims at investigating: 1) the existence of 'cultural' traditions in gorilla food choice that are independent from food availability, 2) if the intra and inter-specific differences (in comparison to existing data on other primates, including humans) in food processing and manipulation techniques (including manual preferences) are linked to feeding traditions and/or morphological variability respectively, and 3) the behavioural mechanisms involved in the transmission of feeding information (food choice and processing) during learning. The candidate is expected to have previous field experience (preferably with gorillas) and will be working under natural conditions in West Africa.

Contacts : Dr Emmanuelle Pouydebat, MNHN, UMR 7179, Mécanismes adaptatifs : des organismes aux communautés. Département d'écologie et de gestion de la biodiversité, Pavillon d'anatomie comparée, 55 rue Buffon, CP 55, 75231 Paris. Phone: +33 (0) 1 40 79 81 19

Dr Françoise Aubaile-Sallenave, MNHN, UMR 7206, Eco-Anthropologie et ethnobiologie. Department Hommes Natures Sociétés, CP 135, 57 rue Cuvier, 75005 Paris, France. Phone : +33 (0) 1 40 79 53 37

CV and motivation letter must be sent to epouydebat@mnhn.fr AND aubaile@mnhn.fr before the 25 February 2013.

emmanuelle.pouydebat@mnhn.fr

OregonStateU EvolutionaryGenetics

DEADLINE: January 21st, 2013

POSTDOCTORAL RESEARCH ASSOCIATE – The Coastal Oregon Marine Experiment Station at Oregon State University invites applications for a Postdoctoral Fellowship in Ecological Genetics. The postdoc will

hold a leadership role among a larger research team studying founder effects of recently established populations of Chinook salmon (*Oncorhynchus tshawytscha*). Core responsibilities will be to develop methods to examine 1) the effects of hatchery propagation on reproductive success of Chinook salmon in the wild and 2) the evolutionary response of reduced hatchery influence on recently established wild populations with the aim of producing several publications for the primary literature. The successful candidate will be expected to provide general support and collaboration towards scholarly advancement in the Marine Genomics Program located at the Hatfield Marine Science Center in Newport, Oregon.

ONLINE APPLICATION: To review posting and apply, go to <http://oregonstate.edu/jobs>. Apply to posting #0010093. Closing Date: 01/21/13. OSU is an AA/EOE. Email questions to: Kathleen.omalley@oregonstate.edu

Thank you, Kathleen

Kathleen O'Malley <kathleen.omalley@oregonstate.edu>

OregonStateU FounderEffects

DEADLINE: February 10, 2013

POSTDOCTORAL RESEARCH ASSOCIATE – The Coastal Oregon Marine Experiment Station at Oregon State University invites applications for a Postdoctoral Fellowship in Ecological Genetics. The postdoc will hold a leadership role among a larger research team studying founder effects of recently established populations of Chinook salmon (*Oncorhynchus tshawytscha*). Core responsibilities will be to develop methods to examine 1) the effects of hatchery propagation on reproductive success of Chinook salmon in the wild and 2) the evolutionary response of reduced hatchery influence on recently established wild populations with the aim of producing several publications for the primary literature. The successful candidate will be expected to provide general support and collaboration towards scholarly advancement in the Marine Genomics Program located at the Hatfield Marine Science Center in Newport, Oregon.

ONLINE APPLICATION: To review posting and apply, go to <http://oregonstate.edu/jobs>. Apply to posting #0010093. Closing Date: 02/10/13. OSU is an AA/EOE. Email questions to: Kathleen.omalley@oregonstate.edu

leen.omalley@oregonstate.edu

Thank you, Kathleen

Kathleen O'Malley Assistant Professor, Marine Fisheries Genetics Coastal Oregon Marine Experiment Station Hatfield Marine Science Center Dept. Fisheries and Wildlife, Oregon State University 2030 SE Marine Science Drive Newport, Oregon 97365-5229 ph: (541) 961-3311 fax: (541) 867-0345

<http://people.oregonstate.edu/~omalleyk/-Home.html> <http://fw.oregonstate.edu/About%20Us/-personnel/faculty/omalley.htm> Kathleen O'Malley <kathleen.omalley@oregonstate.edu>

Paris DemographyPolymorphism

Demographic inferences from large-scale polymorphism data.

We propose a two-year postdoctoral position funded by the French Agence Nationale de la Recherche, program "Demochips". The postdoctoral fellow will be supervised by Frédéric Austerlitz, at the laboratory "EcoAnthropologie et Ethnobiologie", National Museum of Natural History (Paris, France). We seek a creative and motivated candidate, with a solid background in bioinformatics and/or computational biology. Experience in population genetics/genomics would be highly appreciated.

The first aim of the postdoc will be to lead the development of a new computer program (possibly based on one or several already existing publicly available programs) to simulate massive genome-wide neutral SNP data (e.g. DNA chips) or very large sequences under the coalescent framework, in a complex demographic setting with a realistic genetic model (mutation, recombination.). This software will be used to develop an Approximate Bayesian Computation approach for inferring complex demographic processes (e.g. bottlenecks, expansions, migration, admixture) using such kind of data. Finally these new tools and methods will be applied to human population genetics data already generated in the lab or available from public databases. Several major questions will be investigated, for instance: What is the impact of lifestyle (e.g. sedentary farmers, nomadic herders, and nomadic hunter-gatherers) on the demography of human populations? How can we infer complex admixture processes among human populations from genome wide data?

This is a two-year position, with a start-date to be determined between April and October 2013. Candidates should send a CV, a short letter of application and the name of three academic referees by email to Frédéric Austerlitz (austerlitz@mnhn.fr) no later than February 15th. Please feel free to contact me for any further information. Salary will depend on the candidate's previous professional experience but will amount around 2,300 euros (including benefits) monthly for a candidate with a PhD and at least already one postdoctoral experience.

Frédéric Austerlitz Directeur de Recherche CNRS / CNRS Research Director Laboratoire d'Eco-anthropologie et Ethnobiologie Museum National d'Histoire Naturelle, CP 139 57 rue Cuvier F-75231 Paris Cedex 05, FRANCE tel: + 33 1 40 79 54 97 / fax: +33 1 40 79 32 31 webpage: <http://www.ecoanthropologie.cnrs.fr/-spip.php?article519> austerlitz@mnhn.fr

Roscoff France Molecular Evolution

3-year postdoctoral position in molecular evolution

A position is available for a postdoctoral researcher on a recently funded ANR project SEXSEAWEEED in the Algal Genetics Group (<http://www.sb-roscoff.fr/-algal-genetics>) at the Roscoff Marine Biological Station (CNRS and University Pierre and Marie Curie, <http://www.sb-roscoff.fr/roscoff-marine-station>). The aim of the project is to identify and analyze genes involved in the transition from isogamy to anisogamy in the brown algae, in order to understand the forces shaping the evolution of sexual dimorphism. In particular, the patterns of molecular evolution of sex biased genes during the transition to anisogamy will be studied. Applicants should have a strong background in molecular evolutionary genomics, with experience in transcriptomics, next generation sequencing and ideally in molecular evolution of sex-biased genes. Candidates should be familiar with general laboratory techniques and should have a broad understanding of molecular biology and molecular genetics. A good understanding of computational statistics is a bonus. The candidate will be encouraged to design and be responsible for independent research that involves the collection, analysis and publishing of data. No previous experience with seaweeds is necessary. Knowledge of French is not required. Gross salary will be between 2885-3468 euros/month depending on experience.

Applicants should send a cover letter outlining past research experience and particular motivation for the position (max. 2 pages), C.V., list of publications, and contact details of 2-3 referees to coelho@sb-roscoff.fr. Informal enquiries can be made by email or phone (0033 298 29 23 60).

Is there a formal way to do it or this email is sufficient? Thanks in advance for your help Best regards Susana

Susana M Coelho Algal Genetics Group UMR 7139 CNRS-UPMC Station Biologique, Place Georges Teissier, CS 90974 29688 Roscoff, France 48 43' 37.33" N 3 59' 17.41" W Tel: 33 2 98 29 23 60, Fax: 33 2 98 29 23 85 Email: coelho@sb-roscoff.fr <http://www.sb-roscoff.fr/algal-genetics> Susana Coelho <coelho@sb-roscoff.fr>

RutgersU FungalPathogenGenomics

Post-Doctoral Research Position, Colletotrichum fungal transcriptome and genome evolution, Rutgers University.

We are seeking applications for a Post-Doctoral Researcher to study transcriptome and genome evolution of five closely related species of Colletotrichum fungi impacting the health and productivity of grasses used for bioenergy, food, and turfgrass. The incumbent will: (1) Develop and test hypotheses related to infection and cellulolytic degradation of host tissue by diverse Colletotrichum strains, (2) Take the lead on performing inoculations of grasses with these pathogens for RNA-Seq analysis from the host/pathogen interaction, and (3) Contribute to a larger collaborative Colletotrichum genome sequencing initiative.

Using genomic and transcriptomic (RNA-Seq) resources provided through a grant from the DOE/Joint Genome Institute (JGI), we seek to understand the molecular basis of host specialization, pathogenicity, cellulosic biomass degradation and other traits that characterize this diverse, yet closely related group of grass pathogens. Fully assembled genomic datasets will soon be available for 20 Colletotrichum isolates and mapped transcriptomes for 14 of these isolates. Data analysis will be facilitated through inclusion in the JGI MycoCosm Fungal Genome pipeline.

The incumbent will work under the joint direction of Dr. Bruce Clarke, Rutgers University, Dept. of Plant Biology & Pathology, and Dr. Jo Anne Crouch, USDA-

ARS. The position will be physically located at the Rutgers University's Cook Campus in New Brunswick, NJ.

Qualifications: A Ph.D. in plant pathology, microbiology, mycology or a closely related field is required. Candidates should be proficient in working with large datasets, and must have strong analytical, statistical and writing skills. Candidates with experience working with fungi and/or plant pathogenic microorganisms, or any of the following areas are especially encouraged to apply: next-generation sequencing datasets; comparative genomics using Galaxy tools; experience analyzing RNA-Seq data; population and evolutionary genetics; phylogenetics. Skills in bioinformatics (python, perl, R, etc) are desirable.

Terms of Appointment: Starting salary is \$37,000 - \$45,000 depending on experience, plus Rutgers University benefits. Funds are guaranteed for one year, and renewable for a second year pending satisfactory research progress and availability of funds.

Position is available starting February 2013. Review of applications will begin January 23, 2013, and continue until a suitable candidate is found.

Applications should be sent to:

Bruce Clarke (clarke@aesop.rutgers.edu) and Jo Anne Crouch (joanne.crouch@ars.usda.gov) and must include: (1) a cover letter containing a brief description of research interests and career goals, (2) curriculum vitae, (3) PDFs of two publications, and (4) contact information for three references.

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

SangerInst
ParasitePopulationGenomics

Postdoctoral Fellow - Parasite Genomics Job Ref: 81333

Salary range is £28563 to £35795 per annum with a

discretionary range to £38594 per annum dependent on experience

The Parasite Genomics group uses large-scale sequencing approaches to study parasites associated with diseases of global importance to humans and animals, with a particular emphasis on diseases of developing countries.

Existing projects within the group build on genome sequence data to address scientific questions from population genomics to functional genomics and immunology, and include working on a range of helminth and protozoan parasites in collaboration with experts in particular systems. Specific examples include in-depth comparative genomics of schistosome species, transcriptomic analysis using RNA-seq of the life cycle of a number of nematode parasites as well as a number of de novo genome sequencing projects.

We are seeking to recruit an enthusiastic and ambitious postdoctoral fellow to contribute to projects involving the application of high-throughput sequencing technologies to understand the population structure, evolution and epidemiology of a range of eukaryotic parasites. We either have already generated, or are initiating projects to generate genome-wide datasets on the diversity of a number of clinically important species including a number of *Leishmania* species, *Schistosoma mansoni* and *Dracunculus medinensis*. A key aspect of this role will include the analysis of 'next generation sequencing' data in a population genetic framework. The successful candidate will be encouraged to both get involved in existing projects and develop their own interests in related areas, taking advantage of the unparalleled resources and expertise available within the Institute.

This post is a 3 year fixed term contract Closing date for applications is: Friday 25th January 2013

Please see <http://tinyurl.com/asdp94q> for further details or to apply

James Cotton Senior Scientist Wellcome Trust Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridge. CB10 1SA UK

james.cotton@sanger.ac.uk 01223 494864

jc17@sanger.ac.uk

SeoulNatIU
EvolutionDiseaseResistance

We are seeking to appoint a Post-Doctoral Fellow to work on a three- year project on “Dynamic Evolution of Immunogenetic Responses to Pathogen Virulence” funded by the National Research Foundation of Korea and the College of Natural Sciences at Seoul National University.

The Post-Doctoral Fellow will conduct research on how chytrid fungus affects amphibian populations in Asia and worldwide. The research will characterize virulence of chytrid strains, track their spread, and examine selection for immunogenetic responses of hosts that enable them to resist or tolerate infection.

The research involves collaboration between the School of Biological Sciences and the College of Veterinary Medicine at Seoul National University and the successful candidate will have ample opportunities to interact with colleagues both within Korea and with our international collaborators in Australia, Panama, and the United States.

Experience in molecular biology with a strong interest in evolution is desirable. Research will be conducted in well-equipped, modern laboratory facilities. Our research group is multidisciplinary and highly interactive. The project makes use of excellent next-generation sequencing facilities and expertise available in our school.

Seoul National University is one of the leading universities in Asia and ranks internationally 37th overall and 27th in natural sciences (QS World University rankings, 2012). The campus is nestled in a mountain reserve in southern Seoul and offers excellent opportunities for outdoor activities as well as the full range of cultural activities of an exciting, glamorous city that combines traditional and modern lifestyles.

Subsidized housing and meals are available on campus. Transport is easy, inexpensive, with multilingual signage and announcements, so foreigners have no difficulties living here or getting around.

Applications should include a curriculum vitae, names of three referees, and a brief statement of research interests and goals.

For more information, please contact Prof Bruce Waldman, email: waldman@snu.ac.kr; telephone +1 512 782 9905 (USA) or +82 10 8686 2121 (Korea); FAX +82 2 872 1993.

Bruce Waldman School of Biological Sciences Seoul National University 1 Gwanak-ro, Gwanak-gu Seoul 151-747 South Korea

<http://biosci.snu.ac.kr/behavior> Bruce Waldman
<waldman@snu.ac.kr>

TrentU ContemporaryEvolGenomics

PhD or Postdoctoral Fellow Opportunity: Genomic research on contemporary evolution in natural populations in response to rapid changes in selective pressures. Infectious diseases are critically important in species adaptation, evolution, and persistence. However, climatic changes are altering disease dynamics in northern species by promoting the invasion of novel diseases and disease vectors. The capacity of northern species to adapt to these rapid changes is largely unclear, thereby threatening their persistence. One approach for understanding adaptation to disease is to examine the correlation between the geographic distribution of host immunogenetic variation and of disease variants relative to demographic parameters such as gene flow that also influence the distribution of adaptive and non-adaptive genetic variation. I am seeking a student/post doc to take an adaptive landscape genomics approach to investigate contemporary evolution and demographic constraints on local adaptation among co-evolved and naïve disease vectors. These questions are of practical relevance given pronounced climatic changes associated with changing infectious disease dynamics and northward movements of pathogens and invasive species. This research will be performed using our in-house genomics facility that includes next generation sequencing.

The successful candidate will also be encouraged to develop/explore independent research within the framework of existing funding. Research will be conducted within a collaborative team that includes the Ontario Ministry of Natural Resources and Natural Resources DNA Profiling and Forensic Centre (www.nrdpfc.ca). Applicants should hold a MSc or PhD in Landscape or Population Genetics, or a related area. All candidates should submit a letter of application and research interest, curriculum vitae, and names and contact information for three referees. The position will commence either May or September 2013. Ideally, applications will be submitted by Feb 15, 2013, however, they will be accepted until a suitable candidate has been found.

Dr. C. J. Kyle, Associate Professor, Natural Resources DNA Profiling and Forensics Centre Forensic Science Department, DNA Building, Trent University 2140 East Bank Drive, Peterborough, ON, K9J 7B8 Tel. 705-748-1011 ext 7055 Fax. 705-748-1132

christopherkyle@trentu.ca http://web.nrdpfc.ca/bios/dr_chriskyle.html Additional Information: The Natural Resources DNA Profiling and Forensic Centre (NRDPFC) is located within the new DNA building of Trent University (Peterborough, Ontario, Canada). We have separate genomic DNA and DNA cloning laboratories for molecular work and an automation laboratory for high throughput sample preparation and DNA analyses. Our facility also includes access to a bio-containment Level II lab for processing potentially infectious tissues and an Indigenous Pathogen Containment Level III (IPCL 3) laboratory that is certified for several indigenous pathogens, including the rabies virus. The NRDPFC also houses the DNA Wildlife Forensics Laboratory that processes DNA evidence for several wildlife agencies as well as several police services that require non-human DNA profiling. The NRDPFC includes a custom Laboratory Information Management System (LIMS), 2 high capacity DNA sequencers (3730 ABI DNA analyzers), a next generation pyrosequencer (454 GS Junior) that enables genome sequencing as well and transcriptome analysis; and 2 real time PCR systems (Taqman, ABI Prism 7900 and Open Array, Biotrove) for gene expression analysis.

christopherkyle@trentu.ca

UAlabama Birmingham ComparativeAnalysisWorkflow

Postdoctoral Research Opportunity: Comparative Analysis Workflows for the Tree of Life

A postdoctoral research position is available in Dr. Robert Thacker's laboratory at the University of Alabama at Birmingham (UAB) as part of a multi-institution award from the National Science Foundation's Assembling, Visualizing, and Analyzing the Tree of Life (AVAToL) program. The Arbor team is building workflow software for comparative analyses of phylogenetic data at Tree of Life scales (www.arborworkflows.com).

Our current test cases address three fundamental questions in evolutionary biology: (I) The Evolutionary Process of Spatial Diversification, using species distribution data, phylogenetic relationships, and temporal data to understand processes underlying biogeographic patterns and ecological niche differentiation; (II) The Evolution of Symbiotic Communities, using natural evolutionary replicates to understand the tempo and

mode of evolution in species interactions and the evolution of phylogenetic community structure; and (III) The Evolution of Complex Interactions, using novel evolutionary models and analytical algorithms to understand functional diversification during macroevolution and the evolution of interaction networks.

The successful applicant will contribute to Arbor design and case studies, primarily focusing on the evolution of symbioses, but will also develop her/his own comparative analysis project. This position will be for 1 year initially and is renewable for an additional year dependent on applicant contributions to the project. Applicants should have, or be about to gain, a Ph.D. in Biology or a related field, and are expected to have experience with phylogenetic analyses. Preferred qualifications include a working knowledge of R, Perl, and/or Python.

Applicants must e-mail a single PDF document containing a cover letter, curriculum vitae, a statement of research interests, and contact information for at least three references to thacker@uab.edu. The e-mail subject line must include 'Postdoctoral Research Opportunity'. Review of applications will begin on March 1, 2013 and will continue until the position is filled.

For more information about this position, please contact: Bob Thacker, thacker@uab.edu The UAB Office of Postdoctoral Education provides additional opportunities for training and career development (www.uab.edu/postdocs).

UAB is an Equal Opportunity/Affirmative Action Employer committed to fostering a diverse, equitable and family-friendly environment in which all faculty and staff can excel and achieve work/life balance irrespective of ethnicity, gender, faith, gender identity and expression as well as sexual orientation. UAB also encourages applications from individuals with disabilities and veterans.

UAB performs a pre-employment background investigation on candidates selected for employment.

Robert W. Thacker, PhD Professor and Interim Chair Department of Biology University of Alabama at Birmingham 464 Campbell Hall 1300 University Boulevard Birmingham, AL 35294-1170 voice: 205-934-9685 fax: 205-975-6097 e-mail: thacker@uab.edu <http://www.portol.org> Bob Thacker <thacker@uab.edu>

UAntwerp SongbirdEvolution

We are seeking a highly motivated PhD candidate and a postdoctoral fellow interested in songbird behavioural and evolutionary ecology

Job description:

Although birdsong is a classic example of a sexually selected trait, individual song traits have often been studied in isolation and/or during a limited period during life. In our project we will adopt an integrative approach to study the causes and consequences of song behaviour in a colour-ringed great tit population in which males are followed during their entire life. Song recordings, observational data, laboratory and field experiments will be used to examine the causes and (fitness) consequences of individual variation in all aspects of song (while simultaneously also considering other sexual traits). Dependent on the candidate's interests, particular attention can/will be paid on:

* the links between song traits, personality and cognitive skills * the role of song in intersexual communication * song learning in relation to spatial movements and social network characteristics * the effects of pollution (light, noise, chemical...) on song expression * the physiological/immunological basis of variation in song expression

Profile and requirements:

* You hold a Master degree in Biology or comparable with a strong background in behavioural and evolutionary ecology, and you are enthusiastic about field work; * You have strong experimental, analytical and statistical skills, good organizational and (written and spoken) communication skills, and a proven ability to collaborate with others (but with independence and initiative), and willingness to conduct/organize extensive ornithological field work; * You can submit outstanding academic results; * Experience with birds, birdsong, and with (one of) the topics mentioned above is an advantage; * A driver's licence and licence to carry out experiments with vertebrates is a plus; * The postdoc has a strong publication record in high-quality journals, and experience with 'communication' research and birdsong is a plus.

We offer:

* A doctoral scholarship for a period of one year, with the possibility of renewal for a further three-year period after positive evaluation; * You will enrol in the Antwerp Doctoral School training program (www.ua.ac.be/ads) allowing you to take part in various courses, training programs and conferences within and outside the university; * You will work in a team of several PhD students, postdocs and technical staff involved in behavioural and evolutionary ecological re-

search; * You will be member of the Ethology group, a dynamic and internationally-oriented research group that combines proximate and ultimate (and field and lab) approaches to study various questions in evolutionary ecological research, mainly focusing on birds; * The postdoctoral position is for one year, with the possibility of renewal. * Depending on the quality and expertises of the applicants, there is an option to select 2 PhD students; * Both positions will start as soon as possible.

Interested?

* Applicants should send their complete CV, a one-page statement of research interests and motivation for this project, detailed information on their study results during Bachelor/Master (PhD students) and contact information of two referees who can supply letters of recommendation upon our request. * Applications should be submitted by email to Prof Marcel Eens at marcel.eens@ua.ac.be until the closing date: 15 January 2013 * The selected candidates should start as soon as possible (with the possibility that candidates can be contacted before the closing date). * For more information, contact Marcel Eens at the same email address or at (+32) 3265 2284 (see also: <http://www.ua.ac.be/-main.aspx?c=marcel.eens>).

Eens Marcel <marcel.eens@ua.ac.be>

UArizona Evolutionary Physiology

A postdoctoral position in evolutionary physiology is available to study the individual-level physiological tradeoffs between flight and fecundity in the hawkmoth *Manduca sexta*. The study combines field, greenhouse and lab experiments with flow-through respirometry, stable carbon isotope techniques, flight energetics and micro-surgery. The postdoc is available for two years with an immediate start date. Starting salary \$34,000 USD with benefits. Minimal requirements: PhD in physiology, ecology or evolutionary biology (or related fields), competitive publication record and strong statistical ability. Preference will be given to candidates with experience in insect physiology and respirometry. For more information please contact Goggy Davidowitz at: goggy@email.arizona.edu. Phone: +520-349-5288. Goggy Davidowitz, Department of Entomology, University of Arizona

Goggy Davidowitz Assistant Professor Department of Entomology University of Arizona

goggy@email.arizona.edu voice: 520-626-8455

Goggy Davidowitz <goggy1@me.com>

UArizona ProteinEvolvability

A postdoc position is available to work with Joanna Masel (<http://eebweb.arizona.edu/faculty/masel>) at the University of Arizona in Tucson.

The conventional view is that new proteins evolve from old proteins via gene duplication and divergence. However, this poses a chicken-and-egg problem, implying an ancient “big bang” of protein creation. This project focuses instead on the ongoing de novo evolution of protein-coding genes from previously non-coding sequences. The postdoc will investigate both case studies of this phenomena, and computational predictors of biochemical properties that might facilitate such conversions over evolutionary timescales.

The Masel group’s main research interests are in robustness and evolvability, using a mixture of analytical theory, bioinformatic and simulation approaches. This work is primarily bioinformatic, but opportunities for related, more theoretical projects also exist. Experimental collaborations with structural biologist Matthew Cordes, also at the University of Arizona, are possible too.

Excellent computer programming skills are essential, with bioinformatics / genomics experience strongly preferred. Experience with (or at least prior interest in) evolutionary biology, protein structure and folding, statistics and other quantitative approaches are all advantages. A start date of August 2013 is preferred but negotiable, and the position is renewable, with funding secured for three years.

Contact Joanna Masel at masel@u.arizona.edu for more information or to apply.

masel@email.arizona.edu

UBasel HostMicrobeInteractions

Postdoc position in microbial population genetics and evolutionary genomics

A postdoc is available in the research group of Dieter Ebert, at the Zoological Institute at Basel University in Switzerland. I am looking for a highly motivated post-doc with interest in the evolutionary genetics of host-parasite interactions. This position is funded to work on the evolutionary genetics/genomics of a bacterial parasite (*Pasteuria ramosa*) of *Daphnia*. A background in evolutionary genetics, including knowledge of molecular methods is essential. Bioinformatics skills are welcome. Excellent written, verbal, and interpersonal skills, a superb work ethic, and the ability to think creatively and critically are desired. The starting date is flexible. The positions are initially for 2 years, but can be extended to 3 years.

The post-doc will be part of Dieter Ebert’s research group, working on the co-evolution of host-microbe interactions. Our experimental work uses *Daphnia* as the host system. Details about the group can be found under: <http://evolution.unibas.ch/ebert/> Please send application by E-mail to Dieter Ebert (dieter.ebert@unibas.ch). Applications (all in one single pdf file with your name as file-name, please) should include a CV, a list of publications and a 1 page description of your research interests and motivation. Please give names and email addresses of two persons who are willing to write a letter of recommendation. Deadline for applications is 15. Feb. 2013. Interviews will be held soon after.

Contact information: Prof. Dr. Dieter Ebert, Basel University, Zoological Institute, Vesalgasse 1, 4051 Basel, Switzerland, Email: dieter.ebert@unibas.ch Tel. +41-(0)61-267 03 60

– Dieter Ebert Universität Basel, Zoologisches Institut, Evolutionary Biology Vesalgasse 1, CH-4051 Basel, Switzerland <http://evolution.unibas.ch/> Email: dieter.ebert@unibas.ch Tel. +41-(0)61-267 03 60 FAX +41-(0)61-267 03 62

dieter.ebert@unibas.ch

UBrest MarineInvertebrateEvoDevo

LabexMer Postdoctoral Position on the

Impact of Environmental Change on Larval Development of Marine Organisms

A full-time postdoctoral position is available jointly at the European Institute of Marine Sciences (IUEM) and the French Research Institute for Exploration of the

Sea (IFREMER) in Brest, France, under the supervision of Dr. Flavia Nunes. The position is funded by the LabexMer Chair in Evolutionary Marine Ecology.

We are seeking a motivated and independent individual, who enjoys experimental and field work, and who is equally comfortable and qualified in the molecular lab. Ability to work in a team is essential and a strong publication record is desired.

The research goals of the project are to examine the effects of climate change and ocean acidification on the larval development of marine invertebrates. A comparative approach will be used to examine the effects of environmental change on gene expression, physiology and calcification in molluscs.

The successful candidate will demonstrate proficiency in at least two of the following areas:

- Molecular biology, including gene expression analysis (transcriptomics, qPCR, in-situ hybridization)
- Bioinformatics for the analysis of genomic, transcriptomic and/or proteomic data
- Invertebrate larval development

Funding is available for up to 2 years with renewal after 1 year pending satisfactory research progress. Salary will be euro 30,000 - 32,000 plus benefits.

Brest is home to the largest oceanographic community in France and in Europe. The network of academic and government institutes based here provide numerous opportunities for interactions, collaborations and sharing of resources for the exploration of the sea. The city of Brest has a rich maritime culture and is located along the charming coastline of Brittany.

To apply, please send a letter of motivation, detailed CV including publication list, and contact information for 2 references to Flavia.Nunes@univ-brest.fr

Deadline for applications: March 1, 2013

– Flávia Nunes

International Chair in Evolutionary Marine Ecology
LabexMer - Institut Universitaire Européen de la Mer

IUEM Technopôle Brest-Iroise Rue Dumont d'Urville
Bureau A124 29280 Plouzané FRANCE

Flavia.Nunes@univ-brest.fr

UBritishColumbia ProtistEvolution

Research Associate Position in Evolutionary Ultrastructure of Marine Heterotrophic Flagellates

A nine-month, full-time Research Associate position is available in the Botany Department at The University of British Columbia. This position will provide high-level electron microscopy and group support for projects that examine the evolutionary morphology of marine heterotrophic flagellates.

The successful applicant must have a PhD in a relevant field and at least 4 years of postdoctoral research at the highest international standards relating to comparative protistology, molecular phylogenetics and single cell transmission electron microscopy. The successful applicant must also have a strong publication record in the comparative ultrastructure of marine heterotrophic flagellates. Research will be within the framework of the Tula Foundation Funded Centre for Microbial Diversity and Evolution. Additional responsibilities include the presentation of research findings at conferences, continued publication of research, and assistance with the day-to-day training of other research personnel.

Applicants should mail, no later than February 6, 2013, a curriculum vitae, a concise statement of research interests, the names of three referees and copies of two representative publications to:

Brian Leanderâ Department of Botany â University of British Columbia â 6270 University Blvd.âVancouver, BC, V6T 1Z4

This position will begin on April 1, 2013 and will initially be for nine months.

UBC hires on the basis of merit and is committed to employment equity. All qualified persons are encouraged to apply. Canadians and Permanent Residents of Canada will be given priority.

bleander@mail.ubc.ca

**UCIrvine
ButterflyVisionTranscriptomics**

Physiological genomics of color vision in butterflies

UNIVERSITY OF CALIFORNIA, Irvine 3 year, NSF funded, postdoctoral researcher Start date: April 2013 (possibly later) Salary: \$39,264-\$41,364

Butterflies evolve mimetic wing coloration under selec-

tion from predators. Unless butterfly eyes have adaptations for discriminating mimetic color variation there is a risk of confusing mimics from potential mates for the butterflies themselves. The genus *Heliconius*, composed of 43 species, is of particular interest because unpalatable species form Müllerian mimicry rings throughout the Neotropics. We have discovered that *Heliconius* eyes express recently duplicated ultraviolet (UV) opsin mRNAs, and provided evidence that this gene duplication may be an adaptation for species recognition of mimetic colors, via enhanced UV color vision. This project aims to characterize the visual transcriptome across the *Heliconius* phylogeny and in related outgroup taxa using RNA-sequencing of adult compound eyes to identify gene networks involved in the evolution of novel photoreceptors and sexual dimorphisms in eye morphology and visual function.

We are seeking a Postdoctoral Research Associate with expertise in bioinformatics, comparative genomics, molecular evolution and/or in qPCR and in preparation of libraries for Next-Generation sequencing to complement the existing core research team at the University of California, Irvine, Department of Ecology and Evolutionary Biology (Adriana Briscoe) and external collaborators, Peter Andolfatto (Princeton University), Daniel Osorio (University of Sussex). The successful candidate will also have opportunities for involvement in field collecting in Latin America.

Relevant papers:

Briscoe AD, Bybee SM, Bernard GD, Yuan F, Sison-Mangus MP, Reed RD, Warren AD, Llorente-Bousquets J, Chiao CC. 2010. Positive selection of a duplicated UV-sensitive visual pigment coincides with wing pigment evolution in *Heliconius* butterflies. *Proceedings of the National Academy of Sciences, U.S.A.* 107:3628-33. DOI: 10.1073/pnas.0910085107.

Bybee SM, Yuan F, Ramstetter MD, Llorente-Bousquets J, Reed RD, Osorio D, Briscoe AD. 2012. UV photoreceptors and UV-yellow wing pigments in *Heliconius* butterflies allow a color signal to serve both mimicry and intraspecific communication. *The American Naturalist* 179:38-51

Heliconius Genome Consortium. 2012. Butterfly genome reveals promiscuous exchange of mimicry adaptations among species. *Nature*. 487:94-8.

Enquiries to abriscoe@uci.edu

A job ad is also available at the UCI website http://jobs.bio.uci.edu/jobtemplate_new.cfm?the_jobid=-3D658 . abriscoe@uci.edu

UCalgary ParasitePopulationGenomics

Postdoctoral position available in Parasite Population Genomics

We are seeking a postdoctoral fellow to carry out population genomic studies that will improve our understanding the molecular mechanisms through which parasites evolve resistance to drugs.

The project is led by Dr John Gilleard in collaboration with Dr Sean Rogers and Dr James Wasmuth. The proposed project will initiate a new approach that complements our current work in which genetic crossing and genomic strategies are being used to map drug resistance loci using *Haemonchus contortus* as a model parasite system (Redman et al. 2012. *PLoS Pathogens*). Using reduced representation library based and next-generation sequencing approaches (e.g. RAD sequencing), the postdoc will use naturally occurring field populations of *H. contortus*, to identify regions of the genome that are under selection by drug treatment. The identification of the genetic loci that confer resistance is urgently needed tools to detect and monitor drug resistance parasites.

The successful applicant will be based at the University of Calgary's Faculty of Veterinary Medicine. The project involves close collaboration with the Wellcome Trust Sanger Institute, Cambridge, UK as well as colleagues at the University of Glasgow.

Required: A PhD degree with 0-3 years post-doctoral experience. Background in population genetics or molecular evolution. Good bioinformatic skills and an ability to use Linux operating system. Experience in organizing and analyzing sequence data. An ability to work independently with good communication and presentation skills.

Strongly desired: Experience with next-generation sequence data and an interest in parasite biology (although previous parasitology experience is not essential).

The expected start date is June 2013 (this is negotiable). For potential candidates that are finishing their PhD studies, please note that you will need to have successfully completed your PhD exam before a contract can be offered. Review of applications will begin on the 1st of February and continue until a suitable applicant

is found.

If you are interested in the position, please send a brief letter outlining your motivation, your CV and contact information for three references to Dr John Gilleard at jsgillea@ucalgary.ca. All applications will be considered until the post is filled.

Further information regarding our research groups and the University of Calgary can be found at <http://www.ucalgary.ca/jsgilleard/>, <http://homepages.ucalgary.ca/~srogers/index.html> and <http://wasmuthlab.wordpress.com>. jwasmuth@ucalgary.ca

UChicago 2 EvolHumanGeneRegulation

Two postdoc positions are available at the department of Human Genetics at the University of Chicago, to work with Yoav Gilad and Jonathan Pritchard.

One of the main challenges for geneticists in the 'post-genome' era is to understand the genetic architecture of gene regulation and how differences in gene regulation affect complex phenotypes, including human diseases. By collecting valuable samples, developing and adapting new technologies, and combining expertise in evolutionary biology, comparative genetics, and genomics, our groups have made key contributions to the study of gene regulation in humans and closely related primates.

Over the past year, we have started to develop induced pluripotent stem cell (iPSC) systems for many of our projects. We realized that in order to gain additional insight into regulatory processes that underlie variation in complex phenotypes we must have access to faithful model systems of a wide range of cell types. We are currently working on the a number of iPSC-related projects, including a project aimed at understanding genetic determinants of regulatory variation in differentiated cells, a comparative genomics study of differentiation in primates using iPSCs, and a study aimed at using iPSC-derived cardiomyocytes to study the genetic basis for CVD.t

The open postdoc positions are not targeted to specific projects; postdocs are expected to choose a project based on their interest. Both empirical and computational biologists are encouraged to apply.

If interested, please email a cover letter outlining your research experience and interests, a curriculum vitae

and contact information for 3 referees to Yoav Gilad at gilad@uchicago.edu

For more details on our research, please visit our webpage at <http://giladlab.uchicago.edu/> gilad@uchicago.edu

UCollegeCork Ireland FishQuantGenetics

Research Fellow in Quantitative Genetics & Evolutionary Biology Job Posted: 18 Dec 2012 Closing Date for Applications: 21 Jan 2013 School: School of Biological, Earth & Environmental Sciences, University College Cork, Ireland. Principal Investigators: Dr Philip McGinnity & Prof. Tom Cross Contract Type: Fixed Term Whole-Time Job Type: Research Salary: 51,716 - 54,820

Position Summary The Beaufort Marine Research Awards, launched in 2007, has provided 20 million to establish world class marine research groups in a number of priority areas aimed at addressing the objectives of Sea Change: A Marine Knowledge, Research and Innovation Strategy for Ireland 2007-2013. The awards target research leaders of international standing and mobile early stage researchers from Ireland and abroad. One of the groups established under this initiative is the Beaufort Fish Population Genetics Research Centre. This new centre of excellence integrates researchers and research capacity from University College Cork, Queen's University Belfast and the Marine Institute, Ireland.

The School of Biological, Earth & Environmental Sciences, University College Cork (UCC), Ireland, is seeking to employ under the Beaufort Marine Science Scheme, a Research Fellow in the area of Quantitative Genetics and Evolutionary Biology. This position will run from appointment to the end of 2015. The Research Fellow will participate in the practical implementation of an all-Ireland programme in Fish Genetics, aiming to generate high level research activity and to produce publications in the area of population and evolutionary genetics.

Specifically, and in addition to the application of molecular techniques to support its population genetics programme (e.g. microsatellites, sequencing of both nuclear and mtDNA genes, SNPs and Next Generation Sequencing) the Beaufort team has been conducting a

series of common garden and reciprocal transfer experiments in addition to developing multigenerational pedigrees on wild fish populations. Some of these populations have been subject to detailed monitoring for many decades and have excellent potential to provide insights into the processes of local adaptation, natural selection, phenotypic plasticity, inbreeding depression and mating strategies, and to gain a improved understanding of such applied topics as the evolutionary consequences of climate variability, fisheries, introgression with captive bred conspecifics, ecosystem changes due to invasive species and disease. The project has and continues to build excellent datasets for Atlantic salmon, brown trout, European lobster, Atlantic cod and stickleback.

We are now seeking a quantitative geneticist/evolutionary biologist who can provide a link between the molecular, biological, demographic and quantitative genetic aspects of the various projects within the Beaufort programme and exploit the research opportunities provided by these unique datasets. There should also be the opportunity to undertake some genomic analysis based upon NGS data. Suitable candidates will have a strong background in evolutionary or conservation genetics (in any species) and have a good knowledge of modern quantitative genetic methodologies.

The successful candidate will be facilitated at the Marine Institute's research centre at Newport, Co. Mayo, Ireland, with scope to spend periods of time at University College Cork and Queens University Belfast.

Criteria - A PhD qualification in quantitative genetics, evolutionary biology, conservation genetics, molecular ecology or a related topic and significant relevant research experience; - The capacity to work independently on research projects; - The ability to assess and evaluate concepts/theories in order to develop original solutions and particular knowledge of, and expertise in research methodologies; - Track record of high quality peer reviewed publications; - Experience with pedigree analysis and kinship reconstruction using molecular data; - Experience with a range of quantitative techniques and statistical modelling for example restricted maximum likelihood (REML) or Bayesian mixed models, in particular 'animal models' for the analysis of pedigree data; - Experience in post graduate and Post-Doctoral supervision; - Strong project management experience; - Ability to provide leadership to small research teams; - Ability to secure independent external research funding; - Ability to contribute to broader organisational and management processes; - Knowledge transfer and commercialisation experience is highly desirable.

For more detailed outline of the Research Fellow responsibilities and career development at University College Cork please see the UCC Job Vacancy website <http://www.ucc.ie/en/hr/vacancies/research/full-details-186532-en.html> For informal enquiries on the post candidates should contact: Dr Philip McGinnity

— / —

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>

UCopenhagen ArthropodBiodiversity

Postdoctoral position in entomology at the Center of Macroecology, Evolution and Climate/Natural History Museum Denmark.

Danish National Research Foundation , University of Copenhagen and Technical University of Denmark

The Center of Macroecology, Evolution and Climate at the Natural History Museum of Denmark has an open postdoctoral position in entomology. The center has been established with funds from the Danish National Research Foundation ("Danmarks Grundforskningsfond"), the University of Copenhagen and the Technical University of Denmark. It is a long-term funded Center of Excellence that started 1st of January 2010. It will integrate terrestrial and marine research in a cross-disciplinary research program addressing fundamental questions on the origin, maintenance, conservation and future of life and biological diversity on Earth.

The center will bring together ca. 40 marine and terrestrial high-profile scientists, postdoctoral scientists, PhD-students as well as technical and administrative staff. The center will juxtapose faculty staff scientists from the fields of macroecology, historical biogeography, oceanography, evolutionary biology, ecology, population biology, climate change research, conservation biology and environmental economics, who have been assigned to the center from the Department of Biology, the Natural History Museum of Denmark, and Forest & Landscape (all University of Copenhagen) and the National Institute of Aquatic Resources (Technical University of Denmark).

The postdoctoral position in entomology is to work on species diversity patterns of arthropods in the Eastern

Arc Mountains, Tanzania. The preferred candidate will become responsible for a new arthropod inventory program which the museum is launching in the Udzungwa National Park, Tanzania and the position will therefore require substantial and physically demanding fieldwork in Tanzania. The aims of the project are to investigate faunal turnover along altitudinal and longitudinal transects for selected groups of arthropods (alpha and beta diversity) and to further develop and promote standards, techniques and methodologies for state of the art and cost-efficient biodiversity inventories and assessments.

Qualifications

We seek a candidate with strong publication records within the topic of the postdoc position, strong analytical and data handling skills, experience with tropical fieldwork, and an ability to communicate within a cross-disciplinary research team. Taxonomical knowledge on the level of arthropod orders would be favorable.

The appointment is for 1-2 years. Starting time is negotiable, but preferably as soon as possible.

Specific inquiries concerning the position should be directed to Nikolaj Scharff, Natural History Museum of Denmark, Section of Entomology, University of Copenhagen, Universitetsparken 15, DK-2100 Copenhagen Ø, Denmark E-mail: nscharff@snm.ku.dk; Phone: +45 35321107.

Application

The application must be in English and submitted online by clicking "Apply online" at <http://www.ku.dk/-stillinger/vip/>. The application must include the following appendices:

- * Curriculum vitae with documentation of education
- * Complete publication list
- * Description of previous research experience
- * Contact details of 3 referees.

Applications should be received no later than March 1st, 2013. Application received after the deadline will not be considered.

Terms of appointment and payment in accordance with the agreement between the Ministry of Finance and The Danish Confederation of Professional Associations (AC). Post docs salary is based on seniority and is currently between 31.800 kr. and 33.500 kr. plus pension contribution.

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

You can read more about the Natural History Museum at www.snm.ku.dk/english Founded in 1479, the Uni-

versity of Copenhagen is the oldest university in Denmark. With 37,000 students and 9,000 employees, it is among the largest universities in Scandinavia and one of the highest ranking in Europe. The University consists of six faculties, which cover Health and Medical Sciences, Humanities, Law, Science, Social Sciences and Theology.

Nikolaj Scharff, Associate Professor, Curator of Arachnida Department of Entomology Natural History Museum of Denmark Zoological Museum, University of Copenhagen Universitetsparken 15, DK-2100 Copenhagen DENMARK

Tel. +45 35321107 Email. nscharff@snm.ku.dk

Webpage: <http://snm.ku.dk/people/nscharff> Nikolaj Scharff <NScharff@snm.ku.dk>

UEdinburgh BacterialEvolutionaryGenomics

Post-Doc Fellowship in Bacterial Evolutionary Genomics

University of Edinburgh

A post-doctoral researcher position is available in the Laboratory for Bacterial Evolution and Pathogenesis at The Roslin Institute, University of Edinburgh with Prof. Ross Fitzgerald (www.roslin.ed.ac.uk/ross-fitzgerald). The 2 year BBSRC-funded project will investigate the evolution of *Staphylococcus aureus*, the major human and animal pathogen using a comparative next generation sequencing approach. Overall, the project will aim to identify and characterise the evolution of new virulent clones of *S. aureus* affecting humans and animals with a long term goal of identifying new targets for preventing or controlling infections. The candidate will have a strong bioinformatics background with experience of handling large sequence datasets for comparative genomic and evolutionary analyses, and a keen interest in bacterial evolution. In addition, experience in molecular microbiology would be a distinct advantage. The Roslin Institute is a new world-class centre for biomedical research of relevance to both animal and human health with a strong focus on infectious diseases. The Institute has state of the art research facilities for genomics including Next Generation Sequencing, imaging, and proteomics. Within the University of Edinburgh the project will involve collaboration with the Institute for Evolutionary Biology and

other research groups within Edinburgh Infectious Diseases (www.eid.ed.ac.uk). Informal queries encouraged (Ross.Fitzgerald@ed.ac.uk). Closing date for application (CV and covering letter): Feb 1.

Relevant selected references:

Paul R. McAdam, et al and J. Ross Fitzgerald, 2012. Molecular tracing of the emergence, adaptation and transmission of hospital-associated MRSA. *Proc Natl Acad Sci U S A*, 109:9107-12

Lowder BV, et al and J. Ross Fitzgerald. 2009. Recent human-to-poultry host jump, adaptation, and pandemic spread of *Staphylococcus aureus*. *Proc Natl Acad Sci U S A*. 106:19545-50

ross.fitzgerald@roslin.ed.ac.uk

large scale project. See project website for more details: <http://osslab.ex.ac.uk/adLola.html> To apply, please see info and instructions given here: https://jobs.exeter.ac.uk/hrpr_webrecruitment/wrd/run/ETREC107GF.open?VACANCY_ID=-9343857C2U&WVID=3817591jNg&LANG=USA

Orkun S. Soyer, PhD Senior Lecturer in Systems Biology Engineering, Mathematics and Physical Sciences University of Exeter Tel: +44 (0)1392 723615

Lab: <http://osslab.ex.ac.uk/> Tinker: <http://osslab.ex.ac.uk/Tinker.aspx> Synthetic Communities: <http://osslab.ex.ac.uk/adLola.html> "Soyer, Orkun" <O.S.Soyer@exeter.ac.uk>

UExeter 2 EvolutionMicrobialCommunities

Two Postdoctoral Researcher Positions on "Engineering synthetic microbial communities for biomethane production"

Understanding the ecological and evolutionary dynamics in complex microbial communities and harnessing this understanding in engineering synthetic communities is a big challenge. We are aiming to face this challenge by studying microbial communities involved in biomethane production. In a two tiered approach, we will employ directed evolution on microbial communities and implement simple synthetic communities in the lab. To focus on these two complementary approaches, we are looking to recruit two postdoctoral researchers that can work in collaborative manner. One post will focus on mathematical modelling of simple "synthetic" communities and their experimental implementation (with the support of a technician). The other post will focus on establishing and running of directed evolution experiments on natural microbial communities isolated from natural sources and bioreactors. This work will also be supported by an independent technician. The work on synthetic community modeling and implementation will be conducted under the supervision of Orkun Soyer (University of Exeter, Strathearn campus), while that on experimental evolution will be conducted under the supervision of Angus Buckling (University of Exeter, Cornwall campus).

The successful candidates will be part of a larger team of PIs and researchers, encompassed by this

UFlorida SeasonalAdaptation

Postdoc: U. Florida - mechanisms of seasonal adaptation and life history evolution.

A postdoctoral position in genomics and physiology of seasonal adaptation, life history evolution, and speciation is available in Dan Hahns lab at the University of Florida.

Our work takes a vertically integrated approach to understanding how rapid adaptation of insect seasonal life history timing can lead to speciation and radiation onto new host plants in the apple maggot sympatric speciation system. Specifically, a new host race of *Rhagoletis pomonella* formed when this fly radiated from its native host plant, hawthorns, onto domesticated apples. Because apples flower and fruit earlier in the summer than hawthorns and adult flies are short lived the two host races have become isolated in time. In this system temporal isolation of the two host races is driven by shifts in the timing of pupal diapause/dormancy wherein the apple host race enters diapause earlier than the hawthorn host race and also exits diapause earlier the next year to synchronize themselves with their novel host fruit. Thus, this system is not only a model for speciation and host plant adaptation, but also for adaptation to shifts in seasonal timing like those expected to occur with shifts in seasonality due to anthropogenic climate change.

Some representative publications include:

Ragland, G.J., S.B. Sim, S. Goudarzi, J.L. Feder, and D.A. Hahn. 2012. Environmental interactions during host race formation: host fruit environment moderates a seasonal shift in phenology in host races of *Rhagoletis*

pomonella. *Functional Ecology*. 26:921-931.

Ragland, G.J., S.P. Egan, J.L. Feder, S.H. Berlocher, and D.A. Hahn. 2011. Developmental trajectories of gene expression reveal candidates for diapause termination, in the apple maggot fly, *Rhagoletis pomonella*. *Journal of Experimental Biology*. 214:3948-3959.

Michel, A.P., S. Sim, T. Powell, M.S. Taylor, P. Nosil, and J.L. Feder. 2010. Widespread genomic divergence during sympatric speciation. *PNAS*. 107:9724-9729.

Filchak, K.E., Roethele, J.B. & Feder, J.L. 2000. Natural selection and sympatric divergence in the apple maggot *Rhagoletis pomonella*. *Nature*. 407:739V742.

Feder, J.L. and K.E. Filchak. 1999. Its about time: the evidence for host plant-mediated selection in the apple maggot fly, *Rhagoletis pomonella*, and its implications for fitness trade-offs in phytophagous insects. *Entomologia Experimentalis et Applicata*. 91: 211V225

This project is a collaborative effort with Greg Ragland, Scott Egan, and Jeff Feder at the University of Notre Dame and the successful applicant will be part of a larger team at both U. Florida and Notre Dame. The postdoc will be expected to lead a group of undergraduate and graduate students in field collecting flies from both host plants, rearing them in the lab under different thermal regimes mimicking seasonal shifts, phenotyping dormancy using metabolic rates, and collecting staged tissue samples for RNA-seq, proteomics, and whole-genome associations. The postdoc will be expected to process, analyze, and integrate high-throughput data from next-generation sequencing and mass spectrometry and apply the results to a physiologically informed framework for the evolution of life history timing. Experience with high-dimensionality data, genomics, molecular evolution, and programming in R and Perl/Python are all a plus.

The initial appointment will be for 2 years starting in summer 2013, with extension for up to 4 years based on performance. The University of Florida located in Gainesville offers a rich scientific community for evolution, ecology, physiology/cell biology, and genomics that spans many departments including Entomology and Nematology (the academic home for this appointment), Biology, Wildlife, Forestry, the Genomics Institute, the US Department of Agriculture, and the College of Medicine. There will be substantial opportunities for interdisciplinary training across these units, including training in genomics and informatics, as well as additional training opportunities in teaching/instruction and scientific outreach to the public. Gainesville is a great college town in north Florida surrounded by forests, springs & rivers, and is also an easy

drive from the beach on either coast and larger cities like Jacksonville, Orlando, and Tampa.

For more information, contact Dan Hahn (dahahn@ufl.edu). To apply, send a single PDF document including your CV, a brief statement of previous research, and contact information for three references to Dan Hahn (dahahn@ufl.edu) by February 15th. Review of applications will begin in late February and continue until the position is filled, ideally with a summer 2013 start date. Both Dan and Greg will be at the SICB meetings in San Francisco January 3-9 if you would like more information in person.

Daniel A. Hahn Associate Professor Department of Entomology and Nematology University of Florida P.O. Box 110620 Gainesville, FL 32611-0620

— / —

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>

UGeorgia EvolutionDiseases

The Park lab in the Ecology School, University of Georgia is seeking to recruit a postdoctoral associate with interests in the evolutionary ecology of infectious diseases and a strong background in modeling/computation applied to population biology. The lab uses modeling and computational techniques to study the ecology and evolution of host-parasite interactions. Interested applicants are first encouraged to familiarize themselves with the research interests of lab members (geospiza.ecology.uga.edu/parklab). As the successful applicant will be given freedom to develop their own research questions, applicants are asked to submit (1) CV, (2) short statement of intended research plan (1-2 pages) by email to Dr Andrew Park (awpark@uga.edu). Applicants are also requested to arrange for 3 letters of reference to be emailed to Dr Park. Salary will be commensurate with experience and the position includes health and retirement benefits. Informal enquiries by email are welcome. Start date could be as early as 1st March, 2013 and applications received by 11th February, 2013 will be given full consideration.

Dr Andrew Park Assistant Professor University of Georgia Odum School of Ecology & Dept. Infectious Diseases, College of Veterinary Medicine Athens, GA, 30602-2202, USA

Ph 706 610 0784 || Fx 706 542 4819 || Skype awp222 ||
 Web geospiza.ecology.uga.edu/parklab

Andrew Park <andrew.william.park@gmail.com>

UGothenburg SpeciationGenomics

6 months position as young researcher in population genomics of speciation

The Centre for Marine Evolutionary Biology, Faculty of Science, University of Gothenburg Centre for Marine Evolutionary Biology (www.cemeb.science.gu.se) is a Swedish centre of excellence linking research in theoretical biology, population genetics, ecological genomics, developmental biology, physiology and ecology. About 50 researchers, postdocs and PhD students work jointly in the programme. CeMEB is funded by the Swedish Science Research Councils (VR and Formas) and the University of Gothenburg during the period 2008-2018.

During the year 2013 the Centre will host Professor Roger Butlin, University of Sheffield, as guest professor. Professor Butlin is an authority in research on hybrid zones and speciation. We now seek a dedicated young researcher with a PhD degree in the field of population genetics/genomics/bioinformatics to be appointed at CeMEB as a young researcher during 6 months to work closely with Professor Butlin and in collaboration with the CeMEB community.

During his time in Sweden, Professor Butlin will work on local adaptation and the evolution of reproductive isolation in the marine snail *Littorina saxatilis*. The project will make extensive use of data from NGS sequencing, including a new study on hybrid zones between Swedish ecotypes and analysis of existing sRAD and RNAseq data to study genomic differentiation across abrupt environmental boundaries. The de novo genome sequencing of *Littorina saxatilis* is currently nearing completion by the CeMEB consortium. Professor Butlin will work jointly with the CeMEB community in assembling and annotating the genome, as well as combining the genome assembly with a genetic map using sRAD markers. There may also be an opportunity to work with Professor Butlin on a pilot project, probably with a different model organism, aimed at detecting the very first steps in the evolution of reproductive isolation.

Qualifications

The successful applicant should have a PhD in evo-

lutionary genetics, or a related discipline, and either previous experience of working with analyses of high-throughput sequencing data in an evolutionary context or demonstrable willingness and aptitude to develop skills in this area. Experimental, hands-on experience with live organisms and previous work with hybrid zones or speciation processes are desirable but not a requirement. Good communication abilities in written and spoken English are required qualifications.

Starting date

The postdoc period should ideally start in May-June and will last through the summer of 2013 (with the opportunity for a short 2 week holiday).

Practicalities

The position is based at the University of Gothenburg's marine research station at Tjarno (see www.loven.gu.se). There will be a possibility to rent a room (with shower, and common kitchen) at the research station hostel.

For more information contact the postdoc host, Professor Roger Butlin (r.k.butlin@sheffield.ac.uk) or the programme coordinator, Professor Kerstin Johannesson (Kerstin.Johannesson@gu.se).

For information about salaries, appointment rules, etc. contact the head of the department, Dr Ingela Dahllöf (Ingela.Dahllof@bioenv.gu.se).

Applications should include a CV and a publication list, a letter describing the applicant's earlier experiences and skills, the motivation for applying (one page limit), and the name and contact information for two independent reference persons. The application should be sent by email to Eva.Marie.Rodstrom@gu.se

The application should reach the above address no later than 28th February.

r.k.butlin@sheffield.ac.uk

UHelsinki FungalPathogenEvolution

POST DOC POSITION IN DISEASE ECOLOGY

Applications are invited for a 2-year (with a possibility of continuation) post doc in the research group of Anna-Liisa Laine, part of the Centre of Excellence in Metapopulation Research at the University of Helsinki.

The project is centered on the interaction between host plant *Plantago lanceolata* and its fungal pathogen

Podospaera plantaginis in the Åland Islands. With 12 years of epidemiological data from over 4000 host populations, sequenced pathogen transcriptome and solid experimental protocols, this system offers unique opportunities for testing classic hypotheses regarding pathogen evolution with direct links to epidemiological dynamics. Part of the project is overseeing large scale field surveys of the pathogen in the archipelago of Finland. Using this large scale ecological data, there is room to develop the project towards experimental / molecular / theoretical direction depending on the interests of the candidate.

The successful candidate should have PhD / post doctoral experience with host-parasite interactions, and a strong interest in studying disease in natural populations. Excellent written and verbal communication skills, and the ability to think independently and creatively are required. You must demonstrate ability to work as part of a team, and participate in supervision of more junior group members as well as numerous field assistants.

More information: www.helsinki.fi/science/~allaine
www.helsinki.fi/science/metapop Starting date: Summer / Autumn of 2013

Application deadline: 15 March 2013

Mail your application (CV with publications included, contact details of two references, and a letter (MAX 1 page) with a description of your research interests and why you would be a suitable candidate for the project) as a single pdf file to biotiede-mrg@helsinki.fi.

Informal inquires to anna-liisa.laine@helsinki.fi

Anna-Liisa Laine <anna-liisa.laine@helsinki.fi>

UHull Microbial shape evolution

I am currently advertising for three five-year postdoctoral positions in my lab (tinyurl.com/physecolab) at the University of Hull.

The positions are funded by the Leverhulme Trust and all relate to the causes and consequences of microbial shape. I am looking for PDRFs to work on:

1. Comparative phylogenetic analyses of bacterial shape and ecology (position reference FS0250)
2. Experimental tests of optimal bacterial shapes (position reference FS0252)
3. Modelling low-Reynolds number swimming and shape interactions (position reference

FS0251)

More information can be found at <http://www2.hull.ac.uk/administration/jobs/academics.aspx>
 Available from 1st May 2013. Closing date 11th February 2013.

I am happy to answer informal queries about the posts or the department.

Stuart

Dr Stuart Humphries Senior Lecturer Department of Biological Sciences University of Hull Kingston-upon-Hull UK HU6 7RX

+44 (0)1482 466425

tinyurl.com/PhysEcoLab

www.hull.ac.uk/biosci S.Humphries@hull.ac.uk

UKansas SoftwareForLargeGeneTrees

A position for a postdoctoral researcher is available in the laboratory of Dr. Mark Holder in the Department of Ecology and Evolutionary Biology at the University of Kansas (Lawrence, KS). The duration of the position is two years. The research projects that fund the position focus on developing improved methods of conducting multiple sequence alignment and phylogenetic inference. In particular, designing new algorithms and statistical models for updating large gene trees in light of new sequence data is an important target for the work. The postdoctoral researcher will be expected to contribute to the software efforts of a multi-institutional collaborative effort to integrate phylogenetic estimates across the entire tree of life (<http://opentreeoflife.org>). Candidates will be expected to have completed a PhD in Biology, Statistics, Computer Science or a related field. Preferably the candidate will have experience in Python and either Java, C, or C++.

The ideal candidate will be enthusiastic, motivated, have a strong background in phylogenetics, and have experience implementing statistical inference techniques in software as demonstrated by materials submitted through the application process, work experience, and letters of reference, and/or previous publications.

Apply to: <https://jobs.ku.edu> and use the "Search postings" to search for position number 00008584 and

job id 1667.

Currently the URL for the posting is at: https://recruiting.ku.edu/psp/tam/EMPLOYEE/-HRMS/c/HRS_HRAM.HRS_CE.GBL?Page=-HRS_CE_JOB_DTL&Action=A&JobOpeningId=-1667&SiteId=1&PostingSeq=1 (but that URL may change if the posting has to be amended, and searching for the position number should remain a reliable manner to find the listing).

For more information, see the Holder web page at: <http://phylo.bio.ku.edu/> KU is an EO/AA employer.

Mark Holder

mtholder@gmail.com mtholder@ku.edu <http://phylo.bio.ku.edu/mark-holder> Department of Ecology and Evolutionary Biology University of Kansas 6031 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045

lab phone: 785.864.5789 fax (shared): 785.864.5860

mtholder@gmail.com

We are seeking a PDRA with expertise in computational population genetics, statistics and informatics to complement the existing core research team at the University of Liverpool Institute of Integrative Biology (Ilik Saccheri, Arjen van't Hof, and research technician) and external collaborators, François Rousset (Montpellier), Frantisek Marec (Ceske Budejovice) and Laurence Cook (Manchester Museum). Some involvement with sample collecting in continental Europe and USA will also be necessary.

Suggested papers: Saccheri et al (2008). Selection and gene flow along a diminishing cline of melanic peppered moths. PNAS 105: 16212-16217.

Van't Hof et al (2011). Industrial melanism in British peppered moths has a singular and recent mutational origin. Science 332: 958-960.

Enquiries to saccheri@liv.ac.uk A formal job ad will soon be available at http://www.liv.ac.uk/working/-job_vacancies/research/ I.J.Saccheri@liverpool.ac.uk

ULiverpool MothMelanismPopGen

Industrial melanism in the peppered moth: recent and ancient sweeps

UNIVERSITY OF LIVERPOOL

3 year, NERC funded, postdoctoral researcher Start date: March 2013 (possibly later) Salary: £31,020-£33,884 pa

Industrial melanism in the peppered moth (*Biston betularia*) is the iconic example of rapid adaptation to environmental change. Large changes in the frequency of melanism (a dominant trait controlled by allelic variation at a single locus) have been observed in Britain, continental Europe and North America. Preliminary data suggest that melanism in these populations has arisen from separate mutations. This project aims to characterise extended haplotypes around the melanism locus in contemporary and historical (museum) samples from all three populations to make inferences about the strength of selection and consequences for linked variation, gene flow, as well as the age of morph alleles. The results will add an entirely new dimension to the body of work on this important system, providing insight into the mechanism of recurrent or parallel evolution, and the dynamics of selective sweeps.

UMichigan ComputationalEvolutionaryBiology

Postdoc: UMichigan.ComputationalEvolutionaryBiology

Job title: Postdoctoral position in computational macroevolution

A postdoctoral position in computational macroevolution is available immediately in Dan Rabosky's lab at the University of Michigan, Ann Arbor. The postdoctoral researcher will be involved the development of computationally intensive methods for studying evolutionary dynamics (speciation, extinction, phenotypic evolution) across phylogenetic trees that potentially include many thousands of taxa. The ideal candidate will have a strong background in computational biology, computer science, and/or quantitative methods in evolutionary biology. Programming experience in both a compiled language (C++ or C preferred) and one or more scripting languages such as R or Python is highly desirable. Previous experience studying macroevolution dynamics is helpful but not essential, and we welcome applications from any area of computational biology, including population genetics, theoretical ecology, and applied mathematics.

The position offers exceptional opportunities for independent research, career development, and quantita-

tive skills training. We have an outstanding group of researchers in quantitative/computational evolutionary biology and biodiversity science in the Department of Ecology and Evolutionary Biology, the UM Museum of Zoology, and the UM Museum of Paleontology.

Applications should be sent to drabosky at umich.edu. Please include a cover letter describing your research interests and background, a C.V., evidence of programming experience (e.g., code or links to code/software repositories), and contact information for three references. Review of applications will begin immediately and will continue until the position is filled. Any questions about the position can be directed to Dan Rabosky (<http://www.lsa.umich.edu/-eeb/directory/faculty/drabosky>).

Dan Rabosky Assistant Professor Dept of Ecology and Evolutionary Biology & Museum of Zoology University of Michigan

drabosky@umich.edu

UNewOrleans EvolutionaryBiol

A full-time postdoctoral position is available in the laboratory of Nicola Anthony in the Department of Biological Sciences at the University of New Orleans. This position is funded through a National Science Foundation Partnerships for International Research and Education (PIRE) award aimed at developing an integrated framework for conserving central African biodiversity under climate change. The overall goal of this project is to map environmentally-associated genomic and phenotypic variation in a broad range of species and use this information to identify areas of elevated evolutionary potential. This information will then be used to develop a conservation prioritization scheme that ranks candidate areas for protection based on their evolutionary importance, degree of landscape connectivity and socio-economic significance. This project is also tied to an international education program that will deliver training in biological, environmental and social sciences to U.S. and African students and early career scientists. This project will be conducted in close collaboration with the research groups of Tom Smith (University of California Los Angeles), Katy Gonder (University at Albany) and scientists at partner institutions in Gabon (Université des Sciences et Techniques de Masuku, Institut de Recherches en Ecologie Tropicale, Wildlife Conservation Society, Smithsonian Institution), Cameroon (Uni-

versity of Yaoundé I, University of Buea, University of Dschang, Wildlife Conservation Society, San Diego Zoo), the United Kingdom (University of Cardiff, University of Stirling) and Germany (University Eberhard Karls; University of Halle-Wittenberg).

This is a highly collaborative project that will bring together participants from multiple institutions and integrate remote sensing, genomic, phenotypic and socio-economic data. The postdoctoral research associate will be expected to take a major role in coordinating research and educational activities of the project and will work with an inter-disciplinary team of scientists, educators, resource managers and other stake-holders. The postdoctoral researcher will also have the opportunity to advance his or her research interests related to the overall goals of the project. The post is available immediately and is renewable for up to four additional years.

RESPONSIBILITIES: Work for this position will involve coordination of field work in Gabon and Cameroon and analysis of transcriptomic, genomic and phenotypic datasets in consultation with other project researchers. The candidate will also model environmentally-associated patterns of genomic and phenotypic data and work with social scientists in the integration of evolutionary and socio-economic data. He/she will also be expected to mentor graduate and undergraduate students and help organize annual undergraduate and graduate educational programs in Gabon each year.

REQUIRED QUALIFICATIONS:

- A Ph.D. in Evolutionary Biology or related field (the candidate must have a Ph.D. by the time of appointment)
- Demonstrated track record in publishing scientific manuscripts
- Ability to conduct work independently as well as part of a larger, diverse team
- Good communication skills and flexibility to adapt to the different needs of the project

DESIRED QUALIFICATIONS:

- An ability or willingness to learn to effectively communicate in the French language
- Expertise in bioinformatics and genomics
- Familiarity with the software and scripting employed in the analysis of next-generation sequencing data
- Previous field experience in the tropics
- A good working knowledge of GIS and ecological statistics

SALARY: \$35,000 per annum (3% annual pay increase) plus full benefits

APPLICATION PROCEDURE: Please send Curriculum Vitae, cover letter and the names, email addresses

and telephone numbers of three academic referees to nanthony@uno.edu

CLOSING DATE: Position will remain open until filled. To assure full consideration, applications should be received by January 30, 2013.

The University of New Orleans is an Affirmative Action/Equal Employment Opportunity employer. Women, ethnic minorities, veterans and persons with disabilities are encouraged to apply.

nanthony@uno.edu

UOregon HostMicrobeInteraction

All,

We are looking to fill several postdoctoral positions in a newly funded NIH Center of Excellence at the University of Oregon that is focused on the genetics, genomics, development, molecular biology, ecology and evolution of multicellular hosts and their associated microbiota. The center comprises a highly interactive set of laboratories from diverse areas such as biology, physics, chemistry, computer science, and mathematics.

The core empirical systems used in the center are zebrafish and threespine stickleback fish. The research environment for these well developed teleost models is particularly strong at the University of Oregon. In addition, the recent development of gnotobiotic microbiological approaches in zebrafish and stickleback at UO make this a very powerful pairing for manipulative studies of host-microbe interactions.

Several of us are particularly interested in applicants who would like to better understand host-microbe systems by formulating novel co-evolutionary theory from first principles, or by developing new analytical approaches and tools for massively large genomic data sets.

For more information on the positions, and how to apply, see the official UO advertisement below.

Sincerely, Bill

William A. Cresko Associate Professor of Biology Institute of Ecology and Evolution (IEÅ²) University of Oregon Eugene, Oregon 97403-5289 www.uoregon.edu/~wcresko —

Position Announcement/Advertisement

Post-doctoral Scientist: Multicellular Organisms and

Their Associated Microbes

Multiple Positions Bridging Mathematics, Biology and Computer Science

We are seeking multiple postdoctoral researchers interested in research at the intersection of mathematics, biology and computer science to join the newly established Microbial Ecology Theory in Animals (META) Center at the University of Oregon {meta.uoregon.edu}. The META Center is an NIH-funded Center of Excellence in Systems Biology, focused on the development and application of biological theory, integrated with empirical studies, to better understand host-microbe systems. Every multicellular organism is associated with a diverse array of microbes, and although it has become evident that these microbes contribute significantly to their hosts - and that hosts influence their microbiota - the biological mechanisms underlying these interactions are still unclear. The META Center aims to generate fundamental new knowledge regarding these interactions by integrating concepts from genomics, developmental biology, ecology and evolution, and by developing new approaches for imaging, mathematical modeling, systems and functional biology, and analysis of next generation sequence data.

The ideal candidates will have a demonstrated record of past scholarly success and experience in developing and applying quantitative approaches to the analysis of complex data sets, to address problems that are computationally challenging and data intensive. Preference will be given to candidates who can work independently as well as a member of a research team. Optimal candidates will be willing to work in a highly interactive group of researchers spanning a wide range of disciplines, and be eager to challenge themselves by working in novel areas bridging mathematics, biology and computer science. A strong interest in addressing fundamental questions about host-microbe systems using insights from ecological and evolutionary theory is especially desirable.

Applicants must have a Ph.D. from a relevant discipline, such as physics, mathematics, statistics, computer science, ecology, evolution, systems biology, microbiology, genomics or a related field. The positions are initially for a 1 year term; renewal contingent upon satisfactory performance. The start date is flexible but preference is early 2013. Please email questions regarding these positions, the META Center, or its scientific mission to any of the META Center scientists listed below:

Karen Guillemin guillemin@molbio.uoregon.edu
Brendan Bohannon bohannon@uoregon.edu Bill

Cresko wresko@uoregon.edu John Conery conery@uoregon.edu Jessica Green jlgreen@uoregon.edu Raghuvveer Parthasarathy raghu@uoregon.edu

To apply, please include: (1) a brief cover letter explaining your background and career interests (2) CV (including publications), (3) names and contact information for three references.

Materials should be submitted to jhale@uoregon.edu. Subject: Posting 12519 A-E. To ensure consideration, applications must be received by 1/4/2013, but positions will remain open until filled.

Women and members of groups underrepresented in science are encouraged to apply. We invite applications from qualified candidates who share our commitment to diversity. The University of Oregon is an EO/AA/ADA institution committed to cultural diversity.

— / —

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

UOslo DiseaseEvolution

A 3-YEAR POSITION AS A POSTDOCTORAL RESEARCH FELLOW (SKO 1352) IN DISEASE ECOLOGY is available at the Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biosciences, Faculty of Mathematics and Natural Sciences, University of Oslo.

The Post Doctoral fellow will be part of the project “Climate Changes and Zoonotic Epidemiology in Wildlife Systems” (ZEWS) funded by the Norwegian Research Council as part of the NORKLIMA Program. The position is tentatively available from April 1st 2013.

Within the framework of the position duties may be assigned. No one can be appointed for more than one specified period at the same institution.

Please go to <http://uio.easycruit.com/vacancy/-904757/96323?iso=no> to apply for the position.

Project description

Among the most serious effects of climate change is its capacity to drastically alter the ecology of diseases that are vectors-borne, have wildlife and/or environmental

reservoirs (WVE diseases). Theory and observation suggest that disease outbreaks can result from gradual changes in transmission, susceptibility, host or vector density, resulting in tipping points where epidemiological characteristics suddenly change. The understanding required to plan and implement mitigation strategies for WVE diseases requires broad interdisciplinary collaborations to provide: - Integration and overview of research on WVE diseases likely to respond to climate change - New data where critical information is found to be missing - Improved risk models taking different scenarios into account To make the most of limited resources, we use three systems that are important in their own right while being complementary as model systems: Lyme disease, anthrax and tularemia. They are chosen for being; (a) currently or potentially important in Scandinavia, (b) likely to respond strongly to climate change, and (c) giving complementary perspectives on how WVE diseases responds to climate change. The project is led by a national Centre of Excellence; Center for Ecological and Evolutionary Synthesis (CEES) and performed in collaboration with prominent members of the international medical, biosecurity, veterinary medicine, climatological and public health communities.

Qualifications

The Faculty of Mathematics and Natural Sciences has a strategic ambition of being a leading research faculty. Candidates for these fellowships will be selected in accordance with this, and expected to be in the upper segment of their class with respect to academic credentials.

The candidate must have completed a PhD or other corresponding education equivalent to a Norwegian doctoral degree in evolutionary ecology. The project will call for a strong background in ecological and evolutionary theory, and it necessitates both practical experience in doing research on class A environmental pathogens in the field as well as in a BSL3 laboratory and a very strong background in statistical modeling of population dynamics, evolution and epidemiology, preferably on zoonotic disease systems. The announced position involves development of new theoretical predictions to investigate current and future patterns of disease distribution, prevalence and evolution. A solid background in mathematics and strong computational and modeling skills are thus essential. Excellent knowledge of at least one programming language (e.g. Matlab and/or R) and knowledge of statistical and GIS software is required. Applicants must possess sound knowledge of different modeling approaches in environmental disease biology and should have a successful track record of applying these skills. The candidate must also be employ-

able in a biosecure facility requiring security clearance. An interest in fundamental research and the ability to communicate and work in a multidisciplinary team are essential. Being willing and capable of spending extended periods doing relevant fieldwork under simple conditions in Namibia, Scandinavia and possibly Central Asia is also essential, and due to the nature of the work the candidate should have demonstrated advanced first-aid skills sufficient to deal with injuries in remote locations, including administration of intravenous antibiotics in an emergency.

The main purpose of post-doctoral research fellowships is to qualify researchers for work in top academic positions within their disciplines. Please also refer to the regulations pertaining to the conditions of employment for post-doctoral fellowship positions: <https://www.uio.no/english/about/regulations/-personnel/academic/guidelines-appointment-postdoc-researcher.html> The CEES The project will be carried out through the Centre for Ecological and

— / —

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

UParisSud ProtistDiversity

Postdoctoral position at the CNRS/Université Paris-Sud Protist diversity and phylogeny in suboxic environments

A postdoctoral contract of 1 year renewable up to 3 years is available in the “Microbial diversity and evolution” team (<http://www.ese.u-psud.fr/-rubrique7.html?lang=en>) at the institute of Ecology, Systematics and Evolution starting from September 2013 (dates are negotiable). The institute belongs to the French Research Council (CNRS) and the University of Paris-Sud, and is located at the pleasant university campus of Orsay, a botanical garden 25 km south of Paris, 30 min by direct train (RER B line).

The scientific project aims at exploring the diversity and phylogeny of protists thriving in selected anoxic or microaerophilic environments. The candidate will try to isolate novel protist species by cultivation and single cell collection. He/she will carry out phylogenetic analyses from various gene markers after gene/genome

amplification. Emphasis will be put on divergent lineages with a pivotal location in the eukaryotic tree.

The postdoc will be funded by the ERC Advanced Grant ProtistWorld. The net salary will be of ca. 2400-2800 euros depending on the candidate experience and includes social security and medical assistance.

We are looking for highly motivated candidates with good experience in classical protistology (morphology, ecology, taxonomy) and molecular phylogeny.

Candidates should send a CV, a cover letter and the names of at least two referees to:

Purificación LOPEZ-GARCIA (puri.lopez@u-psud.fr)
David MOREIRA (david.moreira@u-psud.fr)

Unité d'Ecologie, Systématique et Evolution, UMR CNRS 8079 Université Paris-Sud. Bâtiment 360, 91405 Orsay cedex, FRANCE <http://www.ese.u-psud.fr/-rubrique7.html?lang=en> Purificacion Lopez-Garcia <puri.lopez@u-psud.fr>

USouthernCalifornia ComputationalGenomics

We are seeking two or more Computational/Analytic postdoctoral researchers with experience and strong computational skills in one or more of the following areas: machine learning, computer vision, agent-based simulation, graphical processing unit (GPU) programming, Bayesian statistics and bioinformatics, population genomics, quantitative genomics. We are a large multidisciplinary team, supported by an NHGRI Center of Excellence in Genomic Science and multiple NIMH and NSF grants to study genetic variation in population and community contexts. The postdocs will be jointly advised by Simon Tavaré, Gary Chen, Paul Marjoram and Sergey Nuzhdin, and will closely collaborate with several other faculty and approximately 30 other team members, including computational and experimental scientists. We combine multiple data sets, including genomic, transcriptomic, metabolomic, and whole organism phenotypes, and we are processing videos of multiple individuals in groups, tracking their movements and developing simulation-based analytical methods to study genetic variation in social processes. The successful applicants may variously need to optimise software, develop machine learning algorithms, develop conceptual or simulation models, and parallelise these on CPUs or GPUs.

We are a collaborative and interactive team located jointly at the Program in Molecular and Computational Biology at USC and the Keck School of Medicine of USC, in the heart of Los Angeles, California. Please send a statement of interest, CV, and names of referees to Paul Marjoram pmarjora@usc.edu and Sergey Nuzhdin snuzhdin@usc.edu by Feb 15th.

brfoley76@gmail.com

UStrasbourg Evolutionary Physiology

Postdoc-Position: Eco-Physiology of Cognition (Excellence Initiative Strasbourg)

A 24 months postdoc position is available in the field of Eco-Physiology of Cognition at the striped mouse research group of Carsten Schradin <http://www.iphc.cnrs.fr/-Carsten-Schradin-.html> based at the Institut Pluridisciplinaire Hubert Curien, Département d'Ecologie Physiologie et Ethologie (DEPE). The DEPE is France's largest eco-physiology lab which also hosts one of the most important French research groups on cognition <http://www.iphc.cnrs.fr/-Strategie-scientifique,90-.html>. The DEPE offers a privileged environment for exchanging on broad questions in ecology, animal behavior, cognition, evolution and eco-physiology, studying vertebrate species living in extreme environments.

Research topic: <http://www.usias.fr/en/eco-physiology-of-cognition/> Increased environmental stress due to anthropologically induced climate change might impair cognitive abilities of free ranging animals. Students of cognition typically have little experience of physiology while students of physiology typically do not consider cognition. Therefore we will investigate how cognitive tasks (attention, spatial memory) in free ranging animals are influenced by their physiological state. The postdoc is expected to work in the new field of eco-physiology of cognition and to:

1. Establish cognitive tests for striped mice in the laboratory.
2. Study how cognitive abilities in free ranging striped mice are influenced by their physiological status, both correlational and by experimentally altering the physiological status.

Strasbourg <http://www.otstrasbourg.fr/?lang=en> is a

beautiful and international city in the center of Europe, hosting many institutions of the European Union. It lies at the river Rhine at the border to Germany and enjoys a mild climate. West of it you can enjoy the nature of the Alsace, east of it the black forest of Germany. The University of Strasbourg ranks within the 5 best French universities.

Research group: We have been studying 12 generations of striped mice living under the harsh and unpredictable conditions of the Succulent Karoo semi-desert since 2001. We are interested in behavioral and physiological flexibility enabling survival in this extreme environment (<http://onlinelibrary.wiley.com/doi/10.1111/j.1365-294X.2011.05256.x/abstract>). The working language in the striped mouse research group is English. Knowledge of French is of advantage but not mandatory. The research station http://stripedmouse.com/site1_2_2.htm is in very remote area of South Africa but offers all necessary infrastructure for research.

Salary: This position is funded by the excellence initiative of the University of Strasbourg via the Institute for Advanced Sciences <http://www.usias.fr/en/>. The salary after deduction of social fees but before taxes will be approximately 2000 Euro / month.

Starting date: Preferably between April and June 2013, though a later start in 2013 would be possible.

Profile and requirements for the candidate:

You can produce outstanding academic results!

Strong background in cognition and a strong interest in eco-physiology OR strong background in eco-physiology and a strong interest in cognition.

Very good writing skills proven by a good publication record.

Enthusiastic about field work with the willingness to spend 6-9 months /year in the field.

Good technical skills.

Strong experimental, analytical and statistical skills.

Good organizational skills and the ability to work independently.

Applicants should send a cover letter detailing their motivation and expectations from this position, and a CV (combined into a single PDF), as well as contact information for two referees to Carsten Schradin (carsten.schradin@iphc.cnrs.fr), before February 25th 2013. Interviews are scheduled for March 2013.

Dr. Carsten Schradin Institut Pluridisciplinaire Hubert Curien Département d'Ecologie Physiologie et Etholo-

gie 23, rue Becquerel UMR 7178 CNRS Uds 67087
Strasbourg cedex 2, France

Tel: +33 (0)3 88 10 69 19

PD at the University of Zurich, Switzerland

Honorary Associate Professor at the School of Animal,
Plant and Environmental Sciences, University of the
Witwatersrand, Johannesburg, South Africa

Director of the Succulent Karoo Research Station
(South African non-profit organization), Goegap Na-
ture Reserve, PO Box 1010, 8240 Springbok, South
Africa

— / —

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>

USussex SocialWasps

POSTDOCTORAL RESEARCH FELLOW IN THE
BEHAVIOURAL ECOLOGY OF SOCIAL SYSTEMS

Full time, 3 years fixed term

Closing date for applications: 25 January 2013

Start date: 1 March 2013

A full-time, NERC-funded, 3-year postdoctoral research position is available to join a research team in the School of Life Sciences at the University of Sussex, UK. The programme of research is led by Prof Jeremy Field. The main aim of the project is to understand helping decisions in primitively eusocial insects, using paper wasp (*Polistes*) cofoundresses as a model system. In particular, to investigate the role of partner choice, conflict and market forces in the process of cofoundress group formation itself. Results should provide the most comprehensive understanding of group formation to date in a primitively eusocial insect, and will allow a critical evaluation of previous models and data.

The project will involve a combination of field experiments, and genetic work using microsatellite markers that are already available. The successful applicant will spend 3-5 months each year conducting fieldwork at an established site in southern Spain, with other members of the research group. There will be a technician work-

ing on the project who will carry out most of the molecular work.

The successful applicant will have a PhD in behavioural/evolutionary biology. Experience with animal social systems, and experience of fieldwork, molecular techniques and statistical analysis using 'R' or similar programs would be useful, but it is not necessary to have experience in all of these areas. An ability to speak Spanish, or willingness to learn some basic Spanish, is desirable. A driving licence is essential.

The Evolution, Behaviour and Environment (EBE) Subject Group in the School of Life Sciences at Sussex (<http://www.sussex.ac.uk/lifesci/ebe/research>) is a thriving research environment providing ample opportunities to interact with leading senior researchers and their groups. The successful applicant will particularly benefit from an exceptional concentration of research expertise that focusses on social evolution in insects. Jeremy Field, Francis Ratnieks, Bill Hughes, Dave Goulson (joining Sussex in April 2013), Tom Collett and Paul Graham all lead well-established research groups. Our seminar series have a correspondingly strong (though by no means exclusive) focus on social evolution.

Full details of the post, with information about where to submit an application, salary and the University of Sussex application form, are available at: <http://www.sussex.ac.uk/aboutus/jobs/961> Informal enquiries: Jeremy Field (j.field@sussex.ac.uk)

Professor Jeremy Field School of Life Sciences, John Maynard Smith Building, University of Sussex, Falmer, Brighton BN1 9QG, UK

j.field@sussex.ac.uk <http://www.sussex.ac.uk/lifesci/-fieldlab/> J.Field@sussex.ac.uk

UTroms AncientDNA

Postdoctoral Research fellow on ancient DNA studies,
Tromsø University Museum

Application deadline: 31.01.2013

The following reference number must be quoted in your application: 2012/989

The University of Tromsø has vacant a Postdoctoral fellow on the project ancient DNA analyses of flora and fauna in NW Europe. The starting date is as soon as possible.

The position is a fixed term of 2.5 years.

The position is attached to Tromsø University Museum, Department of Natural Sciences.

For further information, please contact project leader professor Inger Greve Alsos, e-mail: inger.g.alsos@uit.no, tel + 47 77 62 07 96 or head of Department of natural sciences Karl Frafjord, e-mail karl.frafjord@uit.no .tel +47 77 64 57 25.

The Department of Natural Sciences presently employs 25 staff members, including 10 permanent scientific positions, one researcher, and 5 PhD students . The department has large scientific collections, documenting more than 130 years of research in North Norway and other northern regions. The department includes a research group in taxonomy and biodiversity. The group focuses on diversity, phylogeography, and taxonomy of northern organism using molecular as well as traditional methods.

The position is on the project “Ancient DNA of NW Europe reveals responses to climate Change” funded by the Research Council of Norway. The primary objective of the project is to explore the occurrence of boreal species at northern latitudes by ancient DNA analyses. Subgoals are to 1) Confirm the occurrence of trees and other boreal taxa during the LGM period (22,000 - 13,000 BP) at Andøya (Parducci et al. Science 2012), 2) Determine the occurrence of boreal species on Svalbard during the Holocene warm period, 3) Evaluate the representation of current surrounding vegetation in modern lake DNA, 4) Test if pollen may contribute to DNA recovered in ancient soils, and 5) Evaluate implications for inferred species migration rates as well as climate reconstruction.

See more at:

<http://www.jobbnorge.no/job.aspx?jobid=89577>

Prof. Inger Greve Alsos Tromsø University Museum NO-9037 Tromsø Norway Telephone: +47 77 62 07 96 Telefax: +47 77 64 51 05 Email: inger.g.alsos@uit.no <http://en.uit.no/ansatte/-inger.g.alsos> <http://www.svalbardflora.net/> Alsos Inger Greve <inger.g.alsos@uit.no>

U Vermont Plant Evolutionary Genetics

A postdoctoral position is available in the Preston lab at the University of Vermont to work on the evolution-

ary genetics of asterid petal fusion. The main objectives of this project are to determine how the petal developmental program has been modified between related species with fused and unfused petals, and whether independent origins of fused petals involved the recruitment of similar genes. The postdoc will be involved in all aspects of the project, from data collection to publication, and will be actively encouraged to pursue side projects of his/her own interest. The successful applicant will have a PhD involving work in evo-devo or related field, and be independent, highly motivated, meticulous, productive, and able to work in a team. She/he will have an excellent understanding of experimental design and a proven publication record. Experience with in situ hybridization, and next-gen sequencing is preferred.

The position will be for one year with an opportunity for extension for at least one additional year. The start date is negotiable. To apply, please send a single PDF containing a current CV, the name and contact details for two referees, and a cover letter explaining your suitability for the position to Dr. Jill Preston (Jill.Preston@uvm.edu). Informal inquiries are also encouraged. Applications will be considered until the position is filled.

Jill Preston Department of Plant Biology University of Vermont 111 Jeffords Hall 63 Carrigan Drive Burlington, VT 05405 USA

<http://www.uvm.edu/~plantbio/preston/Site/-Home.html> Jill.Preston@uvm.edu

U Wisconsin Madison Population Genomics

Postdoctoral Research Associate in Population Genomics, University of Wisconsin-Madison

A postdoctoral position focused on the population genomics of island populations is available in the laboratory of Bret Payseur at the University of Wisconsin-Madison. The position is part of an NIH-funded project to understand the genetic basis of rapid morphological evolution that often accompanies island colonization. The position involves analyzing genome sequence variation to find genes responsible for recent adaptation in the largest wild house mice in the world, which reside on Gough Island. The research integrates population genomics with QTL mapping to understand how Gough Island mice evolved extreme body sizes.

The successful candidate will demonstrate a strong background in population genetics. Experience with genomic data and computer programming is especially desirable. Applicants should be highly motivated and interested in working as part of a research team. A Ph.D. in biology or a related science is required.

The Payseur lab is located in the Laboratory of Genetics at the University of Wisconsin-Madison. The department and the university are home to a diverse and a highly interactive collection of faculty with expertise in genetics and evolution. The Payseur lab enjoys stimulating collaborations with leaders in statistical genetics, molecular genetics and computational biology. The University of Wisconsin-Madison is consistently ranked as one of the best public universities and is renowned for its strength in biological research. Madison is a vibrant place to live, offering excellent restaurants, a thriving arts community, and an impressive collection of bike paths and lakes. Madison is only a few hours driving distance from Chicago and Milwaukee.

The initial appointment is for two years. The appointment may be renewed, contingent upon progress.

To apply, please email to Bret Payseur (payseur@wisc.edu) a SINGLE PDF consisting of three pieces: (1) a one page research statement clearly explaining the qualifications for the position and the motivation for applying, (2) an updated CV, and (3) contact information for three references. Review of applications will begin immediately. Please contact Bret Payseur with any questions.

The University of Wisconsin is an Equal Opportunity/Affirmative Action employer.

Bret Payseur Associate Professor Laboratory of Genetics Genetics/Biotechnology 2428 425-G Henry Mall University of Wisconsin Madison, WI 53706 Office phone: 608-890-0867 Lab phone: 608-262-6856 Fax: 608-262-2976 <http://payseur.genetics.wisc.edu/> payseur@wisc.edu

UWisconsin Madison
TropicalMammalEvolution

Postdoctoral Fellow - Molecular Ecology of Tropical Mammals

Department of Forest and Wildlife Ecology, University of Wisconsin-Madison, Madison, Wisconsin

PROJECT DESCRIPTION: The successful candidate will work on an NSF-funded project using next-generation sequencing methods to study the demography and dispersal of two- and three-toed sloths. The position offers the opportunity to conduct some field work in Costa Rica, but is largely a laboratory position based at the University of Wisconsin-Madison. The position offers opportunities to interact and collaborate with multiple scientists on campus, as well as internationally with faculty at the University of Costa Rica and Groningen University in the Netherlands.

REQUIREMENTS: Applicants should have a doctoral degree in Conservation Genetics, Molecular Ecology, or closely related discipline by the start date (see below). A strong publishing record and experience with next-generation sequencing methods are essential. Fluency in English also is essential and competence in Spanish is desirable, but not a requirement of the position.

SALARY AND CONDITIONS: The position will be available May 1, 2013 and the duration of the appointment is two years and two months (26 months total). Salary will be \$44,000 per year plus benefits.

APPLICATION/CONTACT INFORMATION: Applicants should send a cover letter, curriculum vitae, and contact information for three references in a single pdf-file to mpeery@wisc.edu.

The CV should contain a list of publications and information describing relevant skills and experience. Reviews of material will begin March 1, 2013 and continue until a suitable candidate is found.

FOR FURTHER INFORMATION, PLEASE CONTACT: Dr. Zach Peery; Department of Forest and Wildlife Ecology; University of Wisconsin-Madison Madison, WI 53706; phone: 608.890.2766; E-mail: mpeery@wisc.edu.

Ricka Stoelting Graduate Research Assistant Department of Forest and Wildlife Ecology University of Wisconsin A225 Russell Labs 1630 Linden Dr. Madison, WI 53706

(608) 263-7595 stoelting@wisc.edu

Ricka Stoelting <stoelting@wisc.edu>

UWyoming UCalforniaSantaCruz
EvolProteinInteraction

Postdoctoral Research Associate: Evolution of the

Protein-Protein Interaction Network

An NIH-funded 2 year postdoctoral research position is available for a collaborative project involving the research groups of Dietlind Gerloff (<http://users.soe.ucsc.edu/~gerloff/>), Seth Rubin (<http://www.chem.ucsc.edu/~srubin/RubinLab/Home.html>), and David Liberles (<http://www.wyomingbioinformatics.org/LiberlesGroup/>).

The position may be extended beyond 2 years if additional funding is available. The researcher will be expected to share time between the Gerloff and Liberles Groups. It is expected that the candidate will be available to start within 3 months. The research project involves initial computational comparative analysis of sequences in a protein structural and biophysical context using novel phylogenetic methods to predict changes in protein-protein interactions between closely related species. This work will proceed in the groups of Gerloff and Liberles. Predicted interaction changes will then be tested experimentally in the Rubin Research Group.

To apply, please send a cover letter that describes your background, motivation, and interests as well as a full CV to gerloff@soe.ucsc.edu and liberles@uwyo.edu (the applications should be sent to both email addresses). Please also arrange to have 3 letters of recommendation sent directly by the letter writer to the above email addresses as well. Senior and international applicants are encouraged to apply and will be given full consideration.

David Liberles <liberles@uwyo.edu>

UYork Experimental Evolution

NERC Postdoctoral Research Associate in Experimental Evolution

University of York - Department of Biology Ref. 2768

We are seeking a highly motivated postdoctoral researcher to work on a project using experimental evolution to investigate host-symbiont coevolution. This project, which is partly funded by the Natural Environment Research Council (NERC), combines experimental evolution with whole-genome sequencing to understand how coevolutionary processes vary along the parasitism-mutualism continuum using bacteria-plasmid interactions as a model system.

You will be responsible for the project on a day-to-day

basis, performing experimental evolution experiments, a range of phenotypic and molecular analyses and large-scale whole-genome next-generation sequencing. You should hold a PhD in microbiology / evolutionary biology / experimental evolution / evolutionary genomics or related discipline and have an advanced level of practical and theoretical knowledge of evolutionary biology. Candidates with training in experimental evolution or next-generation genomics approaches or bioinformatics are strongly encouraged to apply.

Informal enquiries can be made directly to Prof. Michael Brockhurst (email: michael.brockhurst@york.ac.uk).

This post is available from 1 February 2013 for a period of up to 1 year.

https://jobs.york.ac.uk/wd/plsql/wd_portal.show_job?p_web_site_id=3885&p_web_page_id=159832 Michael Brockhurst Professor of Evolutionary Biology Department of Biology University of York Wentworth Way YORK YO10 5DD

Telephone: +44 (0) 1904 328 576 Email: michael.brockhurst@york.ac.uk

Publications: <http://scholar.google.com/citations?user=jNVIr6MAAAAJ> Michael Brockhurst <michael.brockhurst@york.ac.uk>

UppsalaU Evolution Multicellularity

* Postdoc position ***Multilevel selection in filamentous fungi: a clue to the evolution of multicellularity** at Uppsala University, Sweden*

A fully-funded 1-year postdoctoral research position (with the high probability for a second year) is currently available at the Department of Evolutionary Biology, Uppsala University, Sweden.

The theory of evolution by natural selection is one of the cornerstones in modern biology. There is, however, considerable debate about which entities (ranging from genes, cells and individuals, to populations, species and species groups) are the units of selection. Natural selection acting at different levels is expected to drive the aggregation of smaller independent units to form new, more complex, layers of biological organization. For example, this process is expected to have driven the evolution of multicellularity, whereby the interaction

between genes and cells resulted in a fitness increase in multicellular organisms compared to unicellular organisms. This post-doc project involves the study of multilevel selection in filamentous ascomycetes. These organisms may be considered intermediates between unicellular and multicellular organisms because of their totipotent and free ranging heterogeneous nuclei within a mycelium, all of which contributes to the phenotype of the mycelium. The candidate will perform artificial selection experiments combined with genomics and transcriptomics of the model system *Neurospora* to investigate whether the mycelium represents a case of cooperation or conflict between the haploid nuclei it contains. Under the scenario of cooperation we expect to observe inter-nucleus dynamics that are typical of those observed within diploid nuclei, such as sheltering of *de novo*/ deleterious mutations and dosage compensation, and the combination of adaptive mutations of the heterogeneous nuclei should be beneficial for the mycelium. A next step is to test for kin selection by investigating the outcome of interactions between nuclei exhibiting different degrees of relatedness. On the other hand, under the conflict scenario, heterogeneous mycelia would be at a fitness disadvantage due to antagonism among nuclei. The results of the evolutionary interactions occurring at subcellular and higher levels emerging from this project have the potential to contribute significantly to our understanding of one of the major evolutionary transitions - the evolution of multicellularity.

Applicants should have a PhD in biology/ecology and a strong interest in biology and evolution. Experience in experimental lab skills as well as some knowledge in bioinformatics are advantageous. Mathematical skills and an interest to develop theoretical models are welcome but entirely optional. The candidate will join the research group of Simone Immler (see <http://www.ebc.uu.se/forskning/IEG/evbiol/forskning/Immler/>) located at EBC. The current research focus of the Immler lab lies on the evolutionary consequences of sex, in particular the evolution of gametes and the consequences of differential selection between the haploid and diploid phases of the eukaryotic life cycle using experimental and mathematical tools. This project will be in close collaboration with the group of Hanna Johannesson, (http://www.ebc.uu.se/forskning/IEG/evbiol/personal/sidor/_Hanna_Johannesson/_) also located at EBC. The Johannesson lab has its research focus on the evolution of mating systems and the underlying genetics in filamentous fungi. The project is announced in combination with a PhD position on sexual dimorphism, and there are ample opportunities

to work closely with postdocs and PhD students in the Immler and Johannesson lab that focus on related projects. The working atmosphere is international with English as working language. EBC constitutes an exciting arena for multidisciplinary research in evolutionary biology in a broad sense, with research programs including ecology, systematics, genetics, genomics, and developmental biology. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful surroundings conveniently situated 40 minutes by train from Stockholm.

*Important dates:*The application deadline for the position is the 28th of February 2013, and the starting date as soon as possible thereafter or as agreed upon.

*Applications should include:*1) letter of interest / background (2 pages max); 2) complete CV; 3) the names and e-mail addresses of three referees.

Applications should be sent by e-mail to Simone.Immler@ebc.uu.se. Alternatively, send hardcopies to the following address: Simone Immler,

— / —

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

UppsalaU EvolutionaryBiology

The Department of Ecology and Genetics, Evolutionary Biology Centre, Uppsala University invites applications for 2 Departmental postdoctoral fellows in ecology, evolutionary biology, or genetics, broadly defined.

Positions are for two years and may begin as early as March 2012.

The Evolutionary Biology Centre of Uppsala University offers a vibrant research environment and bridges a broad range of disciplines in the biological sciences. Information about the Evolutionary Biology Centre and the Department of Ecology and Genetics can be found at www.ebc.uu.se. Prior to application, candidates should identify and communicate with a potential advisor. Potential advisors are faculty and researchers at the Department. Please, see list of staff in the four research programs of the Department: Animal Ecology, Evolutionary Biology, Limnology, and Plant Ecology and Evolution at <http://www.ebc.uu.se/forskning/IEG/?languageId=3D1>. To

apply, candidates should submit a cover letter indicating the proposed faculty advisor(s), a curriculum vitae, and a short (1-3 pages) description of past research accomplishments and future research plans. Applicants should include names and e-mail addresses of two potential referees. Applicants should also indicate the date they will be available to begin the position, and should enclose a letter from the proposed supervisor that indicates willingness to host the suggested project and that describes the added value of the proposed project in relation to ongoing research.

For further information about the position, please contact professor Ulf Lagercrantz, phone +46 18 471 6418, e-mail Ulf.Lagercrantz@ebc.uu.se.

You are welcome to submit your application no later than March 7, 2013. The application form and further information can be found using the link below <http://www.uu.se/job/other/annonsvisning?languageId=3D1&tarContentId=-3D230566> ulf.lagercrantz@ebc.uu.se

Wageningen BehaviouralMolecularEpigenetics

A 1-year postdoctoral opportunity is available in behavioural ecological epigenetics in a collaboration between the departments of Animal Ecology and Terrestrial Ecology of the Netherlands Institute of Ecology in Wageningen, The Netherlands. Deadline for application is February 14, 2013.

Job description: This project will explore the role of epigenetic mechanisms in personality traits in great tits. Making use of well-characterized great tit populations, including artificial selection lines for personality traits, the post-doc will analyse genetic and epigenetic variation at candidate genes for personality differences. The work will include DNA methylation analysis using bisulfite sequencing. This is an exploratory project with the aim to gain first insight in the relative contributions of sequence variation and DNA methylation variation to heritable differences in personality traits. The post-doc will lead this project and work closely with the groups of Dr. Kees van Oers (great tit personality and genomics) and Dr. Koen Verhoeven (ecological genetics and epigenetics).

Requirements: We are looking for an independent, highly motivated and creative person with excellent so-

cial skills. The ideal candidate has a background in molecular (epi)genetics, a keen interest in behavioural, ecological and evolutionary questions, and a good publication record. A Ph.D. in a relevant discipline is required.

Appointment: The appointment will be on a temporary basis for one year. This project is funded by a NIOO-KNAW grant to stimulate innovative research, and the candidate is expected to contribute to grant proposal writing for continuation of the project after the first year. Salary depends on training and work experience. The maximum gross monthly salary coming with a full-time appointment will amount to euro 3.755,00 (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: 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: Please contact Dr. Kees van Oers (k.vanoers@nioo.knaw.nl) or Dr. Koen Verhoeven (k.verhoeven@nioo.knaw.nl) for questions and additional information about this position. More information about the NIOO and the department can be found on our website (www.nioo.knaw.nl).

Applications: Please send your application (reference AnE-013051) 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. The closing date is 14 February, and the interviews will be scheduled early March.

Dr. Kees van Oers Senior Scientist Department of Animal Ecology Netherlands Institute of Ecology P.O. Box 50, 6700 AB Wageningen The Netherlands Visiting address: Droevendaalsesteeg 10, 6708 PB Wageningen Tel. +31 (0)317-473456 Mob. +31 (0)6 18048495

Web: <http://www.nioo.knaw.nl/users/kvanoers>
For PDF's of publications: <http://home.kpn.nl/-tanja.kees/main.htm> K.vanOers@nioo.knaw.nl

Wageningen EvolutionEpigenetics

A 1-year postdoctoral opportunity is available in behavioural ecological epigenetics in a collaboration be-

tween the departments of Animal Ecology and Terrestrial Ecology of the Netherlands Institute of Ecology in Wageningen, The Netherlands. Deadline for application is February 14, 2013.

Job description: This project will explore the role of epigenetic mechanisms in personality traits in great tits. Making use of well-characterized great tit populations, including artificial selection lines for personality traits, the post-doc will analyse genetic and epigenetic variation at candidate genes for personality differences. The work will include DNA methylation analysis using bisulfite sequencing. This is an exploratory project with the aim to gain first insight in the relative contributions of sequence variation and DNA methylation variation to heritable differences in personality traits. The post-doc will lead this project and work closely with the groups of Dr. Kees van Oers (great tit personality and genomics) and Dr. Koen Verhoeven (ecological genetics and epigenetics).

Requirements: We are looking for an independent, highly motivated and creative person with excellent social skills. The ideal candidate has a background in molecular (epi)genetics, a keen interest in behavioural, ecological and evolutionary questions, and a good publication record. A Ph.D. in a relevant discipline is required.

Appointment: The appointment will be on a temporary basis for one year. This project is funded by a NIOO-KNAW grant to stimulate innovative research, and the candidate is expected to contribute to grant proposal writing for continuation of the project after the first year. Salary depends on training and work experience. The maximum gross monthly salary coming with a full-time appointment will amount to 3.755,00 (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: 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: Please contact Dr. Kees van Oers (k.vanoers@nioo.knaw.nl) or Dr. Koen Verhoeven (k.verhoeven@nioo.knaw.nl) for questions and additional information about this position. More information about the NIOO and the department can be found on our website (www.nioo.knaw.nl).

Applications: Please send your application (reference AnE-013051) 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. The closing date is 14 February, and the interviews will be scheduled early March.

Dr. Kees van Oers Senior Scientist Department of Animal Ecology Netherlands Institute of Ecology P.O. Box 50, 6700 AB Wageningen The Netherlands Visiting address: Droevendaalsesteeg 10, 6708 PB Wageningen Tel. +31 (0)317-473456 Mob. +31 (0)6 18048495

Web: <http://www.nioo.knaw.nl/users/kvanoers>
For PDF's of publications: <http://home.kpn.nl/-tanja.kees/main.htm> "Oers, Kees van"
<K.vanOers@nioo.knaw.nl>

Yale FreshwaterBiodiversityModeling

This post is for interdisciplinary research on the biogeography, phylogeny and function of freshwater fishes in the face of global change. Funded through the Yale Climate and Energy Institute this is a collaborative project including the labs of Walter Jetz (EEB), Tom Near (EEB) and Peter Raymond (FES). Candidates will have extensive experience in spatial biodiversity modeling, ideally of freshwater systems, and also some background in phylogenetic and trait analysis. Advanced skills in R and GIS and a compelling publication record are a prerequisite.

For more information see <http://sbsc.yale.edu/-opportunities> Walter Jetz, Associate Professor Ecology and Evolutionary Biology Yale University, 165 Prospect Street New Haven, CT 06520-8106, USA Email: walter.jetz@yale.edu URL: <http://www.yale.edu/jetz> walter.jetz@yale.edu

Yale HierarchicalEcologicalModeling

A two year postdoc position is available to work on cross-scale models of species distributions/occupancy, niche change analyses and development of dynamic analysis tools. Successful candidates will have superior skills in the analysis of ('big') biodiversity and geospatial data, knowledge of Bayesian analysis approaches,

and some background in programming (e.g. development of libraries, analysis tools). The postdoc will work in the larger Map of Life (MOL) team. The position may include the opportunity to contribute to the core research support provided by the new Yale Program in Spatial Biodiversity Science and Conservation.

For application please email a short cover letter, CV and contact details of three referees (all in one pdf) to roserita.riccitelli@yale.edu with the subject line: "MOL research". Review of applications will begin 5 Feb 2013 and continue until the position is filled.

For more information see <http://sbsc.yale.edu/-opportunities> Walter Jetz, Associate Professor Ecology and Evolutionary Biology Yale University, 165 Prospect Street New Haven, CT 06520-8106, USA Email: walter.jetz@yale.edu URL: <http://www.yale.edu/jetz> walter.jetz@yale.edu

Yale Vertebrate Macroevolution- Macroecology

A postdoc position is available to perform integrative work using recent species-level phylogenies, geographic range and environmental information. The project will mostly be set in the Lab of Walter Jetz (EEB), but involve collaborations within and outside Yale. The successful candidate will have an outstanding publication record and expert knowledge in key phylogenetic and spatial analysis approaches in R. The position may include the opportunity to contribute to the core research support provided by the new Yale Program in Spatial Biodiversity Science and Conservation.

For application please email a short cover letter, CV and contact details of three referees (all in one pdf) to roserita.riccitelli@yale.edu with the subject line: "Vertebrates". Review of applications will begin 5 Feb 2013 and continue until the position is filled.

For more information see <http://sbsc.yale.edu/-opportunities> Walter Jetz, Associate Professor Ecology and Evolutionary Biology Yale University, 165 Prospect Street New Haven, CT 06520-8106, USA Email: walter.jetz@yale.edu URL: <http://www.yale.edu/jetz> walter.jetz@yale.edu

Workshops Courses

Arolla Switzerland FitnessGameTheory Jun25-28 .129	133
Aussois France PopGenet Jun17-21129	Peru AntEvolution Aug4-15 133
Cargese Corsica QuantPopGenetics Jul8-20 130	SwissAlps EvolutionaryBiol 18-24Jun 134
Foggia Italy PlantEvolutionaryGenetics Apr15-19	UGroningen BayesianInference Mar11-15 135
DeadlineExt 130	ULeipzig ProgrammingForEvolutionaryBiology ... 136
HCMR Greece Metabarcoding May13-17 131	UNebraskaLincoln InvasivePlantEvol Jun25-27 ... 136
HarvardU LinkingPhenotypeDevelopment Jun10-21	UWashington-online Statistical-Genetics Spring2013
132	136
KrugerNatlPark SouthAfrica ConservationGenetics	UWyoming Bioinformatics May27-Aug2 137
May15-25 132	Uppsala GeneticsofAdaptation Apr3-6 138
Montreal PopGenetics GeneticEpidemiology May27-31	

Arolla Switzerland FitnessGameTheory Jun25-28

Workshop inclusive fitness and game theory in the Alps
Swiss Alps, Arolla, 25-28 June 2013

2 ETSC credit points

Key note Speakers:

Andy Gardner (Oxford University, UK) François Rousset (University of Montpellier, FR) Samuel Bowles (Santa Fe Institute, USA) Sébastien Lion (University of Montpellier, FR) Rolf Kümmerli (Zurich University, CH) Jörgen Weibull (Stockholm School of Economics, SE) Hishashi Ohtsuki (Graduate University for Advanced Studies, Hayama, JP) Ingela Alger (Toulouse School of Economics, FR) Joe Wakano (Meij University, Tokyo, JP) Timothy Linksvayer (University of Pennsylvania, USA) Erol Akçay (Princeton University, USA)

Target participants: PhD students, Post-docs, and researchers working on the evolution of cooperation.

The goal of the workshop is to delineate the relationships and interplay between game theory, adaptive dynamics, and inclusive fitness theory for studying the evolution of cooperation. Keynote speakers will present lectures on the genetics, demographics, and strategic aspects of cooperation with a focus on the evolution of other-regarding preferences. The various topics will then be discussed in round-table sessions. The workshop will take place in the Hotel Kurhaus of Arolla (<http://www.hotel-kurhaus.arolla.com>), located in the magnificent mountain landscape of the Alps, and ideal location to reflect on the proximate and ultimate causes of cooperation.

Costs: CHF 480.- for room and board; there is no tuition fee. The web site of the workshop is:

<http://biologie.cuso.ch/ecologie-evolution/dpee-activities/detail-activity/item/courses/from-population-genetics-and-inclusive-fitness-to-game-theory-and-adaptive-dynamics/> To apply, send a single file (pdf or rtf) containing a short motivation paragraph, a cv, and the name of your scientific advisor if you are Phd to Nadia Bruyndonckx Nadia.Bruyndonckx@unil.ch. A number of slots (limited) for talks will also be available, but talks should be at the interface of game theory and inclusive fitness. If you are interested to give a talk, please also provide a short summary paragraph in your application.

Transport: go to Sion by train (two hours from Geneva airport and 2:45 from Zurich). Then take the bus from Sion train station to Arolla (1:20). Timetable for train and buses can be found at <http://www.sbb.ch/en/home.html>. Deadline for application: 8 March 2012.

Laurent Keller, Professor Laurent Lehmann, Assistant Professor Department of Ecology and Evolution University of Lausanne Le Biophore, CH 1015 Lausanne, Switzerland

Laurent Lehmann <laurent.lehmann@unil.ch>

Aussois France PopGenet Jun17-21

SSMPG Summer School 2013: Software and Statistical Methods for Population Genetics

Aussois (Savoie, France), June 17th-21st 2013

Webpage: http://membres-timc.imag.fr/-Michael.Blum/summer_school_2013/Aussois_2013.html

Overview: The aim of the summer school is to provide a comprehensive overview on software and statistical methods for population genetics. Lecture notes and software demos will be held during the summer school. The three topics of the summer school are: population structure, demographic inference, and selection scan. The summer school will take place from the 17th of June (arrival on Monday afternoon) to the 21st of June (end of the school on Friday morning after breakfast).

The summer school will take place in Aussois, a small village in the Vanoise National Park (French Alps). The remote setting, along with the challenging program, were chosen to promote and enhance the communication and interaction between teachers and participants. Lectures and software demos will provide the necessary environment to generate lively discussions and initiate new synergies among the young researchers.

There are around 10 slots of 20 minutes oral presentations as well as two poster sessions where the participants are welcomed to present their own research.

Rates: Registration fees include attendance to the courses, food, housing, conference banquet, and the social event on Wednesday. The rates are of 350 euros for PhD students and postdocs, 450 euros for faculty members, and a supplement of 50 euros will be charged for the participants that prefer to stay in a single room instead of a double room. Registrations will be closed on March 7th, 2013.

Speakers:

Matthieu Foll (EPFL, Lausanne) Oscar Gaggiotti (University of St Andrews, UK) Mathieu Gautier (INRA Montpellier, France) Mike Hickerson (City University of New York, USA) Mattias Jakobsson (University of Uppsala, Sweden) Raphael Leblois (INRA Montpellier, France) Bertrand Servin (INRA Toulouse, France) Renaud Vitalis (INRA Montpellier, France)

Michael BLUM CNRS Research Associate Tel: +33 (0)4 56 52 00 65 Fax: +33 (0)4 56 52 00 55 michael.blum@imag.fr <http://membres-timc.imag.fr/Michael.Blum/> Blum michael <michael.blum@imag.fr>

Cargese Corsica QuantPopGenetics Jul8-20

Dear Colleagues,

We are organizing a summer school on Quantitative Population Genetics this July in Cargese, Corsica, France. Please help us reach interested participants (at any level) by forwarding this message and poster.

Dates: 8-20 July, 2013

Application Deadline: March 31th, 2013

Application Webpage: <http://www.iesc.univ-corse.fr/-index.php?id=20&L=0> School Webpage: <http://www.oeb.harvard.edu/faculty/desai/Cargese.html> A limited number of fellowships will be available.

The basic laws of evolution are simple: mutations generate variation, while genetic drift, recombination, and selection change the frequencies of the variants. Yet it is surprisingly difficult to predict how these effects combine to determine how a population will evolve, or to use our observations of genetic variation in nature to infer how evolution has acted in the past. This summer school will give students, postdocs, and researchers in quantitative disciplines (physics, applied math, computer science, population genetics, statistics, and computational and systems biology) an overview of the challenges in the field, and introduce them to current analytical, computational, and experimental methods of addressing the open questions.

Lecturers: Isabel Gordo, Institute Gulbenkian Anna di Rienzo, University of Chicago Daniel Fisher, Stanford University Bernard Dujon, Institut Pasteur David Bensimon, ENS Paris Oskar Hallatschek, UC Berkeley

Michael Laessig, University of Cologne Dmitri Petrov, Stanford University Colin Russell, University of Cambridge Thierry Mora, ENS Paris Richard Neher, MPI Tuebingen Guy Sella, Hebrew University of Jerusalem Sheri Simmons, Marine Biological Lab Yun Song, UC Berkeley Sander Tans, AMOLF

thanks,

Michael Desai, Harvard University Aleksandra Walczak, ENS Paris Massimo Vergassola, Institut Pasteur

Aleksandra Walczak <awalczak@lpt.ens.fr>

Foggia Italy PlantEvolutionaryGenetics Apr15-19 DeadlineExt

REGISTRATION DEADLINE EXTENDED: JANUARY 20th Course on METABOLOMICS AND PLANT BREEDING Foggia, Italy 15-19th April, 2013 info: <http://www.cerealresearchcentre.it> Dear colleague, we are writing you to remind you of the Course on METABOLOMICS AND PLANT BREEDING We now extended the registration deadline until the 20th of January; only few days left for registration! More information at <http://www.cerealresearchcentre.it> The 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 - Analytical Breeding - Techniques: Chromatography, Mass Spectrometry - Statistical tools and Data Analysis - Plant Evolutionary Genetics. best regards, roberto papa

–

Prof. Roberto Papa Director of the CRA-CER Cereal Research Centre, 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://publicationslist.org/r.papa> Roberto Papa <roberto.papa@entecra.it>

HCMR Greece Metabarcoding May13-17

2ND DNA METABARCODING SPRING SCHOOL IN
CRETE, GREECE (13-17 MAY 2013)

In the context of the European project MARBIGEN, the Institute of Marine Biology, Biotechnology and Aquaculture (former Institute of Marine Biology and Genetics) of the Hellenic Centre for Marine Research, organizes the 2nd DNA Metabarcoding Spring School in Crete, Greece.

The advances in next-generation sequencing (NGS) technologies have revolutionized many fields of the biological sciences, including that of biodiversity studies. Many ecological questions rely on the knowledge of the list of species involved in the studied process. Tackling this demand using standard methods of taxonomical identification, is often a difficult task that relies on highly qualified persons. DNA barcoding has introduced the use of short standardized genomic sequences (barcode) as a character in taxonomical identification. DNA metabarcoding uses the same principle that associates DNA sequences to taxa for estimating biodiversity of an environmental sample. Metabarcoding approaches use total and usually degraded DNA from environmental samples to analyze biotic assemblages and can be potentially carried out for any kind of organisms in an ecosystem. These analyses rely on specific genetic markers, called metabarcodes, which should be optimized for taxonomic resolution, minimal bias in amplification of the target organism group and short sequence length. As all living organisms spread cells in their environment, a PCR amplicon obtained with adequate primers from the total DNA extracted from an environmental sample, can be considered as a mirror of the biodiversity present in the environment. The pertinent choice of the primer pair allows to focus on a specific group as, for example, plants. Then the sequencing of a large number of individual DNA molecules of the PCR amplicon using NGS technologies allows establishing a list of taxa present in the sample. Metabarcoding can be applied to many ecological studies such as plant community analysis, plankton and benthic community analysis, past ecosystem reconstruction, or diet assessment.

After the success of the 1st DNA Metabarcoding Spring School in French Alps, we organize the 2nd one in Crete,

which includes lectures and bioinformatic practical sessions on metabarcoding. The School is open for 20 participants (post-graduate students or researchers) that will attend both lectures and practicals, and for 30 additional participants that will follow only the lectures.

The focus will be mainly on marine biodiversity, however people from all fields of metabarcoding are encouraged to participate.

For more information go to <http://metabarcoding.org/-spip.php?article38> Main lecturers

- Antony Chariton (CSIRO, Australia) - Eric Coissac (LECA, CNRS, France) - Xin Zhou (BGI, China) - Lucie Zinger (LECA, CNRS, France) - ...

Application

The number of participants will be limited to 20 that will attend both lectures and practical sessions. Thirty (30) more participants will follow only the lectures. Applications including a short CV and a short motivation letter should be sent to spring2013@metabarcoding.org, with subject: "MARBIGEN DNA Metabarcoding School 2013" no later than 1 March 2013.

Workshop venue

The workshop will be held in the premises of the Hellenic Centre for Marine Research in Crete, Greece in the main building of Thalassokosmos complex (former US base at Gournes, Heraklion).

Accommodation

Accommodation will be provided in hotels in the area of the workshop venue, in special prices for the participants.

Workshop Costs

There are no registration fees for the workshop. Participants will have to pay for their accommodation, meals and travel expenses. The average cost for accommodation and meals for 6 days is not expected to exceed 350 euros.

The organizing committee

Hellenic Center for Marine Research This message was sent using IMP, the Internet Messaging Program.

kasapidi@her.hcmr.gr

HarvardU
LinkingPhenotypeDevelopment
Jun10-21

Dear Colleagues,

We are pleased to announce a new course “Plant Morphology: Linking Phenotype to Development,” June 10-21, 2013, at the Arnold Arboretum of Harvard University.

With the opportunity to bring molecular genetic and genomic tools to almost any clade of plants, a key challenge will be to link comparative developmental genetics to existing bodies of knowledge; notably the two hundred year legacy of comparative developmental morphology. This integration is critical as the phylogenetic, structural, and ecological breadth of plant taxa open to study expands, and the sophistication of potential questions increases in complexity. This course will provide vital analytical tools central to understanding the developmental bases for structural and functional diversity. Summer courses in organismic plant biology at the Arnold Arboretum of Harvard University bring world-class faculty and a world-class living collection together to enable students from around the world to know the phenotype.

“Plant Morphology: Linking Phenotype to Development,” an intensive two-week laboratory and lecture course for advanced undergraduates, graduate students, and postdoctoral fellows will cover the fundamental principles of plant form, focusing on developmental dynamics, evolutionary diversification, and ecological and physiological function. Students will be presented with the conceptual and analytical tools necessary to interpret the vast array of morphologies that exist among plants. Professors Pamela Diggle (University of Colorado) and Peter Endress (University of Zurich) will serve as the instructors. This course is limited to 12 students.

Costs: meals and dormitory lodging will be provided for all participants and each student will receive a travel stipend of up to \$500

Additional information and application form available at <http://arboretum.harvard.edu/news-events/-plant-morphology-linking-phenotype-to-development/> Please bring this course to the attention of your students and post docs!!

For additional information contact Pamela Diggle:
pamela.diggle@colorado.edu

Pamela.Diggle@colorado.edu

KrugerNatIPark SouthAfrica
ConservationGenetics May15-25

Recent Advances in Conservation Genetics

15 - 25 May 2013

Kruger National Park, South Africa

The American Genetic Association with the University of Pretoria is presenting a 10 day intensive course from May 15th through May 25th, 2013, at the Southern African Wildlife College (10kms from the Orpen Gate of the Kruger National Park). The course will be directed by Dr. Stephen J. O'Brien, and taught by renowned scientists and conservationists in methods, interpretation, and applications of molecular genetic analyses for conservation of endangered species, who will also share a variety of their personal experiences in this important field.

Who should apply:

Applicants should be conservation-minded scientists (advanced graduate students, post-docs, teachers, and researchers with advanced degrees) from academia, government, NGOs, or industry who are studying the genetics of endangered species and who will apply the knowledge gained from this course to the conservation of such species.

Cost:

The cost per participant will be \$1850 and will include your accommodation and all meals. Full and partial scholarships will be awarded to selected participants.

Application forms and more information regarding the faculty involved in the course and course contents and contact information is available on * www.congen2013.co.za . *Deadline:*

The deadline for applications will be the 15th of February 2013 and final decisions regarding successful applicants will be made by the 1st of March 2013.

*Course director:** *Stephen J. O'Brien

*Co-directors:** *Warren Johnson, Klaus-Peter Koepfli, Eduardo Eizirik, Cindy Harper

Contact information:

Interested individuals can contact us directly at
info@congen2013.co.za.

johnsonw11661@gmail.com

Montreal PopGenetics GeneticEpidemiology May27-31

*Montreal Spring School of Population *

Genomics and Genetic Epidemiology

is having its 6th annual workshop from

May 27 to 31, 2013 in Montreal, Canada.

This workshop provides training in the rapidly developing disciplines of genetic epidemiology, human evolutionary genetics, population genomics and bioinformatics.

The training will be based on real-data examples from the instructors' laboratories.

For more information on this year's 5-day curriculum

* and to register please visit *

<http://www.montrealsschool.ca/>

—

Gillian Greig Coordinator Montreal Spring School of Population Genomics and Genetic Epidemiology

eMail montrealsschool@gmail.com Web
www.montrealsschool.ca Montreal Spring
School <montrealsschool@gmail.com>

Peru AntEvolution Aug4-15

ANT COURSE 2013 <http://research.calacademy.org/-ent/courses/ant> 2013 August 4-15, Villa Carmen, Manu Biosphere Reserve, Peru Organized by the California Academy of Sciences

APPLICATION DEADLINE: APRIL 1, 2013 Application link: <https://spreadsheets.google.com/a/fieldmuseum.org/viewform?formkey=3DdGNTcVh1ZzVGNjd1aVU5cnV1dWZNbVE6MA>

IMPORTANT DATES Aug 3: participants arrive in Peru Aug 4 8am: depart Cuzco to Villa Carmen, 8 hrs

drive Aug 14 8am: depart Villa Carmen to Wayqecha Biol. St., 4 hrs drive (overnight at halfway point). Aug 15 8am: depart Wayqecha to Cuzco, 4 hrs drive, arriving for lunch in time for afternoon (3pm or later) flights to Lima and beyond.

COURSE OBJECTIVES. - ANT COURSE is designed for systematists, ecologists, behaviorists, conservation biologists, and other biologists whose research requires a greater understanding of ant taxonomy and field techniques. In 2013, emphasis is on the identification of the ant genera and species occurring in the Neotropics. Lectures will include background information on the ecology, life histories and evolution of ants. Field trips emphasize collecting and sampling techniques, and associated lab work focuses specimen preparation, sorting and labeling. Information on equipment, literature, and myrmecological contacts are also presented.

COURSE SIGNIFICANCE. - Ant Course is a unique opportunity to acquire training that is unavailable elsewhere. This course will provide students with 1) the confidence and skills to identify Neotropical ant genera; 2) an understanding of modern specimen processing and curation techniques; 3) an appreciation for the biological diversity of ants; and 4) experience keying to the species level.

SPONSORED BY. - California Academy of Sciences and The Arthur Lawrence Green Memorial Fund, Museum of Comparative Zoology, Harvard University

LOCATION. - ANT COURSE will be based at the Villa Carmen Biological Station run by Amazon Conservation Association. The station is adjacent to Manu Biosphere Reserve, Peru and includes lowland and mountain rainforest from 520 - 1200 m. The course will be the first exploration of ants at the station and vicinity.

PARTICIPANT ACCEPTANCE CRITERIA. - ANT COURSE is open to all interested individuals, including students, professors and motivated amateurs (citizen scientists). Priority will be given to those students for whom the course will have a significant impact on their research with ants. We aim to include students with a diverse interest in biology, including ant systematics, ecology, behavioral biology, genetics, and conservation. An entomological background is not required. The high instructor to student ratio will allow students to receive individual attention. Though many of the instructors speak Spanish, ANT COURSE is presented in English and limited to 30 participants

COSTS. - Course fees for the 10-day COURSE are \$975 for current students (undergraduate and graduate) and \$1275 for non-students (postdocs and professionals). Transportation costs between home and Cuzco, and ho-

tel fees in Cuzco are to be borne by all participants. Pay course fees by July 1 at: https://www.calacademy.org/tickets/ant_course/ FELLOWSHIPS. - Those interested in attending the course should seek all possible avenues to secure funding on their own for the course. Each year we strive to raise funds to support a few students by offering discounted tuition fees. You should only apply for the Ant Course fellowship if you cannot find other support and it is essential for your participation in the course. Please notify the course if your funding request status changes before the application due date.

COURSE APPLICATION. - Application and course information at <http://www.antweb.org>. The first step is to fill out a form at: <https://spreadsheets.google.com/a/fieldmuseum.org/viewform?formkey=-3DdGNTcVh1ZzVGNjd1aVU5cnV1dWZNBVE6MA>

Note this form requires a short statement of your research interests and future plans and a statement of your reasons for wishing to participate in the course. Also requires is one letter of reference from a professor or colleague familiar with your work to be submitted by the referee at: <https://docs.google.com/a/fieldmuseum.org/sheet/viewform?formkey=-3DdGhfRjgxcXU3OWx5NWVmqzRwN1hRTXc6MQ> You will be notified of your acceptance to the Course around APRIL 15-20.

ANT COURSE is limited to 30 participants. Selection of participants will be

— / —

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>

SwissAlps EvolutionaryBiol 18-24Jun

Evolutionary Biology Workshop in the Alps

Swiss Alps, 18-24 June 2013

3 ETSC credit points

Faculty: Spencer Barrett (University of Toronto) Mark Kirkpatrick (University of Texas, Austin) John Pannell (University of Lausanne) Tadeusz Kawecki (University of Lausanne)

Target participants: PhD students, advanced Master

students

This workshop, based on a concept developed by Stephen Stearns and John Maynard Smith.

The main goals of this course are to develop the following skills: . developing your scientific ideas through discussions in groups; . thinking critically and expressing oneself clearly; . turning a general idea into a research project; . writing a research proposal and defending it.

It is you, the students, who will be in charge in this course. You will be divided in groups of 4-5 students. In those groups, you will work on your ideas. You, as a group, will decide what the important open questions in broadly defined evolutionary biology are, you will choose one, and attempt to develop a proposal for a research project that will address it. The faculty will visit the groups during the discussions to answer your questions, provide coaching and give you feedback on your projects, but they will generally take the back seat. Additionally, the faculty will give talks about their research and be available for informal discussion with individual students. At the end you will present your projects to other participants, and we will party.

The workshop will take place in Villa Cassel (<http://www.pronatura-aletsch.ch/home-en>), at 2000 m of altitude, amid the magnificent mountain landscape of UNESCO World Heritage Site, walking distance from the largest glacier of the Alps. This isolated site will help you to concentrate on the course while giving you also the chance to enjoy the views and the alpine flora.

Costs: CHF 530.- for room and board; there is no tuition fee.

To apply, send a single file (pdf or rtf) containing a short motivation letter, a cv, and the name of your scientific advisor to Nadia Bruyndonckx <Nadia.Bruyndonckx@unil.ch>, with a Cc to tadeusz.kawecki@unil.ch .

Deadline for application: 15 February 2012.

– Tadeusz J. Kawecki Associate Professor Department of Ecology and Evolution University of Lausanne Le Biophore, CH 1015 Lausanne, Switzerland tadeusz.kawecki@unil.ch

Tadeusz Kawecki <tadeusz.kawecki@unil.ch>

UGroningen BayesianInference Mar11-15

Bayesian Phylogenetic Inference using RevBayes Organizers Prof. Rampal Etienne

Dr. Corine Eising

Lecturers Dr. Sebastian Hoehna (Stockholm University, Stockhol, Sweden)

Dr. Seraina Klopstein (Swedish Museum of Natural History, Stockholm)

Prof. Rampal Etienne (University of Groningen)

Aim of the course To familiarize students with the statistical framework of reconstructing phylogenies (i.e. trees and networks).

The course is primarily aimed at PhD level students, but is also open to advanced Master level students, postdocs and other staff with an interest in molecular phylogenetics.

Contents & Structure Topics include: - Theory of Bayesian inference and MCMC methods - Phylogenetic tree reconstruction methods (focusing on substitution models (likelihood of a tree)

- MCMC (posterior distribution on trees) - Dating trees (strict clock, fossil calibrations, relaxed clocks, etc) - Diversification rate analysis (currently several time-dependent rate models are implemented) - Model selection using Bayes factors - MCMC output analysis (credible intervals, convergence, etc)-

Provisional Programme Day 1 (Monday 11 March):

9:00-10:30 Introduction, Sequence Databases and Multiple Sequence Alignment

10:30-11:00 Coffee break

11:00-12:30 Multiple Sequence Alignment Practical

12:30-13:30 Lunch

13:30-15:30 Historical introduction to phylogenetic tree reconstruction methods

15:30-16:00 Coffee break

16:00-17:15 Parsimony, NJ and Distance Methods Practical

Day 2

9:00-10:30 Bayesian inference and MCMC methods (Theory)

10:30-11:00 Coffee break

11:00-12:30 MCMC tutorial

12:30-13:30 Lunch

13:30-15:30 Bayesian inference for phylogenetic tree reconstruction (Theory)

15:30-16:00 Coffee break

16:00-17:15 Bayesian tree reconstruction practical

Day 3

9:00-10:30 Molecular clocks and dating phylogenies (Theory)

10:30-11:00 Coffee break

11:00-12:30 Dating tutorial

12:30-13:30 Lunch

13:30-15:30 Models for Phenotype evolution (Theory)

15:30-16:00 Coffee break

15:30-17:15 Phenotype evolution practical

Day 4

9:00-10:30 Diversification Rate Estimation (Theory)

10:30-11:00 Coffee break

11:00-12:30 Speciation/Extinction rates practical

12:30-13:30 Lunch

13:30-15:30 Bayesian model testing (Theory)

15:30-16:00 Coffee break

15:30-17:15 Model testing practical

Day 5 (Friday 15 March)

9:00-10:30 Open session, to be adjusted to participants needs

10:30-11:00 Open session

12:30-13:30 Lunch

13:30-15:00 Open session

15.00-15.15 End of course & Farewell

Course Material

The following book will be used: The Phylogenetic Handbook. Please bring your own computer to the course.

Location The course will be held in Room 5173.0880 of the Linnaeusborg (Centre for Life Sciences), University of Groningen, Zernike Campus Groningen, The Netherlands. Accommodation is not included in the course but is available in the nearby City centre. Student priced options include: The Bud Gett Hotel and The Simplon Youth Hostel.

Duration 11 - 15 March 2013

Costs & registration For costs and registration, please check out the course website. The number of participants is limited and places will be filled on a first come, first serve policy

C.M.Eising@rug.nl

ULeipzig ProgrammingForEvolutionaryBiology

Course on Programming for Evolutionary Biology

When: April 3rd - 19th 2013

Location: Leipzig, Germany

Application deadline: February 17th 2013

Detailed information about the course content and how to apply: <http://evop.bioinf.uni-leipzig.de/> 'Nothing in Biology Makes Sense Except in the Light of Evolution' (Dobzhansky, 1973). Today, evolutionary biology often involves the analysis of an unprecedented amount of information and supports many other disciplines, such as medicine (evolutionary medicine), behavioral biology (evolutionary psychology), ecology, and information transfer. Scientists have to analyze large datasets, which requires computational programming skills to design and apply own ideas into customized algorithms.

In this intensive 17 days course, students will learn how to survive in a Linux environment, get hands-on experience in two widely used programming languages (Perl and R), and statistical data analysis. The classes will be given by experts in the field and consist of lectures and exercises with the computer. The aim of the course is to provide the students with the necessary background and skills to perform computational analyses with a focus on solving research questions related to genomics and evolution. The philosophy of the course will be 'learning by doing', which means that the computational skills will be taught using examples and real data from evolutionary biology for the exercises. During the course, students will also propose projects of their own interest and perform them as final projects in small groups under the supervision of a teaching assistant. This summer school is open for students from all countries and targeted toward PhD students and postdocs of evolutionary biology or related research fields with no or little programming experience who want to become proficient in computational evolutionary biology in a couple of weeks.

The course takes place at the University of Leipzig.

Katja Nowick <nowick@bioinf.uni-leipzig.de>

UNebraskaLincoln InvasivePlantEvol Jun25-27

2013 NORTH AMERICAN INVASIVE PLANT ECOLOGY AND MANAGEMENT SHORT COURSE

January 21, 2013. The 2013 North American Invasive Plant Ecology and Management Short Course (NAIPSC) is now open for registration. Similar to previous years, the 2013 NAIPSC Field Course will include presentations, hands-on workshops, site visits and instructor-led discussion sessions on the latest in invasive plant ecology and management. The NAIPSC Special Session for 2013 is on the topic of biocontrol. Registration can be done either online or by downloading a brochure from the NAIPSC website (<http://ipscourse.unl.edu>). While there, be sure to check out the new NAIPSC Online Community that features relevant webinars, interesting articles, and opportunities to interact on any topic related to invasive plants. Also new is the Invasive Weed Ecology Program, which has some interesting information and thoughtful insights on invasive plants. The third annual NAIPSC Field Course will be held June 25-27, 2013 at the University of Nebraska-Lincoln West Central Research & Extension Center in North Platte, NE. CEU and graduate student credit will be available.

Thanks, Steve

Steve Young <steve.young@unl.edu>

UWashington-online Statistical-Genetics Spring2013

The Department of Statistics at the University of Washington will provide an online offering of the course STAT 550 A

Statistical Genetics I; Discrete Mendelian Traits

Dates: Spring 2013 Quarter, April 1 - June 14 Number of credits: 3

Instructor: Professor Elizabeth Thompson (eathomp@uw.edu) (<http://www.stat.washington.edu/~thompson/>)

This course provides an introduction to the models and methods of Statistical Genetics for students with little Genetics background but with some knowledge of Probability and Statistics. The course provides a basis for further study in Statistical Genetics, whether in Quantitative Genetics, Human and Medical Genetics, Population and Evolutionary Genetics, or Computational Molecular Genetics.

This class will be given online (audio and slides) in conjunction with the regular on-campus class offering of the class in Spring Quarter 2013. The class will be available to registered University of Washington non-matriculated students (NM):

For information on registering for NM status: see <http://nondegree.washington.edu/nondegree/-register/> For information on UW course fees for this 3-credit 500-level class: see <http://nondegree.washington.edu/nondegree/fees/> For qualified students, the Department of Statistics will approve both NM status (if not already obtained) and course entry: contact Elizabeth Thompson (eathomp@uw.edu) for more information.

Some information about the 2010 offering of the online version of this course is available at: http://www.stat.washington.edu/thompson/Stat550/Online_2010/ Additional information on the 2012 on-campus offering is at: <http://www.stat.washington.edu/thompson/Stat550/> The 2013 class is expected to follow a very similar schedule. eathomp@u.washington.edu

UWyoming Bioinformatics May27-Aug2

<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:

Grant Bowman: Simulations of molecular diffusion and molecular interaction in 3D space in a bacterial cell
 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>

Uppsala Genetics of Adaptation Apr3-6

Genetics of Adaptation Workshop 3-6 April 2013

Postgraduate Course at the Evolutionary Biology Center, Uppsala University

Course Leader - John McKay, Visiting Professor, Jon Ågren Lab

Instructors Corbin Jones, University of North Carolina
Matt Rockman, New York University
Saunak Sen, University of California San Francisco
Bruce Walsh, University of Arizona

Course Content - This course will employ a number of expert instructors to provide lectures and hands on analysis modules in Population Genetics Theory, Quantitative Genetics Theory, QTL mapping implementation, Population Genetic Implementation, and empirical evidence to date (QTL and Pop Gen).

This course is open to PhD students and postdocs. Among those with relevant background and research interests, priority will be given to PhD students in the Evolutionary Biology (EBC) Graduate School at Uppsala University.

Application Deadline 31 January 2013

To apply, send 1 one page CV as pdf (that includes your training to date) and a research statement (200 words or less) that explains how this course applies to your work.

Send by email with the subject line

Application for Genetics of Adaptation 2013

to john.mckay@ebc.uu.se

Theoretical Motivation - Since Darwin, understanding the genetics of adaptation has been a central goal in evolutionary biology. Despite the long history, there are many unanswered questions: How many genes underlie adaptation, what are their effect sizes, and are they consistent with existing theoretical models? For example, Orr (1998) predicts an exponential distribution, where the effect size decreases as genotypes approach an optimal phenotype. A related question is whether the response to selection is limited by beneficial new mutations, or standing genetic variation within populations. Are genetic correlations between traits due to linkage disequilibrium or pleiotropy?

Revolutionary advances in genomics and bioinformatics now promise identification of the causal loci underlying ecological variation. Several longstanding questions in evolutionary and ecological genetics can only be addressed by identifying and examining the history of the actual loci that underlie variation in ecologically important traits. For instance, abundant genetic variation has been described over the last 50 years (both quantitative genetic and sequence variation) but we have historically been unable to distinguish between alternatives causing this variation. Is this variation due to mutation-selection balance, where variation is due to new mutations that have yet to be eliminated by selection or balancing selection, where variation is maintained over long periods of time by fluctuating selection pressure?

John McKay <jkmcKay@colostate.edu>

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 EvoDir direct them to the email `evodir@evol.biology.McMaster.CA`. Do not include encoded attachments and do not send it as Word files, as HTML files, as \LaTeX files, Excel files, etc. ... plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category “Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:” and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formatted) the message will be send to me at `Golding@McMaster.CA` and processed later. In either case, please do not expect an instant response.

Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformatting is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by \LaTeX do not try to embed \LaTeX or \TeX in your message (or other formats) since my program will strip these from the message.